EGG-LOFT-5290
November 1980

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LOFT MONTHLY PROGRESS REPORT
FOR OCTOBER 1980

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for October 1980

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G. D. McPherson, LOFT

This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

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INTERIM REPORT

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LOFT MONTHLY PROGRESS REPORT FOR OCTOBER 1980

MANAGER'S MONTHLY SUMMARY

During the month of October, several significant events occurred. Three tests, L6-1, L6-2, and L6-3, in the anticipated transient series were completed. These tests were conducted to provide information on plant control systems and operator responses to transients in which the initiating event was not a loss of primary coolant. These transient tests and others scheduled for the future will add greatly to predicting responses for such transient conditions.

On the 16th and 17th of October, LOFT hosted a technology transfer meeting in which representatives from more than sixty power utilities in the United States and several foreign countries participated. The purpose of this LOFT/Utility Technology Transfer meeting was to provide an open forum through which utility personnel could become better informed about the LOFT project, its past, present, and future experimental program, and how this program could serve industry needs. Several recommendations for LOFT were made by the utility community; these suggestions are being looked at very closely and correspondence with the utility representatives continues.

Members of the ACRS committee met in Idaho Falls during October to review the scope of the LOFT program. General approval of the LOFT program was expressed by the ACRS, and several recommendations were made. Requests were also made for additional briefings when LOFT has further scoped the potentially more severe large break transients.

Plant preparations were underway during October for the next LOFT test scheduled for mid-December. This test, designated L3-6, will be another in the small break series, with the break occurring in the intact loop of the cold leg.

Budget and actuals are showing good agreement for the first month of FY-81, except for a small underrun in the manpower level which is expected to be corrected in the near future.

ACCOMPLISHMENTS

LOFT TECHNICAL SUPPORT DIVISION

1. The plant vibration spectrum was reviewed to isolate the 10 Hz spike which appeared in Test L3-5. Following L3-5, similar vibration data were taken with the primary coolant pumps de-energized, and the spike as still evident, indicating that the pumps were not the cause. Further investigation will follow pending wiring checkout and an improved method for reducing plant accelerometer data.
2. Flange modification for the spare blowdown system spool piece is continuing. When completed, this spool piece can replace the existing steam generator and pump simulator; this could reduce expense by eliminating installation of the simulations in the cold leg when single-ended hot leg tests are required.
3. The work to upgrade the valve-actuator solenoids is continuing in an effort to improve operability of the solenoids in potential accident conditions.
4. The pressurizer top assembly and spray nozzle bolted closures were examined for leakage. The examination satisfied the annual inspection requirement.
5. An update of LTR 146-4 was initiated to re-verify the minimum acceptable level in the steam generator and still allow for refill using the auxiliary feedwater system. Results of this update will affect the Technical Specifications and Plant Operating Manual.
6. The purification ion exchanger effluent filter element was replaced to improve purification flow rate.
7. Engineering design has been completed and work packages prepared for the following tasks:

- A. Installation of new differential pressure transducers on the upgrade of the LOFT coolant level detection system.
 - B. Modification of the pressurizer pressure detection system.
 - C. Installation of Mobile Test Assembly (MTA) signal conditioning box and cabling for the Center Fuel Module (CFM) plenum pressure monitoring system.
 - D. Installation of cabling on the Downcomer Instrumentation Assembly (DIA) removal cask.
- 8. Flow transmitters FT-P139-27-1 and FT-P139-27-2 were replaced with Rosemount Model 1152 HP transmitters. These new transmitters will improve the accuracy of this system.
 - 9. A Site Work Release (SWR) was completed and work is in progress to provide regulation of the 117-V ac power supplied to PPS-A, PPS-B, and PPS-C power panels.
 - 10. In order to make the Waste Gas Processing System (WGPS) comply with the configuration described in the FSAR, a leak detection system had to be added. The leak detection system will monitor the WGPS for leaks and if any leaks are detected, will close the containment isolation valves in the input line to the WGPS and isolate the WGPS from the reactor blowdown system to prevent any further release of radioactive gas. Constant air monitors (CAMs), used extensively at INEL, have been approved for use as the leak detection monitor.
 - 11. The safety analysis for the use of the WGPS was approved by DOE, and this analysis is being incorporated into the Technical Specifications.
 - 12. Final assembly of the control rod assembly spiders was completed. Final overall assembly of attaching poison rods will begin in November.

13. The preliminary design for the LOFT fuel rod transfer cask has been completed.
14. Design of the fuel module lifting heads was completed, and the SWR for their fabrication was written.
15. The following operational transient tests were successfully conducted:
 - A. L6-1 = Loss of Steam Load Transient.
 - B. L6-2 = Loss of Primary Flow Transient.
 - C. L6-3 = Loss of Feedwater Transient.
16. Changes to the LOFT Technical Specifications (DRR-L-3853) for the conduct of the Operational Transients L6-1, L6-2, and L6-3 were approved by the Department of Energy (DOE).
17. LTR LO-90-80-021, entitled "Comparison of LOFT Process Instrumentation and Regulatory Guide 1.97 Requirements," has been completed and released.
18. The Technical Advisory Group (TAG) recommendations were reviewed with the action assignees, and a schedule for the completion of the tasks was re-established.
19. The traversing in-core probes (TIPs) data taken during test L3-5 were analyzed to determine whether water was present during the test.
20. LOFT personnel completed a study in which the center fuel element in the core was replaced with a fresh A3 or F3 fuel bundle at various points in the core operational lifetime. Preliminary results indicate that peak-to-average flux ratios and reactivity coefficients remain satisfactory significantly beyond previous end-of-life estimates.
21. Zero power physics LOFT core requalification was completed for Loss-of-Coolant Experiment (LOCE) L3-5.

LOFT FACILITY DIVISION

1. Requalification testing was completed for Tests L3-5 and L3-5A.
2. Tests L6-1, L6-2, and L6-3 were successfully completed.
3. A work window was begun in preparation for Tests L3-6 and L8-1 which are scheduled for early December.
4. Inservice Inspection (ISI) and surveillance testing required during this shutdown period was begun.

LOFT MEASUREMENTS DIVISION

1. Three L3-6 modular drag disk turbine (MDTTs) were completed, calibrated, and delivered to TAN for assembly into the PC-2 rake. Some of the improvements include balanced rotors and polished concentric shafts. These improvements will decrease the vibrational loading on the bearings induced by an off-center load.
2. Two new F1 fuel module MDTTs were delivered to Exxon Nuclear. These units have the new style of bearing which survived over 1100 hours in the lower core configuration during flow testing at Exxon.
3. The Megabytes Stabilized Densitometer (MSD) electronics were used on Blowdown Loop BL-2A for the L6 tests. The data are being evaluated for evidence of Co⁶⁰ peak shift and other anomalous behavior.

The MSD system allows approximately four-tenths of a channel drift in the position of the cobalt peaks in the spectrum in the worst observed case, when the reactor background radiation level was decreased as the reactor was shut down. This drift would represent a density change less than 10 Kg/m³. No data are available to evaluate performance of the MSD system during a significant change in the fluid density.

4. The drilling template has been received from Measurements Incorporated for drilling mounting holes in the steam generator support plate. The PC-3 densitometer will be mounted on the support plate. The densitometer has been received from MI and installation at location PC-3 has been started.
5. Six embedded thermocouples for the REBEKA test have been shipped to Exxon for assembly into the heater rods.
6. A final design review was held on the LOFT clad surface zircaloy sheath, MgO insulated thermocouple. This review resulted in the closing of action items and completion of all related development, design characterization, and qualification work done to date.

7. A conceptual design review was held on the LOFT cladding thermocouple, with alumina (Al_2O_3) insulation material. Also, an integrated work plan was published to show the overall program of design characterization and qualification for use in LOFT.
8. The preliminary design for the Feedwater Flow Rate Measurement System was completed. The system will use a Controlotron 480 ultrasonic flow meter. A requisition is in review and approval. The measurement identification was reassigned to FE-SGS-001 and the data will be recorded on Digital Data Acquisition and Processing System (DDAPS) and Plant Log and Surveillance System (PLSS).

The LOFT Operations Branch requested that the flow be monitored on the main control panel. A feasibility and cost impact study to do this was started.

The Data Analysis Branch required that the system be calibrated in-house at ambient and elevated temperature ($350^{\circ}F$) with LOFT configuration. The LOFT Test Support Facility (LTSF) is not capable of instrument calibration with a 3% accuracy. The ARA III facility capability is under evaluation.

9. The preliminary design for the steam generator secondary side liquid temperature measurement was completed. The sensors will be 0.040 in., grounded, Type K, off-the-shelf thermocouples, gold brazed to a stainless steel housing. The measurement locations will be inspection covers No. 1 and No. 3 and a new nozzle approximately 103 inches above the tube sheet. A design sketch is in drafting, and a thermal load analysis was started.
10. Measurement identifications were assigned to TE-SG-3, TE-SG-4, and TE-SG-5. The containment penetration and reference junction will use existing cable systems.

11. Design of a primary pressure testing vessel for the thermocouple assemblies was initiated.
12. Experimental work was completed and a letter report was prepared on the feasibility of using currently designed thermocouples in LOFT as sensors that would register contact with water or steam. The report concluded that it would not be feasible and that the temperature and liquid level measurement should remain conceptually separated.
13. Initial condition and sequence of events reports (both LOFT data reports) for tests L3-5 and L3-5A were completed.
14. An experiment design report (EDR) draft was completed, and all materials were submitted to the Information Division which will prepare the experiment design document (EDD) for distribution.
15. The LOFT Program Division completed the task monitoring data base modifications and put them into operation.
16. An interactive program on automated data qualification (ADQ) demonstrating ADQ concepts was prepared for the LOFT-sponsored utility fair. Approximately 60 representatives of commercial nuclear power plants attended the presentation.
17. The Data Integrity Review Committee (DIRC) activities for LOFT Small Break Tests L3-5 and L3-5A and operational transients L6-1, L6-2, and L6-3 have been completed and qualifying reports issued.
18. Two reports on Wyle test data analysis and interpretation were sent for printing and distribution.
19. Computer programs were modified for processing LOFT densitometer data to allow more flexibility and better traceability. These changes were made necessary by the expansion of the densitometer system to include the PC-3 location and the small pipe densitometer.

20. A list of suggested hardware changes was generated as a result of a study to improve the accuracy of liquid level data obtained from differential pressure measurements. Density-correction equations were derived, and specific corrections were applied to Test L3-5 data.
21. Report No. RE-P-80-070, "PPQ-7 Results for Power Distribution Perturbations Caused by Fuel Centerline Thermocouples in LOFT," was issued by the Reactor Physics Branch.
22. LTR EGG-LOFT-5244, "Review of LOFT Cladding Temperature Response for L2-2 and L2-3: Recommendations for Improved LOFT Fuel Rod Measurements," was issued by the Fuel Evaluation Section.
23. A LOFT Fuel Instrumented Branch representative presented a paper on PWR fuel behavior lessons learned from LOFT at the LOFT/Utility Technology Transfer Meeting in Idaho Falls.
24. A Fuel Evaluation Section representative presented the keynote paper, "Experiments to Evaluate the Ability of Electric Heater Rods to Simulate Nuclear Rod Behavior During LWR LOCAs," at the International Symposium on Fuel Rod Simulators in Gatlinburg, Tennessee.

LOFT PROGRAM DIVISION

1. The Quick Look Report on Experiments L3-5 and L3-5A was prepared and issued (EGG-LOFT-5242).
2. Modeling Experiment L3-7 with the RELAP4/MOD7 code, was completed. The model included 46 unique alterations from that used previously for the L3-2 pretest prediction model. The final initialization of the model was also completed and 1000 s of the L3-7 transient calculated. The results are being reviewed. This calculation is the first step in the process of extending the results of L3-7 to commercial systems. A model of the ZION plant is concurrently being developed using the LOFT modeling techniques for L3-7. ZION will be the first plant to which the results of a LOFT small break experiment are extended.
3. Information required by the Austrians concerning the flow homogenizer research task was compiled and transmitted. The information included geometric descriptions of the pipeline containing the homogenizer and the instrumentation downstream of the homogenizer. The test results for L3-5 were also included.
4. The Quick Look Report on Experiments L6-1, L6-2, and L6-3 was prepared and issued (EGG-LOFT-5270).
5. Presentations were prepared for the LOFT Utility Technology Transfer Meeting and staff members provided assistance in preparation of presentations at the ACRS Meeting.
6. Best estimate predictions for Experiments L6-1, L6-2, L6-3, and L6-5 were completed, and the Experiment Prediction Document was issued.
7. Experiments L3-1, L3-7, L3-5, and L3-5A were calculated using base deck and a consistent version of RELAP5/MOD1 (under development and not issued).
8. The first series of L3-5/5A posttest sensitivity calculations were completed.

FOREIGN-FUNDED TASK SUMMARIES

Foreign-funded and in-kind LOFT support projects are summarized in this section.

SUMMARY OF JAPANESE-FUNDED (JAERI) TASKS

1. Task 5F8C2 -- Program Development and Analysis

An in-depth review of the past fiscal history of the JAERI program was performed and various discrepancies have been resolved. Fiscal budget rollover from FY-1980 to FY-1981 was delayed pending the results of this review, so the budget graphs presented in this monthly report require some adjustment.

2. Task 5F8C3 -- Component Development

Testing on a pressure-balanced drag turbine was completed in September 1980. During October a data report was prepared and is presently in the review process awaiting signatures prior to distribution.

3. Task 5F8C4 -- Post-CHF Heat Transfer

The preliminary experimental operating specifications (EOS) for the post-CHF test have been completed. The conceptual drawings of the test section and test loop have been completed. Work is continuing to define the requirements for a new power supply. Preparations are being made for the initial design review.

4. Task 5F8C5 -- Small Break Instrumentation

The PC-3 densitometer project continued on schedule with approval of the stress analysis and final design. The outside contractor, Measurements, Inc. (MI), completed the final fabrication and assembly

of the densitometer and acceptance testing of the system; MI then shipped the densitometer system to LOFT. LOFT received the system and has begun installation.

SUMMARY OF GERMAN-FUNDED (FRG) TASKS

1. Task 5F7C2 -- Program Development and Analysis

An in-depth review of the FRG program fiscal history, beginning with 1976, has been completed. Some cost-related questions have been resolved, and the program is considered to be in good condition as FY-1981 work commences. FRG has not yet provided a contribution as defined in the new FRG-USNRC agreement, so no new tasks have been approved. Various tasks are being considered and a two-year master plan for use of LOFT foreign funds is being prepared within RPB.

An internal letter was released describing LOFT Program Division progress of the LOFT state vector scoping evaluation. This task is being evaluated by RPB for possible re-direction.

Work on requalification of the two-phase loop steam supply vessels to 3000 psia has been postponed to December 1980 because of a manpower allocation problem.

2. Task 5F7C3 -- Component Development

This task was inactive during October.

SUMMARY OF NETHERLANDS-FUNDED (ECN) TASKS

1. Task 5FNC2 -- Program Development and Analysis

As part of the critical flow scaling studies, a 0.110-inch diameter Semiscale nozzle was selected for mass flow ratio extrapolation feasibility investigation. Data review shows consistency in the data

set. The Henry-Fauske model does not show expected mass flow ratio repeatability on a universal quality correlation basis. The modified Burnell model showed similar results.

2. Task 5FNC3 -- Component Development

Conceptual design drawings for embedding LOFT-type cladding embedded thermocouples in a REBEKA heater rod have been completed at Exxon Nuclear Company. The drawings have been approved by EG&G Idaho, completing this portion of the project.

SUMMARY OF FRENCH-FUNDED (CEA) TASKS

1. Task 5FFC2 -- Program Development and Analysis

Plans were discussed for placement of two thermal-hydraulic analysts in the LOFT Program Office, starting about December 1, 1980. French funds were not received in October by the USNRC.

SUMMARY OF AUSTRIAN-FUNDED (FZS) TASKS

1. Task 5FAC2 -- Program Development and Analysis

Minor management duties were performed during October, but no work packages are now funded by FZS. Support to the in-kind contribution was provided.

2. FZS In-Kind Support to LOFT

Work is progressing on preparation of the LOFT standard problem description document. Likewise, three technical papers related to a flow homogenizer project have been reviewed. A steam-water mixer has been ordered by FZS. The 1.0 - and 2.0-hour autoclave tests and associated inspections of optic window samples have been completed. The suprasil and magnesium oxide samples have failed. Some other samples show surface effects, usually a buildup of some surface layer.

The strontium titanate seems to be in the best condition after 2.0 hours of exposure to stagnant LOFT primary chemistry conditions. The DUROCK insulator sample has lost some surface material.

A proposal supporting the LOFT augmented operator capability project was discussed. FZS would like to participate in this task, but is not sure that they have available manpower at this time.

SUMMARY OF SWITZERLAND IN-KIND (EIR) SUPPORT

1. NEPTUN Reflood Test Program

Mr. von Holzen from EIR visited INEL to review LOFT instrumentation and techniques for welding LOFT-type surface thermocouples. The possibility of using zircaloy clad NEPTUN heater rods looks promising; use of these heater rods will be requested in the revised LOFT-NEPTUN program document. The thermocouples fabricated by EG&G have been received at EIR.

Progress continued on installation of the test facility components. The heaters were mounted on the steam-water separator and water collection tank. All pressure and pressure differential transducers have been installed and are ready for checkout tests. All of the skewed cosine heater elements have been fabricated, and work continues on fabrication of the assembled heater rods. Supporting calculations on heater rod behavior were performed.

FOREIGN COOPERATIVE SUPPORT TO LOFT

1. COSIMA Thermocouple Tests at KfK

Preliminary reports and data plots have been provided to LOFT by the COSIMA staff at Kernforschungszentrum Karlsruhe (KfK). These data show effects of LOFT-type surface clad thermocouples on temperature measurements when the heater rod is subjected to a fast loss-of-coolant transient. Evaluation of the data is in progress.

Figure 1. LOFT management summary schedule.

*Test completed

LOFT Program Cost/Budget Summary LOFT OVERALL FUNDING

The Nuclear Regulatory Commission (NRC) and foreign-funded budgets reflect the LOFT Q81-0 Rev 0/4 baseline approved in October 1980. Refer to the Manager's Monthly Summary for comments.

EG&G IDAHO INC.

LOFT-NRC OPERATING FUNDS

NUMBER 5N0000000

TOTAL PROGRAM

BUDGET	3325	6536	10165	13058	16022	20111	23223	26220	29811	32486	36166	41529
ACTUAL	2788											

MATERIAL

BUDGET	987	1876	3021	3781	4587	5790	6525	7230	8197	8829	9689	12670
ACTUAL	925											

MANPOWER

BUDGET	581	514	518	499	477	501	512	493	461	494	498	512
ACTUAL	471											

BUDGET

ACTUAL

Refer to the summary cost accounts for comments.

EG&G IDAHO INC.
LOFT-FOREIGN FUNDING

TOTAL PROGRAM

BUDGET	161	223	289	306	314	332	339	347	368	375	385	416
ACTUAL	105											

MATERIAL

BUDGET	84	109	137	139	142	153	156	160	174	177	181	206
ACTUAL	79											

MANPOWER

BUDGET	19	8	8	3	1	1	1	1	1	1	1	1
ACTUAL	6											

BUDGET

ACTUAL

Refer to the summary cost accounts for comments.

EG&G IDAHO INC.

NRC 189A A6048 EXPER PROGRAM

NUMBER 5N1000000

CUMULATIVE DOLLARS (THOUSANDS)

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	448	913	1365	1739	2076	2564	2931	3259	3655	3976	4395	4768
ACTUAL	343											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	123	277	434	573	686	857	985	1100	1245	1358	1504	1633
ACTUAL	133											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	84	72	61	56	50	56	52	46	44	51	49	53
ACTUAL	51											

BUDGET

ACTUAL

Refer to the summary cost accounts for comments.

EG&G IDAHO INC.

NRC 189A A6053 FUEL

NUMBER 5N2000000

TOTAL PROGRAM

BUDGET	318	572	1169	1387	1728	2280	2560	2812	3035	3196	3349	3450
ACTUAL	453											

MATERIAL

BUDGET	203	359	847	984	1207	1566	1676	1784	1899	1994	2073	2122
ACTUAL	384											

MANPOWER

BUDGET	27	21	22	18	26	34	36	31	18	15	12	10
ACTUAL	16											

BUDGET

ACTUAL

The overrun is caused by accruals for work that was projected to be paid for in October, November, and December. See the explanation in summary cost account 5N2000000. Recovery is expected by the end of the first quarter of FY-81.

EG&G IDAHO INC.

NRC 189A A6043 EXPER INSTR

NUMBER 5N3000000

TOTAL PROGRAM

	BUDGET	375	721	1080	1419	1767	2265	2628	2944	3298	3573	4059	4504
ACTUAL	219												

MATERIAL

	BUDGET	112	217	319	421	520	700	783	851	951	1015	1096	1166
ACTUAL	20												

MANPOWER

	BUDGET	65	53	54	56	56	55	60	53	44	51	71	81
ACTUAL	51												

BUDGET

ACTUAL

Refer to summary cost accounts for comments.

EG&G IDAHO INC.

NRC 189A A6107 PLANT SUPPORT

NUMBER 5H4000000

TOTAL PROGRAM

BUDGET	724	1395	2021	2560	3072	3729	4271	4811	5567	6001	6675	7856
ACTUAL	543											

MATERIAL

BUDGET	210	397	506	632	750	911	1052	1182	1447	1531	1727	2545
ACTUAL	175											

MANPOWER

BUDGET	122	101	103	91	82	82	82	84	84	81	81	73
ACTUAL	92											

BUDGET

ACTUAL

The indicated underrun is attributed to the extended testing period and the reduced available work window subsequent to the completion of the tests. The incomplete work has been rescheduled for the second quarter of FY-81.

EG&G IDAHO INC.

NRC 189A A6122 CORE & SAFETY SUP

NUMBER 5NS000000

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	318	650	1018	1356	1696	2160	2549	2939	3397	3769	4264	4705
ACTUAL	320											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	102	202	315	416	517	647	757	879	1023	1139	1294	1435
ACTUAL	67											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	47	46	47	49	47	52	53	51	49	55	53	58
ACTUAL	58											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

NRC 189A A6110 COMMON SUPPORT

NUMBER 5N4000000

TOTAL PROGRAM

BUDGET	291	593	925	1225	1525	1920	2246	2572	2969	3285	3693	5640
ACTUAL	247											

MATERIAL

BUDGET	48	93	141	184	227	283	330	377	438	490	549	2201
ACTUAL	31											

MANPOWER

BUDGET	67	63	66	67	63	65	66	66	65	71	68	70
ACTUAL	59											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

NRC 189A A6054 FACILITY OPERATE

NUMBER 5N7000000

TOTAL PROGRAM

BUDGET	641	1317	2065	2741	3418	4308	5040	5773	6651	7347	8262	9031
ACTUAL	589											

MATERIAL

BUDGET	80	165	258	343	427	539	628	717	823	908	1019	1113
ACTUAL	108											

MANPOWER

BUDGET	147	138	144	146	138	142	145	145	142	155	148	152
ACTUAL	128											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

A6108 AUGEM OPER CAPABILITY

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	186	324	456	564	674	820	932	1044	1173	1273	1403	1509
ACTUAL	58											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	105	158	191	217	243	277	303	329	360	385	417	443
ACTUAL	6											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	18	17	18	17	17	17	17	17	15	16	15	15
ACTUAL	11											

BUDGET

ACTUAL

Budget re-alignment under investigation for corrective action.

EG&G IDAHO INC.

A6273 - AUSTRIAN FUNDS

NUMBER SFAC00000

TOTAL PROGRAM

BUDGET	0	0	0	0	0	1	2	3	4	5	7	8
ACTUAL	0											

MATERIAL

BUDGET	0	0	0	0	0	1	2	3	4	5	7	8
ACTUAL	0											

MANPOWER

BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

A6271 - NEATHERLAND FUNDS

NUMBER SFNC00000

TOTAL PROGRAM

BUDGET	10	24	29	36	37	38	38	39	40	41	42	52
ACTUAL	-2											

MATERIAL

BUDGET	2	13	14	14	14	14	14	14	14	14	14	24
ACTUAL	-5											

MANPOWER

BUDGET	2	1	1	2	0	0	0	0	0	0	0	0
ACTUAL	1											

BUDGET

ACTUAL

FY-1980 year-end accruals under investigation for corrective action.

EG&G IDAHO INC.

A6104 - GERMAN FUNDS

NUMBER SF7C00000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	4	8	13	16	19	19	19	19	19	19	19	19
ACTUAL	6											

MATERIAL

BUDGET	0	0	0	0	1	1	1	1	1	1	1	1
ACTUAL	3											

BUDGET

ACTUAL

MANPOWER

BUDGET	1	1	1	1	0	0	0	0	0	0	0	0
ACTUAL	1											

No significant variance.

EG&G IDAHO INC.

A6111 - JAPANESE FUNDS

NUMBER 5F8C00000

TOTAL PROGRAM

BUDGET	148	191	248	253	259	274	280	286	305	310	318	337
ACTUAL	101											

MATERIAL

BUDGET	82	95	124	125	127	137	139	141	155	157	160	173
ACTUAL	82											

MANPOWER

BUDGET	16	7	6	1	1	1	1	1	1	1	1	1
ACTUAL	5											

BUDGET
- - - -
ACTUAL

Costs have not been accumulated as rapidly as expected on small break instrumentation task. No problems are anticipated.

EG&G IDAHO INC.

EXP PROG - PROG PLAN & EVAL

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	107	214	310	379	447	535	594	663	750	811	889	969
ACTUAL	72											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	34	77	109	133	154	180	204	234	273	299	331	357
ACTUAL	27											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	17	13	13	10	10	10	7	8	8	8	8	11
ACTUAL	10											

BUDGET

ACTUAL

This budget does not reflect the latest LOFT test schedule (as defined in NCK-278-80). At our current manpower level, we will be within 10% of this budget at year-end.

EG&G IDAHO INC.
SWISS REFL000

NUMBER SN1C00000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	2	5	8	10	13	16	18	21	24	27	30	33
ACTUAL	2											

MATERIAL

BUDGET	1	2	3	4	6	7	8	9	11	12	13	14
ACTUAL	2											

MANPOWER

BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

EXP PROG - LOFT DATA SYSTEMS

NUMBER 5N1E00000

TOTAL PROGRAM

BUDGET	145	305	411	515	597	749	859	948	1047	1142	1275	1404
ACTUAL	125											

MATERIAL

BUDGET	41	87	125	159	183	243	279	304	335	367	413	464
ACTUAL	64											

MANPOWER

BUDGET	31	31	16	19	15	19	19	16	13	18	18	20
ACTUAL	17											

BUDGET

ACTUAL

The addition of L3-5A and the frequency at which the L6-1, -2, and -3 experiments were conducted have resulted in a net manpower saving but have extended the computer storage time of each data set.

EG&G IDAHO INC.
DATA ANALYSIS BR - TEST EVAL

TOTAL PROGRAM

BUDGET	71	131	190	230	275	338	389	433	482	527	584	621
ACTUAL	38											

MATERIAL

BUDGET	8	17	27	35	44	56	65	74	85	94	105	111
ACTUAL	3											

MANPOWER

BUDGET	15	11	10	7	8	9	9	7	6	8	8	6
ACTUAL	9											

BUDGET

ACTUAL

Late FY-80 test schedule slippage into FY-81 has caused a work load in excess of available manpower. The work has to be done. Actuals will approach estimates as we continue to free up men for various work assignments.

EG&G IDAHO INC.

EXPER EVAL BRANCH - 6420

NUMBER 5N1H00000

TOTAL PROGRAM

BUDGET	122	258	446	606	745	927	1071	1193	1351	1470	1617	1741
ACTUAL	105											

MATERIAL

BUDGET	38	94	171	241	300	372	429	478	542	587	641	687
ACTUAL	37											

MANPOWER

BUDGET	20	17	22	20	17	18	17	15	16	17	15	16
ACTUAL	15											

BUDGET

ACTUAL

Manpower actual is below budget because we are below our manpower level.

EG&G IDAHO INC.
FUEL INSTRUMENTATION

NUMBER 5H2A00000

TOTAL PROGRAM

BUDGET	52	111	176	221	260	313	364	418	478	504	510	512
ACTUAL	8											

MATERIAL

BUDGET	37	81	129	152	167	181	193	205	215	220	222	222
ACTUAL	2											

MANPOWER

BUDGET	4	3	4	5	5	6	8	9	9	5	1	0
ACTUAL	1											

BUDGET

ACTUAL

The underrun is caused by unavailability of key personnel to support authorized activities and delays in procurement of detectors and detector components. Corrective actions are being developed.

EG&G IDAHO INC.

FUEL - FUEL DSGN & ANALYSIS

NUMBER 5H2D000000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	221	391	892	1040	1320	1784	1980	2153	2287	2400	2510	2587
ACTUAL	434											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	161	270	706	817	1022	1362	1456	1549	1650	1736	1809	1855
ACTUAL	382											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	14	12	13	8	16	22	22	17	5	6	6	6
ACTUAL	12											

BUDGET

ACTUAL

The overrun is caused by accruals (\$74,000 against S/C K-100, Reload Core I and S/C K-106) which were budgeted for payment uniformly in the first quarter. Recovery should occur by January 1.

EG&G IDAHO INC.

POST TEST EXAM

NUMBER 542700000

TOTAL PROGRAM

BUDGET	45	70	101	126	148	183	216	242	270	293	329	351
ACTUAL	12											

MATERIAL

BUDGET	5	8	12	16	18	23	27	31	34	38	42	45
ACTUAL	0											

MANPOWER

BUDGET	10	5	6	5	4	5	6	5	4	5	5	4
ACTUAL	3											

BUDGET

ACTUAL

The underrun is due to the unavailability of key personnel to commence planned and authorized activities. Corrective action plans are being developed.

EG&G IDAHO INC.

EXP INSTR - EXPER MEAS BR 6110

NUMBER 5N3A00000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	265	545	834	1114	1404	1803	2088	2331	2600	2799	3180	3529
ACTUAL	160											

MATERIAL

BUDGET	94	193	290	389	483	657	736	799	893	953	1029	1093
ACTUAL	19											

MANPOWER

BUDGET	43	40	40	43	44	39	44	39	31	33	54	62
ACTUAL	37											

BUDGET

ACTUAL

The underrun in this cost account is the result of the combination of Experimental Measurements Branch support, DAVDS support, and Experimental systems Sections "A" and "B." See individual cost account graphs for comments.

EG&G IDAHO INC.

DATA ANALYSIS BRANCH - 6130

NUMBER 5N3#00000

TOTAL PROGRAM

BUDGET	110	176	246	305	363	462	540	613	698	774	879	975
ACTUAL	58											

MATERIAL

BUDGET	18	24	28	33	37	43	48	52	58	62	68	73
ACTUAL	1											

MANPOWER

BUDGET	22	13	14	13	12	16	16	14	14	17	17	19
ACTUAL	14											

BUDGET

ACTUAL

Refer to cost account 5N3AMP for comments.

EG&G IDAHO INC.

PLANT SUPPORT - PLANT SYS NO 3

NUMBER 5N4H00000

TOTAL PROGRAM

BUDGET	134	285	437	609	760	942	1110	1266	1474	1595	1867	2130
ACTUAL	79											

MATERIAL

BUDGET	44	87	121	194	270	368	450	515	610	638	797	978
ACTUAL	15											

MANPOWER

BUDGET	20	22	24	22	15	13	18	19	19	22	20	16
ACTUAL	17											

BUDGET

ACTUAL

Actuals trail the budget due to initial front end loading and the fact that a large portion of the budget is test support. CCF 3071 is being prepared to respread the budget according to the test schedule published in NCK-274-80.

EG&G IDAHO INC.

PLANT SUPPORT - PLANT SYS NO 1

NUMBER 5N4100000

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	202	413	538	635	730	846	939	1029	1134	1217	1338	1611
ACTUAL	212											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	14	84	87	89	94	105	113	118	121	123	126	291
ACTUAL	112											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	47	30	24	21	19	17	17	17	17	18	20	23
ACTUAL	26											

BUDGET
- - - -
ACTUAL

Material expenditures occurred one month earlier than anticipated. The manpower underrun is due to the fact that the start of installing the decon system was postponed to a later work window (the second quarter).

EG&G IDAHO INC.

PLANT SUPPORT - PLANT SYS NO 2

NUMBER 5K4J00000

TOTAL PROGRAM

BUDGET	103	173	252	323	388	493	588	698	945	1022	1105	1599
ACTUAL	56											

MATERIAL

BUDGET	50	64	77	93	101	112	126	154	294	327	338	793
ACTUAL	7											

MANPOWER

BUDGET	12	11	22	11	11	16	17	18	19	10	12	8
ACTUAL	11											

BUDGET

ACTUAL

Material was "front end loaded" to compensate for approximately \$50,000 in charges by M-K (construction manager) that were not posted in FY-80 or in October.

EG&G IDAHO INC.

PLANT SUPPORT - P&C REACTOR CONT

NUMBER 5N4K00000

TOTAL PROGRAM

BUDGET	131	245	379	495	618	782	895	1007	1123	1216	1339	1432
ACTUAL	84											

MATERIAL

BUDGET	58	89	125	152	170	195	219	237	252	262	271	278
ACTUAL	8											

MANPOWER

BUDGET	16	17	19	20	22	22	18	18	16	18	18	16
ACTUAL	19											

BUDGET

ACTUAL

Budget realignment is under investigation for corrective action.

EG&G IDAHO INC.

PLANT SUPPORT - P&C I&E SUPPORT

NUMBER 5H4P00000

TOTAL PROGRAM

BUDGET	114	200	300	379	456	547	620	692	772	832	907	966
ACTUAL	68											

MATERIAL

BUDGET	33	55	75	85	95	110	124	138	150	161	174	184
ACTUAL	21											

MANPOWER

BUDGET	20	15	17	16	15	14	13	13	13	12	11	11
ACTUAL	13											

BUDGET

ACTUAL

Budget realignment is under investigation for corrective action.

EG&G IDAHO INC.

CORE & SAFETY SUPT-PROTECT & CON

NUMBER SHSK00000

TOTAL PROGRAM

BUDGET	96	197	309	411	512	645	754	863	994	1097	1233	1347
ACTUAL	66											

MATERIAL

BUDGET	40	80	124	164	204	257	299	341	391	431	484	528
ACTUAL	9											

MANPOWER

BUDGET	12	11	12	12	11	12	12	12	12	13	12	13
ACTUAL	13											

BUDGET
- - - -
ACTUAL

The spending rate for material dollars, particularly the computer dollars, is not normally a uniform rate as indicated by the monthly budget allocations. A higher rate of spending computer dollars will be experienced during November. This rate will compensate for the underrun in material dollars in October.

EG&G IDAHO INC.

CORE & SAFETY SUPT-REACTOR SYS

TOTAL PROGRAM

BUDGET	141	287	447	591	736	926	1082	1238	1420	1561	1746	1902
ACTUAL	143											

MATERIAL

BUDGET	29	58	89	118	146	183	213	243	276	301	333	360
ACTUAL	26											

MANPOWER

BUDGET	24	23	24	24	23	23	24	24	23	25	24	24
ACTUAL	23											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

CORE & SAFETY SUPT-FUEL ENG & OP

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	81	165	262	353	448	588	713	838	983	1112	1286	1455
ACTUAL	111											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	33	64	101	134	166	207	245	295	355	407	477	547
ACTUAL	22											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	11	11	12	13	13	17	18	15	14	18	17	21
ACTUAL	22											

BUDGET
- - - - -
ACTUAL

The overrun is due to charges resulting from the fabrication of the fuel storage rack, and work not completed in FY-80 and not funded in FY-81. The FY-81 funding is to be reviewed.

EG&G IDAHO INC.

COMMON SUPP - CDCS/TECH SUPT

NUMBER 5N6N00000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	76	156	244	324	404	510	596	682	786	868	975	1066
ACTUAL	66											

MATERIAL

BUDGET	21	44	69	92	115	145	168	192	221	244	274	299
ACTUAL	13											

MANPOWER

BUDGET	16	15	16	16	15	16	16	16	16	17	16	17
ACTUAL	16											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

COMMON SUPPORT - QUALITY

NUMBER 5N6X00000

TOTAL PROGRAM

BUDGET	103	207	319	420	521	655	764	874	1006	1110	1248	1363
ACTUAL	78											

MATERIAL

BUDGET	14	24	33	40	48	58	66	74	83	91	101	109
ACTUAL	0											

MANPOWER

BUDGET	23	22	23	23	22	23	23	23	23	25	24	24
ACTUAL	19											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.
COMMON SUPPORT - PLANS & BUDGETS

TOTAL PROGRAM

BUDGET	70	144	225	299	373	470	551	633	736	820	922	1008
ACTUAL	76											

MATERIAL

BUDGET	11	23	35	47	59	74	88	102	123	143	161	176
ACTUAL	15											

MANPOWER

BUDGET	18	17	18	18	17	18	18	18	18	19	18	19
ACTUAL	18											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.
COMMON SUPPORT - SAFETY

NUMBER 5N6Z00000

TOTAL PROGRAM

BUDGET	42	87	137	181	226	285	334	382	441	487	548	599
ACTUAL	28											

MATERIAL

BUDGET	1	2	3	5	6	7	8	10	11	12	14	15
ACTUAL	3											

MANPOWER

BUDGET	10	9	9	10	9	9	9	9	9	10	10	10
ACTUAL	6											

BUDGET

ACTUAL

The underspending of \$14,000 in manpower is due to men sent to TMI. This manpower assignment problem will straighten itself out.

EG&G IDAHO INC.
LOFT OPERS BRANCH

NUMBER 5N7S00000

TOTAL PROGRAM

BUDGET	243	499	783	1039	1295	1633	1911	2188	2521	2785	3132	3424
ACTUAL	265											

MATERIAL

BUDGET	29	61	95	126	157	198	231	264	303	334	375	409
ACTUAL	41											

MANPOWER

BUDGET	50	47	49	50	47	48	49	49	49	53	51	52
ACTUAL	45											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.
LOFT TEST & DATA

NUMBER SN7T00000

TOTAL PROGRAM

BUDGET	133	274	430	571	711	897	1049	1202	1385	1530	1720	1890
ACTUAL	81											

MATERIAL

BUDGET	11	23	36	47	59	75	87	99	114	126	141	154
ACTUAL	9											

MANPOWER

BUDGET	34	32	33	34	32	33	34	34	33	36	34	35
ACTUAL	29											

BUDGET

ACTUAL

The underrun is due to recent terminations. Requisitions expected to be filled by October were not costed.

EG&G IDAHO INC.
LOFT FACILITY SUPPORT

NUMBER 5N7U00000

TOTAL PROGRAM

BUDGET	218	448	703	933	1163	1466	1715	1964	2263	2499	2810	3071
ACTUAL	218											

MATERIAL

BUDGET	36	74	116	154	192	242	282	322	370	408	458	500
ACTUAL	55											

BUDGET

ACTUAL

MANPOWER

BUDGET	51	47	50	50	47	49	50	50	49	53	51	52
ACTUAL	48											

No significant variance.

EG&G IDAHO INC.
OUTSIDE SERVICE SUPPORT

NUMBER 5M7Z00000

TOTAL PROGRAM

BUDGET	46	95	150	199	248	312	365	419	482	533	600	655
ACTUAL	26											

MATERIAL

BUDGET	4	7	12	15	19	24	28	32	37	41	46	50
ACTUAL	3											

MANPOWER

BUDGET	12	11	12	12	11	11	12	12	12	13	12	12
ACTUAL	7											

BUDGET

ACTUAL

The Safety Division experienced heavier than normal use of vacation time in October.

EG&G IDAHO INC.

AUGMENTED OPER CAPABILITY

TOTAL PROGRAM

BUDGET	102	197	282	349	417	508	580	652	737	802	887	956
ACTUAL	40											

MATERIAL

BUDGET	52	95	123	145	167	195	217	238	264	284	310	332
ACTUAL	5											

MANPOWER

BUDGET	11	11	11	10	10	10	10	10	10	10	10	9
ACTUAL	7											

BUDGET

ACTUAL

Budget realignment is under investigation for corrective action.

EG&G IDAHO INC.

AQC - PAS

NUMBER 5M80PA000

TOTAL PROGRAM

BUDGET	84	128	173	215	257	312	352	393	437	471	516	553
ACTUAL	18											

MATERIAL

BUDGET	53	62	67	72	76	82	86	91	96	101	106	111
ACTUAL	0											

MANPOWER

BUDGET	7	6	7	7	7	7	6	6	6	6	6	6
ACTUAL	4											

BUDGET

ACTUAL

Budget realignment is under investigation for corrective action.

EG&G IDAHO INC.

PROGRAM DEVELOPMENT & ANALYSIS

NUMBER SFAC20000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	0	0	0	0	0	1	2	3	4	5	7	8
ACTUAL	0											

MATERIAL

BUDGET	0	0	0	0	0	1	2	3	4	5	7	8
ACTUAL	0											

BUDGET

ACTUAL

MANPOWER

BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

No significant variance.

EG&G IDAHO INC.
 PROG DEVELOPMENT & ANALYSIS

NUMBER 5FNC20000

TOTAL PROGRAM

BUDGET	10	13	18	25	26	27	28	28	29	30	31	42
ACTUAL	4											

MATERIAL

BUDGET	2	2	3	3	3	3	3	3	3	3	3	13
ACTUAL	1											

MANPOWER

BUDGET	2	1	1	2	0	0	0	0	0	0	0	0
ACTUAL	1											

BUDGET

 ACTUAL

Costs are under projection and resolutions are in progress.

EG&G IDAHO INC.
COMPONENT DEVELOPMENT

NUMBER SFMC30000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	0	11	11	11	11	11	11	11	11	11	11	11
ACTUAL	-5											

MATERIAL

BUDGET	0	11	11	11	11	11	11	11	11	11	11	11
ACTUAL	-5											

BUDGET

ACTUAL

MANPOWER

BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

The FY-80 accrual reversal is under investigation.

EG&G IDAHO INC.
 PROG DEVELOPMENT & ANALYSIS

NUMBER SF7C20000

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	3	7	10	13	14	14	14	14	14	14	14	14
ACTUAL	2											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	1	1	1	1	0	0	0	0	0	0	0	0
ACTUAL	1											

BUDGET

 ACTUAL

No significant variance.

EG&G IDAHO INC.
COMPONENT DEVELOPMENT

NUMBER 5F7C30000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	1	2	2	3	5	5	5	5	5	5	5	5
ACTUAL	0											

MATERIAL

BUDGET	0	0	0	0	1	1	1	1	1	1	1	1
ACTUAL	0											

MANPOWER

BUDGET	0	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.

PROG DEVELOPMENT & ANALYSIS

NUMBER 5F8C20000

TOTAL PROGRAM

BUDGET	4	11	19	24	28	34	40	45	52	57	65	72
ACTUAL	4											

MATERIAL

BUDGET	1	2	4	5	7	9	11	13	15	18	20	23
ACTUAL	3											

MANPOWER

BUDGET	1	1	1	1	1	1	1	1	1	1	1	1
ACTUAL	0											

BUDGET

ACTUAL

No significant variance.

EG&G IDAHO INC.
COMPONENT DEVELOPMENT

NUMBER SF8C30000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	7	7	7	7	7	7	7	7	7	7	7	7
ACTUAL	1											

MATERIAL

BUDGET	1	1	1	1	1	1	1	1	1	1	1	1
ACTUAL	1											

MANPOWER

BUDGET	2	0	0	0	0	0	0	0	0	0	0	0
ACTUAL	0											

BUDGET

ACTUAL

The advanced DTT task budget needs to be reduced to \$2,500 due to work being completed ahead of schedule last month.

EG&G IDAHO INC.
POST CHF HEAT TRANSFER

NUMBER SF8C40000

TOTAL PROGRAM

BUDGET	17	41	90	90	91	100	101	102	113	114	115	126
ACTUAL	1											

MATERIAL

BUDGET	1	12	38	38	38	47	47	47	58	58	58	68
ACTUAL	0											

MANPOWER

BUDGET	4	3	5	0	0	0	0	0	0	0	0	0
ACTUAL	0											

BUDGET

ACTUAL

The present budget improperly reflects the payment schedule to Lehigh University.

EG&G IDAHO INC.

SMALL BREAK INSTRUMENTATION

NUMBER 5F8C50000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	119	133	133	133	133	133	133	133	133	133	133	133
ACTUAL	96											

MATERIAL

BUDGET	80	81	81	81	81	81	81	81	81	81	81	81
ACTUAL	79											

BUDGET

ACTUAL

MANPOWER

BUDGET	10	3	0	0	0	0	0	0	0	0	0	0
ACTUAL	4											

No significant variance. Costs were not incurred as rapidly as expected.

EG&G IDAHO INC.
EXP MEAS -BRANCH SUPPORT

NUMBER 5W3AB3000

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	27	55	86	114	142	179	209	239	276	304	342	373
ACTUAL	16											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	13	26	40	52	65	82	95	109	125	138	155	169
ACTUAL	9											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BUDGET	4	3	3	4	3	3	4	4	3	4	4	4
ACTUAL	3											

BUDGET

ACTUAL

Computer charges are low at this time. As FY-81 progresses and tests are completed, computer charges will increase significantly. This cost account has been rebaselined to meet the new test schedule and is not reflected in the above graph.

EG&G IDAHO INC.

EXP MEAS -DAVDS SUPPORT

NUMBER 5N3ADV000

CUMULATIVE DOLLARS (THOUSANDS)

EQUIVALENT MANPOWER (MONTHLY)

TOTAL PROGRAM

BUDGET	20	41	64	84	105	132	155	177	204	226	254	277
ACTUAL	16											

MATERIAL

BUDGET	2	4	5	7	9	11	13	14	17	18	20	22
ACTUAL	1											

BUDGET

ACTUAL

MANPOWER

BUDGET	5	4	5	5	4	4	5	5	4	5	5	5
ACTUAL	3											

No significant variance; this task is being rebaselined also.

EG&G IDAHO INC.
EXP MEAS -MEAS SYST A

TOTAL PROGRAM

BUDGET	136	289	429	557	691	917	1067	1189	1284	1360	1602	1837
ACTUAL	77											

MATERIAL

BUDGET	47	110	159	195	227	337	369	393	411	425	459	491
ACTUAL	7											

MANPOWER

BUDGET	23	20	19	22	24	21	26	22	14	15	37	44
ACTUAL	18											

BUDGET

ACTUAL

Materials on order are not costed. Labor hours allocated to the transducer testing are not being spent because the transducers have not been delivered.

EG&G IDAHO INC.

EXP MEAS -MEAS SYST B

TOTAL PROGRAM

BUDGET	82	160	256	359	466	575	656	725	836	909	983	1041
ACTUAL	51											

MATERIAL

BUDGET	33	54	86	134	182	227	259	283	341	372	394	411
ACTUAL	2											

MANPOWER

BUDGET	12	12	13	13	13	11	10	9	9	10	9	9
ACTUAL	12											

BUDGET

ACTUAL

The underrun in material dollars resulted from delays in planned subcontracted work for the fuel instrumentation tasks. This was due in part to the effort to establish a subcontract at TEC and to the work done by Kaman Sciences (their work slipped due to inserting TC4 embedded T.C.s ahead of FI requirements).

EG&G IDAHO INC.
EXP MEAS PERFORMANCE

TOTAL PROGRAM

BUDGET	110	176	246	305	363	462	540	613	698	774	879	975
ACTUAL	58											

MATERIAL

BUDGET	18	24	28	33	37	43	48	52	58	62	68	73
ACTUAL	1											

MANPOWER

BUDGET	22	13	14	13	12	16	16	14	14	17	17	19
ACTUAL	14											

BUDGET
- - - -
ACTUAL

The underrun reflected in the graph is the result of the following:
1) understaffing; new people are in the process of being employed and could be on board as soon as next month, 2) budgets for L6-1, -2, and -3 were transferred to FY-81, resulting in peak loading early in FY-81, 3) the entire LMD has undergone a rebaselining for Tests L3-1 and L3-6. This is not reflected in above graph.

EG&G IDAHO INC.
NRC 189A A6308 - PAS

NUMBER 5NP000000

TOTAL PROGRAM

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	84	128	173	215	257	312	352	393	437	471	516	553
ACTUAL	18											

MATERIAL

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	53	62	67	72	76	82	86	91	96	101	106	111
ACTUAL	0											

MANPOWER

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
BUDGET	7	5	7	7	7	7	6	6	6	6	6	6
ACTUAL	4											

BUDGET

ACTUAL

Refer to the summary cost accounts for comments.

PERFORMANCE ANALYSIS

The LOFT Performance Measurement System provides timely, valid project status information that combines cost and schedule performance data for trend analysis. The Budgeted Cost of Work Scheduled (BCWS) forms a Performance Measurement Baseline for subsequent comparisons with the Budgeted Cost of Work Performed (BCWP). The BCWP is also compared with the Actual Cost of Work Performed (ACWP).

	<u>BCWS</u>		<u>BCWP</u>		<u>ACWP</u>	
	<u>Month</u>	<u>Year-to-Date</u>	<u>Month</u>	<u>Year-to-Date</u>	<u>Month</u>	<u>Year-to-Date</u>
5N2D000	221	221	211	211	434	434
5N4K000	131	131	77	77	84	84
5N4P000	114	114	64	64	68	68

For 5N2D000, refer to the comment on the summary cost account chart.

For 5N4K000, refer to the comment on the summary cost account chart.

For 5N4P000, refer to the comment on the summary cost account chart.

TABLE 1. FOREIGN FUNDS AVAILABILITY AT END OF OCTOBER 1980
(In Thousands of Dollars)

<u>Participant</u>	<u>Actual Reserve</u>	<u>Contingency</u>
JAERI	24	57
FRG	4.3	0
CEA	0	0
ECN	57	26.8
FZS	<u>0</u>	<u>0</u>
Total	85.3	83.8

TABLE 2. FOREIGN FUNDED TASK SUMMARY AT END OF OCTOBER 1980

Project Description		Total Proposal Est. Inc. Contingency (\$K)	Total Spending Auth. by CCB (\$K)	Funds Spent to Date (\$K)	Expected Task Completion Date
<u>JAERI TASKS</u>					
5F8C11	Completed Tasks	820	820	822.3	Done
5F8C21	Management and Delegate Support	262	262	186.6	Sept. 81
5F8C22	Analysis and Evaluation	16	16	10.6	Sept. 81
5F8C31	Instrumentation	154	154	152.0	Dec. 80
5F8C32	Hardware Components	43	41	41.6	Dec. 80
5F8C41	Post-CHF Heat Transfer	200	177	64.4	Sept. 81
5F8C51	PC-3 and Small Break Instrumentation	692	660	612.0	Dec. 80
5F8C92	Two-phase Loop	782	782	783.1	Done
5F8C94	Boiler Building	83	83	83.5	Done
<u>FRG TASKS</u>					
5F7C11	Completed Tasks	2937	2937	2852.9	Done
5F7C21	Management and Delegate Support	170	170	235.3	Sept. 81
5F7C22	Analysis and Evaluation	58	58	43.8	Sept. 81
5F7C23	Task Development	10	10	3.6	Feb. 81
5F7C31	Instrumentation	30	30	21.8	Sept. 81
5F7C92	Two-phase Loop	1012	1012	1013.7	Done
5F7C94	Boiler Building	18	18	34.8 ^a	Done

TABLE 2. (continued)

Project Description		Total Proposal Est. Inc. Contingency (\$K)	Total Spending Auth. by CCB (\$K)	Funds Spent to Date (\$K)	Expected Task Completion Date
<u>ECN TASKS</u>					
5FNC11	Completed Tasks	91	91	91.6	Done
5FNC21	Management and Delegate Support	27	27	8.3	Sept. 81
5FNC22	Analysis and Evaluation	234	219	180.1	Sept. 81
5FNC31	Instrumentation	11	11	0	Dec. 80
5FNC32	Hardware Components	59	47	39.6	Dec. 80
<u>FZS TASKS</u>					
5FAC11	Completed Tasks	123	123	123.0	Done
5FAC21	Management and Delegate Support	24	24	13.5	Sept. 81
a. Half of these costs will be transferred to JAERI #5F8C94					

BUDGET STATUS REPORT

TABLE 3. LOFT FY-81 SUMMARY STATUS REPORT
NUCLEAR REGULATORY COMMISSION
(In Thousands of Dollars)

WBSa	189 #	Q80-5-0/3	Approved CCBs	Current PMB #Q80-5-0/4	Current BAC
5N1XX	A6048	4,721	47	4,768	4,768
5N2XX	A6053	3,497	<47>	3,450	3,450
5N3XX	A6043	4,545	<41>	4,504	4,504
5N4XX	A6107	7,923	<65>	7,858	7,858
5N5XX	A6122	4,710	<6>	4,704	4,704
5N6XX	A6110	4,077	<41>	4,036	4,036
5N7XX	A6054	9,062	<31>	9,031	9,031
5N8XX	A6108	940	23	963	963
5NPXX	A6308	500	54	554	554
5N9XX	A6351	0	65	65	65
5NXXX		39,975	<42>	39,933	39,933
Supplementary programs					2,788
NRC management reserves					1,603
Total NRC funding (FY-81)					44,324

TABLE 4. LOFT FUNDING SUMMARY FOR FY-81
(In Thousands of Dollars)

<u>Funds</u>	<u>Current FIN Plan</u>	<u>Current Budget File (Q81-0-0/4)</u>
LOFT Foreign Funds	Not yet available	587 ^a
Total		587
NRC Operating Funds		39,933
Electric Heat Rod Evaluation		278
LTSF		1,694
Advanced Instrumentation		751
TC-3 Tests		65
Total		42,721
Total LOFT Funding ^b		44,324

a. In process of adjustment.

b. Excludes C.E., GSO, and overhead.

TABLE 5. LOFT FY-81 SUMMARY BUDGET STATUS REPORT OF LOFT FOREIGN FUNDS
(In Thousands of Dollars)

LOFT WBS	189 #	Q81-0-0/0	Approved CL.I CCBs	Current PBM #Q81-0-0/4	Current ^a FY-81 Budget	Total Authorized Spending Limit
5FAXX	A6273	8	0	8	11	147
5FNXX	A6271	138	<1>	137	71	393
5F7XX	A6104	23	0	23	31	4,231
5F8XX	A6111	420	<1>	419	359	4,917
5F9XX	A6104S	0	0	0	0	0
5FXXX		589	<2>	587	472	9,688
Foreign contingency reserves					74	74
Foreign management reserves					105	105
Total FY-80 LOFT foreign funds					651	9,867
Foreign funds spent through FY-80					9,216	
Foreign funds budgeted in FY-82					0	0
Total foreign funds received to date					9,867	9,867

a. Tentative - not yet approved.