September 1982

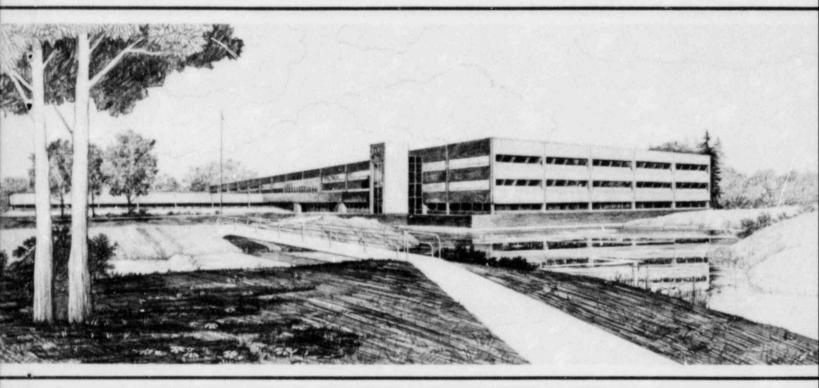
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LOFT MONTHLY PROGRESS REPORT FOR AUGUST 1982

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Operated by the U.S. Department of Energy



This is an informal report intended for use as a preliminary or working document

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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.

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INTERIM REPORT

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LOFT MANAGER'S MONTHLY SUMMARY

The LOFT Experiment L6-8 Series was completed during the month. This series of six experiments was conducted during August 25 to August 31, 1982 and consisted of two control rod withdrawal transients, three small break recoveries, and a natural circulation cooldown with low decay heat.

The results from the three small break recovery experiments supports the hypothesis that primary pump current provides additional information that can remove ambiguities regarding primary coolant mass inventory, especially when pressurizer liquid level and hot leg subcooling indications are lost. The two control rod withdrawal transients utilized the unique experimental capabilities of LOFT as a nuclear powered integral system in the investigation of reactivity feedback and in the testing of computer code kinetics algorithm. Although the power operated relief valve was left open during most of the natural circulation cooldown, valid data were obtained on the response of natural circulation to primary system voiding.

Preparations are now underway to conduct the LOFT Experiment L9-4, Anticipated Transient Without Scram (ATWS), simulating loss of off-site power transient, on the target date of September 22, 1982.

The total costs for the LOFT Program year-to-date through August 1982 indicate a 7.5% underrun. The final year-end budget scrub is in progress.

Refer to the lower level cost graphs for detailed budget versus actual variance comments.

ACCOMPLISHMENTS

LOFT Technical Support Division

- Software was developed for the LOFT Experiment Control System (LECS) for the L6-8 tests.
- Constant Air Monitors (CAMs) for the H&V 10 System were modified to increase reliability.
- Indicator light systems were installed in the Health Physics office to indicate range and alarm levels on the various CAM Systems.
- 4. A new narrow range hot leg temperature monitor was installed to measure hot leg temperatures in the 500°F to 700°F range. This will provide a monitor with good resolution in the event hot leg temperatures exceed the 650°F limit of the present system.
- 5. A buffered signal circuit was provided to the Data Acquisition and Visual Display System (DAVDS) for the purification systems flow measurement (FI-P140-10).
- Several minor modifications were made to the plant instrumentation and control systems as provided in FCF L-9014. These modifications included:
 - a. Buffer amplifiers were installed between the three pressurizer temperature loops and DAVDS.
 - b. A passive resistor network was installed to provide a proportional, scaled down Quick Opening Blowdown Valve (QOBV) position indication to LECS.
 - c. Existing AC solid state relays in the hot leg low pressure indication system were replaced with equivalent qualified DC solid state relays to provide greater compatability with the LECS.

- d. The low pass filters associated with the LECS input buffers were modified to reduce the band pass from 100 Hz to 33 Hz to reject unwanted noise. In addition, the output of the LECS buffer amplifiers was diode clamped to prevent inadvertant multiplier saturation.
- System and readiness reviews for the August L6-8 Experiment Test Series were completed.
- 8. The Experiment L6-8 tests were completed without mechanical difficulty.
- 9. Performance of the Experiment L6-8 test series required an accurate measurement of primary coolant letdown flow. The purification system was chosen for this path due to the in-place flow meter which could measure the required flow to the tolerance required. Further evaluation of the purification system revealed a temperature problem with the letdown valve. This problem was resolved by replacing one of the purification relief valves with a control valve.
- 10. Battelle Pacific Northwest Laboratories completed attachment of thermocouples to the F2 fuel bundle fuel rod cladding tubes.
- 11. Exxon Nuclear Company completed loading of the 146 noninstrumented fuel rods and assembly of the 58 instrumented fuel rods for the F2 fuel bundle.
- 12. The LOFT Fuel Requalification Review Committee approved the Working Group recommendation to proceed with the Experiment L6-8 test series using the resident fuel bundles. A special fuel requalification reactor power cycle indicated that possible slight swelling of the Fl fuel bundle pressurized fuel rods did not cause fuel temperature to exceed the fuel temperatures on which the LOFT safety analysis was based.

- 13. Completion of F2 instrumented fuel rods at Exxon Nuclear was accomplished with test support by EG&G Idaho. Very few instruments failed and the bundle assembly at this time will have a full complement of operational instruments.
- 14. F1 fuel bundle plenum pressure instruments were rechecked and defects were corrected for the L6-8 test series. Preliminary data from the L6-8B test showed good tracking and consistency. Techniques used for checking these instruments will be applied to the F2 bundle.
- 15. The Underwater lighting system has been received from Lennox. Final acceptance is pending a checkout at TAN 607.
- 16. Fabrication of the Fuel Module and Insertion and Removal Cask (FMIRC) Auxiliary Drive Unit is continuing. Repair of the FMIRC was initated and the damaged motor, clutch, and gear box was removed. A replacement motor has been received, and repair and installation of the auxiliary drive gear box and "T" drive has been completed.
- 17. The inservice inspection examination for the LOFT plant components required for Experiment L6-8 and L9-4 were completed on schedule.
- 18. Design layout for the Waste Gas Processing System (WGPS) O_2 analysis shielding, required as a result of the TAN Safety Radiological analysis, was completed and is in drafting. The SWR is drafted and will be released upon receipt of the drawings.
- 19. The required radiation measurements of the spent resin in the old LOFT spent resin cask were completed. The spent resin is scheduled to be transferred to storage containers, which will then be shipped to Waste Management Facility by the Hot Shop.
- 20. The air supply to valves that are required for long term decay heat removal were modified to increase reliability in response to the recommendation of LTR LO-64-80-011.

- 21. The caustic soda hopper and conveyor for demineralizer regeneration were installed to reduce the hazard to the utility operators during regeneration.
- 22. A line was installed to vent the instrument air driers during desiccant regeneration. This change was made to reduce the noise level and to prevent oil vapor being released inside the building.
- 23. The Experiment Safety Analysis (ESA) for the L6-8 test was submitted to the Department of Energy-Idaho Operations Office (DOE-ID) and was approved and issued.
- 24. The six separate parts of the L6-8 experiment were successfully conducted.
- 25. The following Document Revision Requests (DRRs) for changes to the LOFT Technical Specifications were submitted to DOE-ID for concurrence, approved, and issued:
 - a. DRR L-5344: Updated steam generator maximum differential pressure per analysis and updated NUREG references.
 - b. DRR L-5345: Allowed rod velocity increases for control rod testing.
 - c. DRR L 5346: Provided basic limitations and changes required to conduct L6-8.
 - d. DRR L 5347: Imposed limitations on reactor operations until fuel strain had been assessed.
 - e. DRR L 5348: Provided additional limitations on L6-8 operation due to DOE-ID and EG&G Idaho review.
 - f. DRR L-5349: Removed restrictions imposed on reactor operation until fuel steam was assessed.

- g. DRR L-5351: Provided criteria for exiting Mode 9 and redefines new limits for control rod upper limit for Experiment L6-8.
- h. DRR L-5352: Defined beginning of Mode 8 for Experiment L6-8B-1.
- 26. Completed preparation and initiated review of Final Safety Analysis Report (FSAR) supplement on Waste Gas Processing System (WGPS) (DRR L-6125).
- 27. The LOFT Technical Support Center (TSC) was manned during the conduct of Experiment L6-8 to assess experiment safety as the test progressed.
- 28. Safety analysis documentation for L9-4 has been completed and is in LOFT review.
- 29. Concern over strained fuel resulting from Experiment L2-5 precipitated development of a measurement procedure to attempt to establish the current fuel condition. Comparison techniques were developed and a power ascension was performed. A change analysis was performed using previous power ascension data. The results indicate that no discernable change in the fuel condition was evident. Therefore, the current safety envelope is applicable.
- 30. A zero power physics requalification (DOP 01-006) of the LOFT core following LOCE L2-5 was performed.
- 31. Power distribution measurements, decay heat and shutdown calculations were performed in support of the LOFT thermal fuel requalification and Experiment L6-8.
- 32. Posttest analysis of the L6-8B tests were performed and the reactivity insertion rate was determined. Both the fast rod withdrawal test and the slow rod withdrawal test were very close to the pretest calculations.

LOFT Facility Division

- 1. Work items completed for Experiment L6-8 included:
 - a. Control rod drive motor modifications
 - b. Replacement of RV-211 with CV-P140-211
 - c. Replacement of the MPT relief valve.
- Experiment L6-8 series testing was successfully completed.
- 3. Preparation was initiated for Experiment L9-4.

LOFT Program Division

- The and sis was completed and three experiment prediction documents were published in support of the L6-8 experiments.
- The L6-8 Experiment Definition Document (EDD) and Experiment Operating Specification (EOS) were issued.
- Three papers were presented at the ANS/ASME International Meeting on Thermal Reactor Safety in Chicago.
- 4. Calculations for the L9-4 Experiment Prediction (EP) document were performed. The base case and sensitivity calculations for the initial portion of the experiment were completed and calculations of the recovery portion were initiated.
- 5. A post-experiment RELAP5 calculation of the second heatup during Experiment L2-5 was completed.
- 6. A meeting was attended at NUS Corporation (Gaithersburg, Maryland) to discuss additional support analysis needed for the LOFT (Consortium) fission product experiments.

- 7. The L2-5 Experiment Data Report (EDR) was issued ahead of schedule.
- 8. The draft of the L2-6 dual diameter Type K Inconel-Sheathed
 Thermocouple (TC) test specification was prepared. Plans were started
 for implementation. The Oak Ridge National Laboratory (ORNL) shunting
 model was installed on the Cyber. Sensitivity studies have begun to
 establish the usefulness of this program to LOFT.
- The Measurement Capabilities List (MCL) and configuration tables were released for Experiment L6-8 and L9-4.
- 10. Data integrity reviews were started for Experiment L6-8. Automated Data Qualification (ADQ) is being used for as many Data Integrity Review Committee (DIRC) activities as possible.
- 11. Documentation of the INEL Scientific Data Management System (ISDMS)
 ADQ processor was completed.
- 12. Participation in a task force to evaluate data and calculations on the efficacy of primary feed and bleed was completed. An analysis of LOFT Experiment L9-1/L3-3 was made as part of the work of the task force.
- 13. Two papers submitted for the ANS Santa Barbara Conference (January 1983) were accepted. The papers were written on natural circulation and on pump power sensitivity to coolant quality. Reviewer comments are being incorporated.
- 14. Analysis of the six experiments in the L6-8 series was started preparatory to issuance of the Quick Look Report (QLR) covering the experiments.
- 15. Primary Coolant Pump (PCP) power and current calibration information for measurement of coolant quality was developed for Experiments L6-8C-1, L6-8C-2, and L6-8C-3. These experiments are the first direct application of this measurement concept. The experimental data are currently being analyzed.

Foreign Funded Task Summaries

Foreign funded projects are summarized in this section.

Summary of Tasks Funded by Japan (JAERI)

Initial transient evaluation of the LOBI facility test Al-O4 was performed using RELAP5. The initial results are generally good and have identified the need for several minor modeling adjustments and nodalization modifications.

Production testing was completed in the post critical heat flux (CHF) test section at the LOFT Test Support Facility. Approximately 250 tests were performed of which approximately 60 were with a fixed quench front. The remainder were performed with a moving quench front.

Change Control Board (CCB) forms have been submitted to return \$99.2K to the JAERI reserve account, deleting the International Program Evaluation task funding for FY-1983. Another CCB was submitted to request \$64K for completion of analysis and reporting for the post-CHF Phase 2 task.

Summary of Tasks Funded by Germany (FRG)

The task supporting the temperature compensation pressure measurement instruments to be installed in the F2 fuel rods is essentially completed and within budget.

Summary of Tasks Funded by France (CEA)

Work in support of the temperature compensated pressure measurement instruments and installation in the F2 fuel rods is essentially completed and within budget. Only minor work remains in support of this work through September 1983.

The Nuclear vs. Electric Fuel Rod Study task was one of the LOFT operating tasks realigned to French funding. Work for this task was

performed in the following areas: a) RELAP4/MOD6 calculations for the IFA-511 experiments were extended to include the high temperature nuclear rod experiments. The code does a reasonable job in predicting the high and low temperature nuclear experiments and higher temperature electric rod experiments but does rather poorly in predicting the lower temperature electric rod experiments. b) A review of the technical concerns and benefits of the IFA-511 program has been completed. c) Analysis of the Nuclear Reactor Universal (NRU) data has been initiated in an attempt to evaluate FRAP-T6 capability to predict the fuel rod deformation. To complete this assessment, more NRU data is needed.

Summary of Tasks Funded by The Netherlands (ECN)

The \$160K contribution from The Netherlands has been received by DUE-ID and will be placed in The Netherlands reserve account at the September Change Control Board (CCB) meeting.

Summary of Tasks Funded by Austria (FZS)

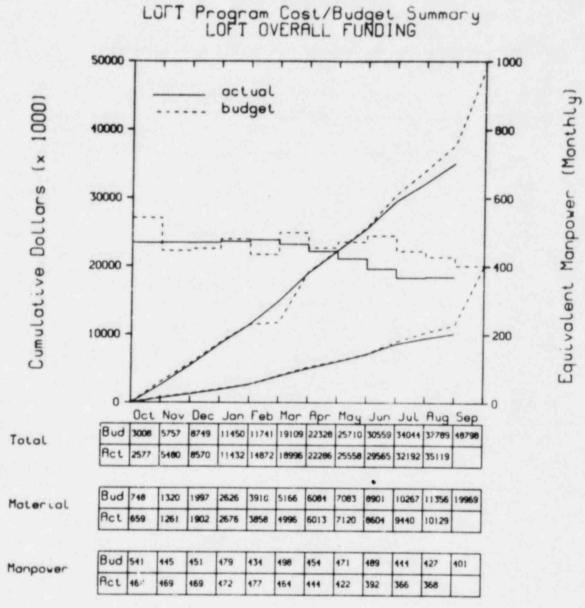
The \$40K contribution from Austria was placed in the Austrian reserve account.

COST GRAPHS

LOFT Overall Funding

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9xxxxx

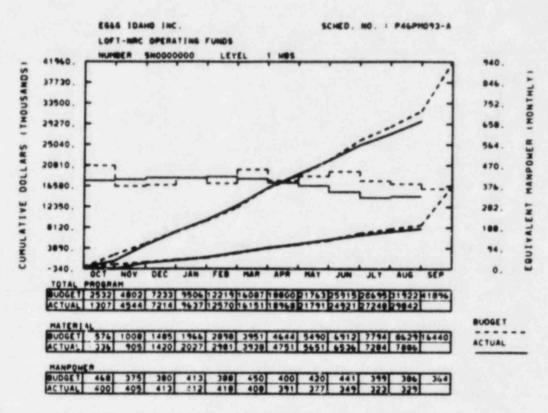


The NRC operating, foreign funded, and capital equipment budgets reflect the LOFT Q82-2, Rev. 4A baseline with approved changes through August 1982. The year-to-date underrun is within 7% of the budgeted costs of work scheduled. A two year (FY-1982 & FY-1983) baseline budget scrub is in progress for the LOFT Program, and carryover funds from \$10 million to \$12 million is anticipated by fiscal year end. No major problems exist. Refer to the Manager's Monthly Summary for comments. The above figures and other cost graphs exclude LTSF, A6108, A6308, A6363, A6384, and DOE Improved Licensing Criteria (categorized as RES-Other).

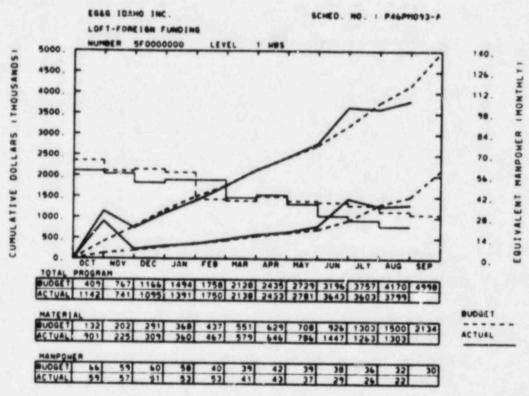
5N--NRC Operating Funding

5F--Foreign Funding

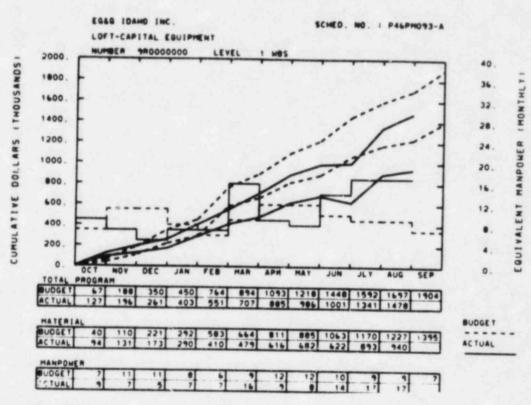
9R--Capital Equipment Funding



The year-to-date underrun is within 7% of the budgeted cost of work scheduled. No significant variances are anticipated at fiscal year end. Refer to the lower graphs for a more detailed variance of cost versus budget comments and review.



The year-to-date underrun is within 9% of the budgeted cost of work scheduled. No significant variances are anticipated by fiscal year end. Refer to the lower graphs for a more detailed variance of cost versus budget comments and review.



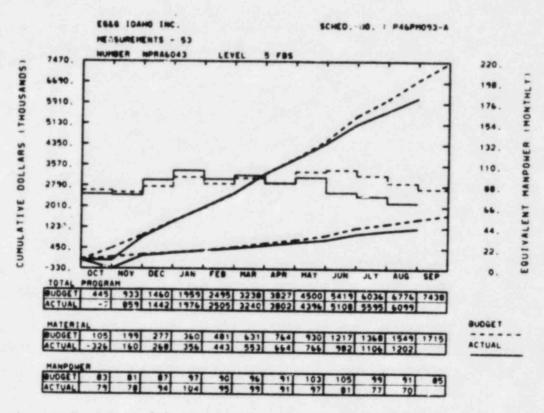
The year-to-date underrun of \$219K is due to the actual cost of work performed being behind schedule. No major problems exist. Refer to the lower level graphs for the detailed variance review and comments.

LOFT Form 189 Summary

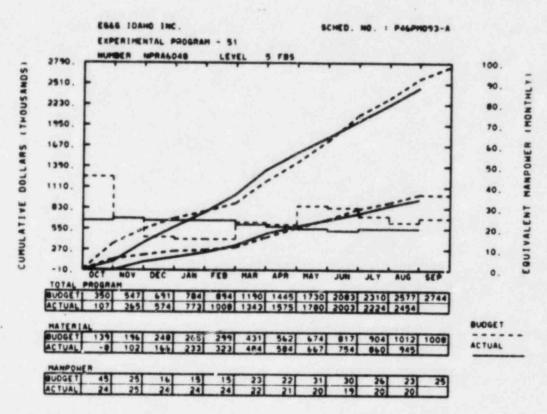
5NX--NRC 189a

5FXX--Foreign 189a

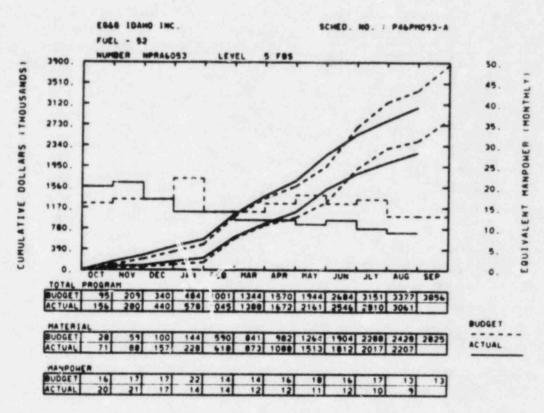
9RX-Capital Equipment 189a



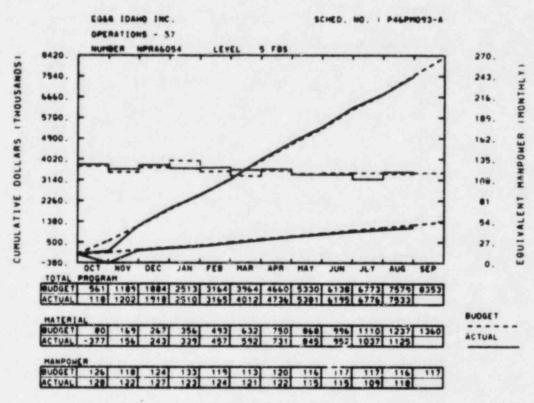
The underrun is due to (a) increased software efficiencies in automated data qualification (ADQ) resulting in lower expenditures than originally anticipated, (b) manpower availability reduction due to attrition and transfers and, (c) systems operating more efficiently and reusing Modular Drag Disk Turbine Transducers (MDTT's). This cost graph includes the annual budget of \$2,003K for the LOFT Test Support Facility (LTSF). No major variances are anticipated by fiscal year end. Refer to lower graphs for a more detailed variance review.



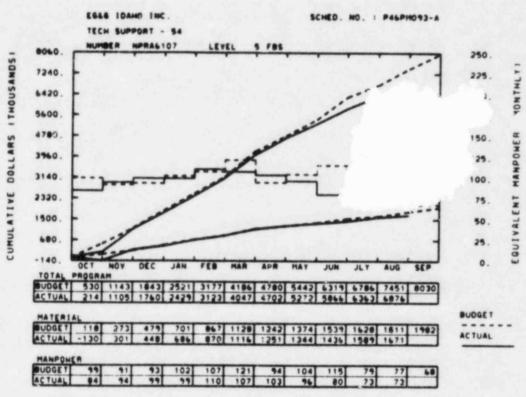
The annual budget was adjusted last month to correct a budget overstatement of approximately \$353K. The expenditures for this account are projected to continue at approximately the current rate. No significant variance is anticipated by fiscal year end. Refer to lower graphs for a more detailed variance review.



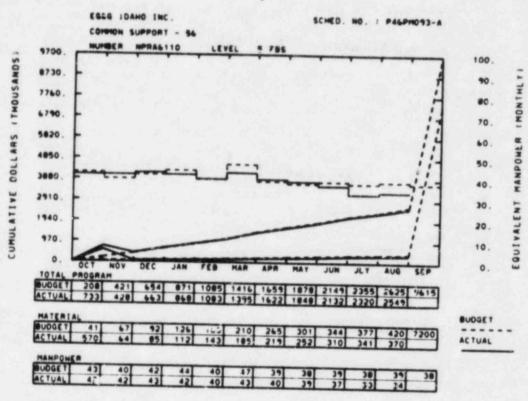
The underrun is due to (a) lower-than-planned costs to date for the F2 fuel bundle design and fabrication subcontracted at EXXON Nuclear Co., and (b) reduced work scope in fuel requalification and fuel data bank maintenance. No significant variance is anticipated by fiscal year end. Refer to the lower costs graphs for further detailed variance comments.



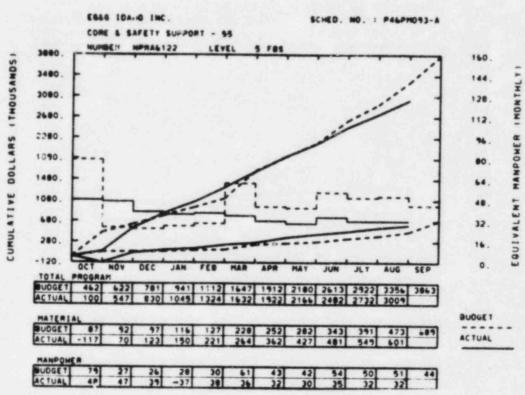
No significant variable. Refer to the lower cost graphs for further variance comments.



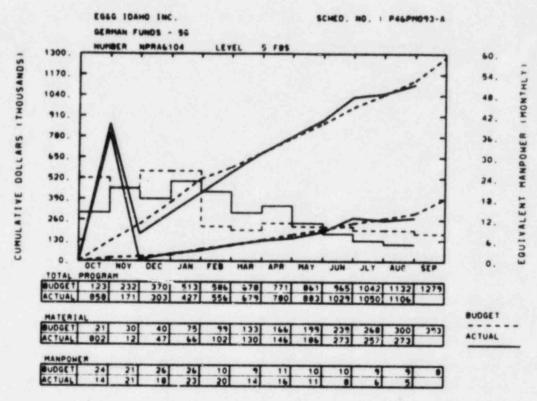
The underrun is due to: (a) combined effort for L9-4, and L6-8 resulting in the elimination of one (1) work window, (b) reduction in work scope for In-Service Inspection (ISI) and (c) unavailability of manpower to support NRC response items. No significant problems are anticipated by fiscal year end. Refer to lower cost graphs for further comments.



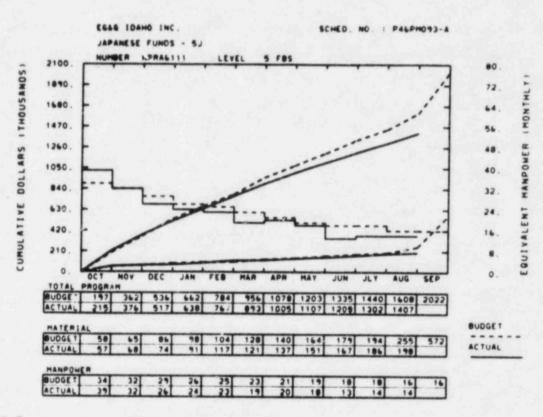
The underrun of \$76K reflects primarily computer usage being less than budgeted due to continuing cost effective applications. No major problems are anticipated by fiscal year end. Refer to the lower graph for a uetailed variance review and comments.



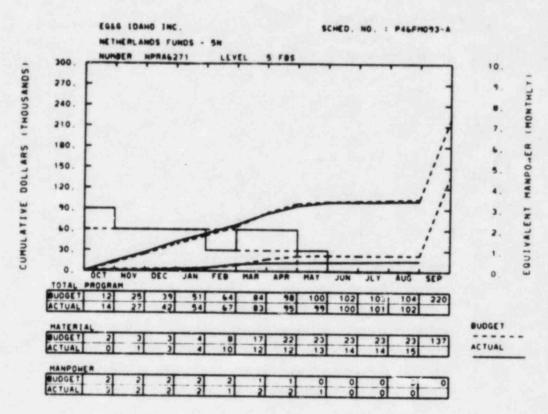
The underrun is a result of significantly reduced computer code configuration management effort on codes currently used in safety analysis. The level and degree of configuration management will remain the same as it has in the past. In addition some money was returned because the experiment analyses have not cost what was expected through cost-effective management of the analysis effort. Refer to the lower cost graphs for a more detailed review.



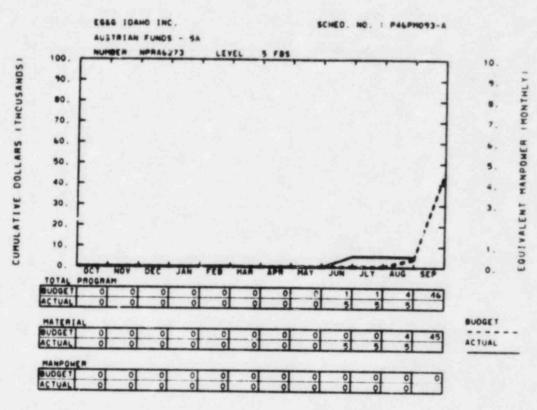
The LOFT scaling study task is under budget by \$10.4K. Due to a lack of personnel to complete this task, funds will be returned to reserve. Fuel handling documentation and administration is \$15.7K under budget. A budget adjustment has been submitted and will compensate for the underrun. German management work for RELAP5 evaluation of PKL has been delayed until September and has resulted in a current indicated underun of \$8.4K.



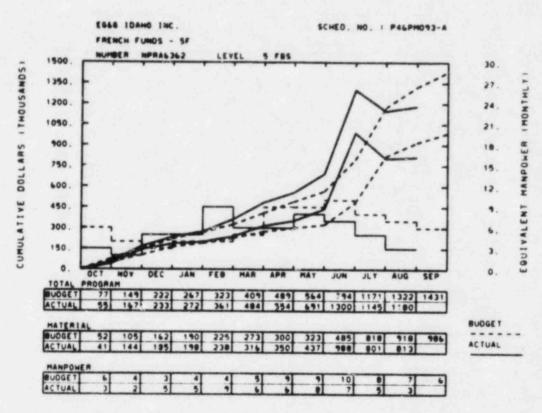
Post CHF phase-2 schedule and budget adjustments are scheduled to be addressed at the September CCB meeting which should reduce the current indicated underrun of \$55.9K for that task. Budget adjustments have been submitted for September which will reduce the indicated underruns for DAVDS support, flow measurements, and pressure measurements which contribute \$26.2K, \$39.1K, and \$73.3K, respectively to the underrun on this cost graph.



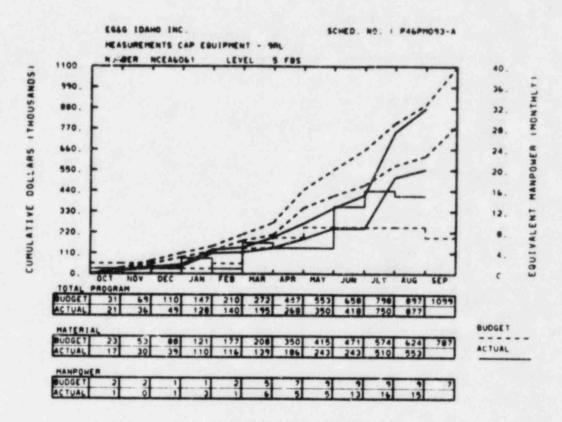
No significant variance.



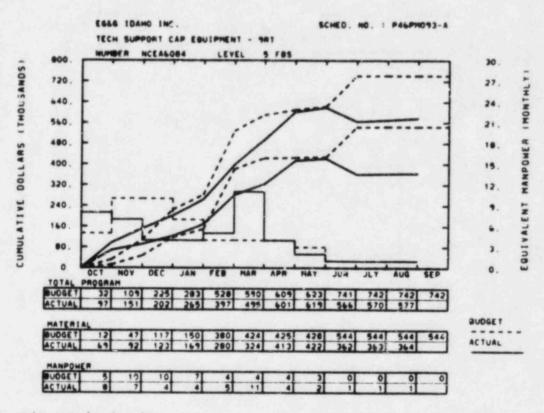
No significant variance. The budget curve shows \$40K in September which is held in the Austrian Reserve account and will not be used until allocated to a specific task.



The following tasks are those which significantly contribute to the indicated cost underrun. 1) The temperature compensation for fuel rod pressure transducer work is \$45.4K under budget. This is primarily due to invoices and accruals on subcontracts which are behind schedule. Budget spread adjustments have been submitted for September CCB meeting. 2) The L2-6 specifications and coverage budget is underrun by \$28.9K. The spending rate on this task is expected to increase during September, bringing actual expenditures close to the year end budget. 3) Budget adjustments were submitted for the Nuclear vs. Electric rod studies task which is \$28.2K underrun. 4) The F2 Fuel Bundle support and fuel instrumentation tasks have been completed under budget (\$35.6K total for both tasks) and surplus funds will be returned to reserve. Total year-end expenditures for this account are expected to be at or below the year-end budget.

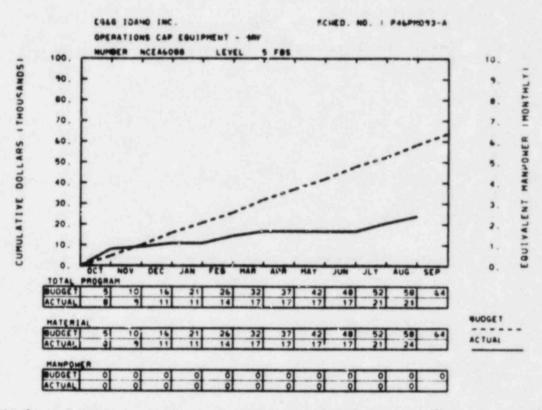


No significant variance.



The underrun is due to:

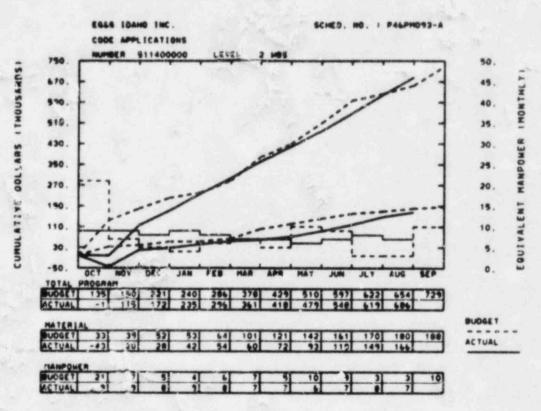
- 1. Materials returned and credited in June have not been received and costed, as expected (over \$70K).
- Some jobs have been put on hold, pending determination of Consortium or shut-down.
- A CCB has been input to reschedule these activities, but is not reflected in the budget figures.



Capital equipment is being used on "as required" basis. The unused dollars will be carried over into FY-1983 to cover any capital equipment purchases during FY-1983.

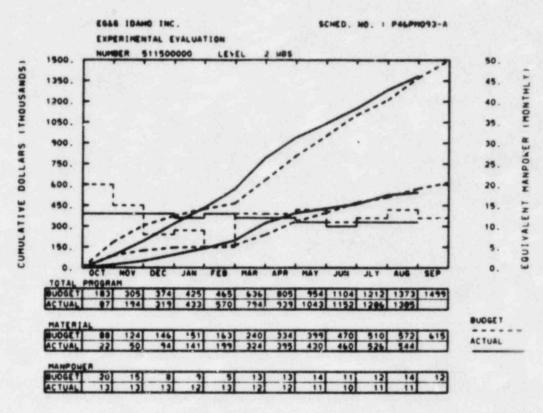
Summary Cost Accounts

5NXX--Summary Cost Accounts

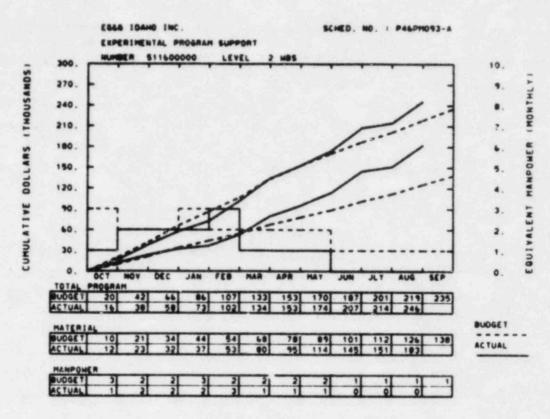


The YID Tabor hours are approximately 6% over budget. This is due to an anomalous manpower loading in the last three months of FY-1982. Actual manpower expenditures in September will drop to an equivalent of about 5 people bringing us close to the year-end projected budget. Material (computer) expenditures are expected to continue at the current rate so that the actual year end material costs will be at or slightly below budget.

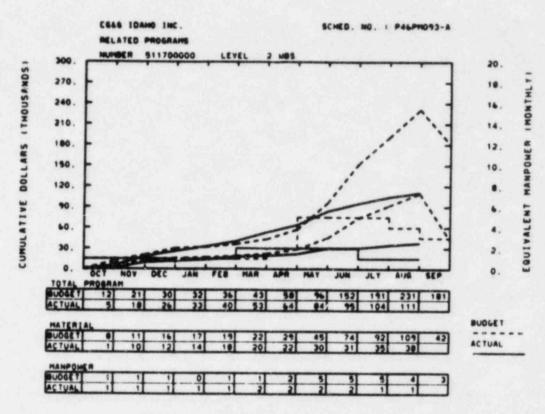
A CCB has been submitted requesting an additional \$23K to support additional work (an inverse in work scope) for the L2-6 experiment. This CCB is not reflected in the current budget.



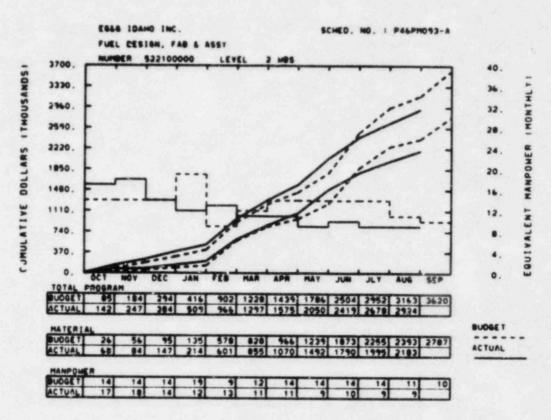
The 74K overrun in July was reduced to 12K in August. This reduction in the overrun is part of the continuing process begun last March to recover from the 158K overrun at the time. Expenditures in September will be approximately 120K, including a 30K subcontract which will be accrued in total in September. With 114K remaining the year end expenditure is estimated to be 6-12K over the budget. This is less than 1%.



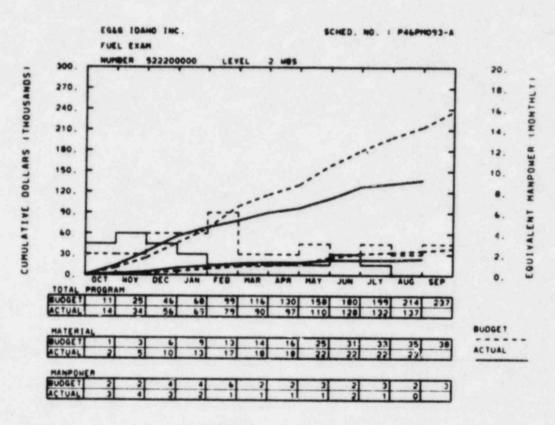
A \$31K subcontract was incorrectly accrued against this account number. This error has been corrected and the account will be on or below budget by year end.



The underrun is due to the IFA-511 work which has been re-scheduled due to delays in Halden testing schedule for the IFA-511 experiments. A schedule adjustment for this work was submitted for the September CCB meeting.



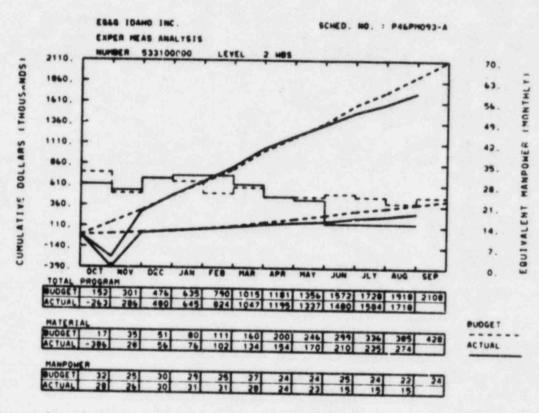
The underrun is due to lower-than-planned costs-to-date for the F2 fuel bundle design and fabrication subcontract at Exxon Nuclear Co. The current plan is to rollover the surplus and determine the appropriate return to reserves in November when the Exxon subcontract work has been completed and incurred costs are more firmly established.



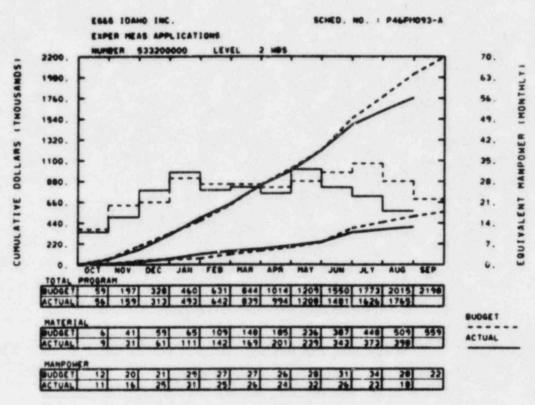
The underrun is due to the following:

- a. Reduced work scope in fuel requalifications and fuel data bank maintenance.
- Delay in subcontracts award for disassembly machine simplification studies.
- c. Reduced work scope in Fuel Module Installation and Removal Cask load cell data acquisition system improvement.

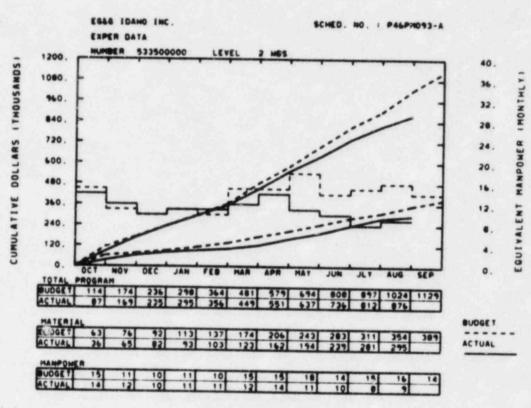
A CCB has been submitted to return excess to Management Reserves.



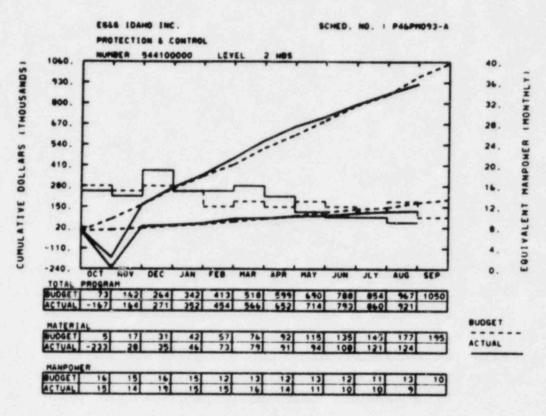
Manpower has decreased due to transfers and employees leaving the company. The budget does not reflect the latest CCB which returned the remainder of the funds to management reserve and showed a reduced scope because of manpower availability.



The underrun is due to: (a) manpower availability and systems operating more efficiently. CCB 82-94 has been submitted to return excess to Management Reserve. No major problems are anticipated by fiscal year end.

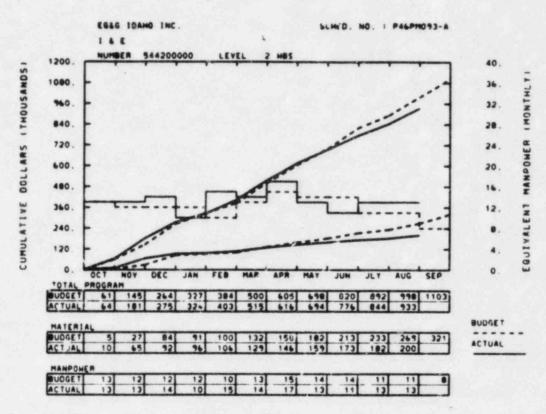


The data processing effort was less than expected due to increased software efficiencies, especially in the ADQ processing, which resulted in underruns in both manpower and computer budgets. A CCB is in process to return the underrun to the Management Reserve.



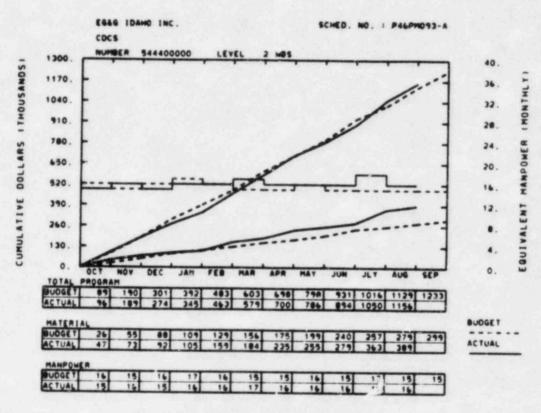
No significant variance.

CCB 82-94 has been submitted to return excess to Management Reserve.

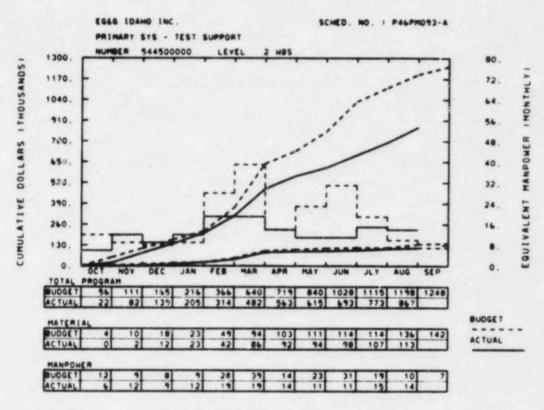


No significant variance.

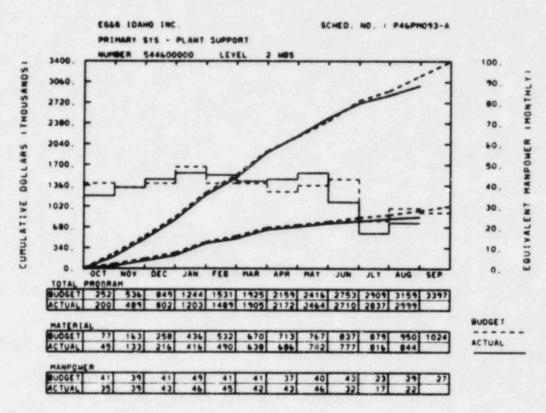
CCB 82-94 has been submitted to return excess to Management Reserve.



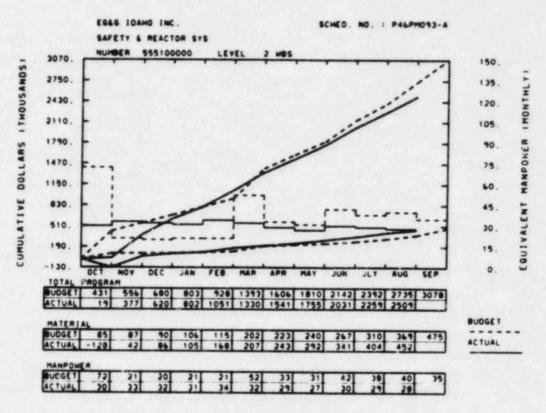
Overrun due to an unexpected cost transfer of \$27K from the F2 fuel project to cover word processing, editing, and printing charges. A CCB is in process to cover the additional material requirements. No significant difference anticipated at fiscal year end.



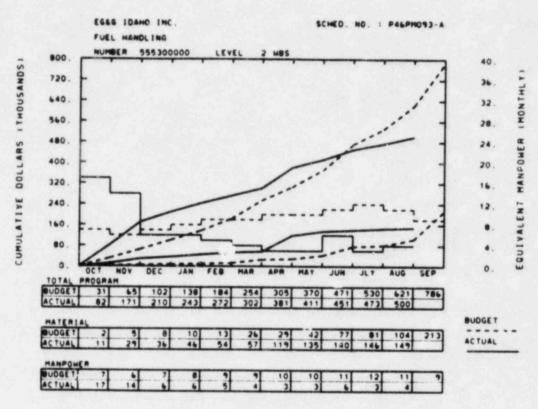
Combined effort for L9-4/L6-8 resulted in substantial savings through the elimination of one work window. CCB 82-94 was submitted to return the excess to Management Reserve.



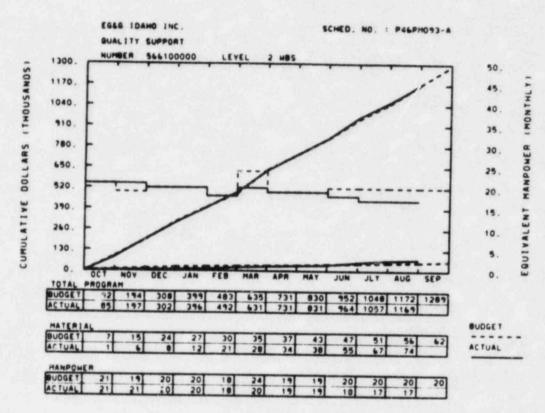
The underrun is due to: (a) reduction in work scope for In Service Inspection (ISI), and (b) unavailability of manpower to support NRC response items. CCB 82-94 has been submitted to return excess to Management Reserve.



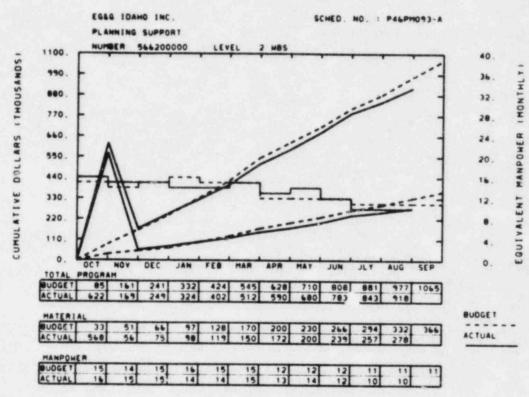
The underrun is the result of significantly reduced computer code configuration management effort on codes currently used in safety analysis. The level and degree of configuration management will remain the same as it has in the past. In addition some money was returned because the experiment analyses have not cost what was expected through cost-effective management of the analysis effort. CCB 82-94 has been submitted to return excess to Management Reserve.



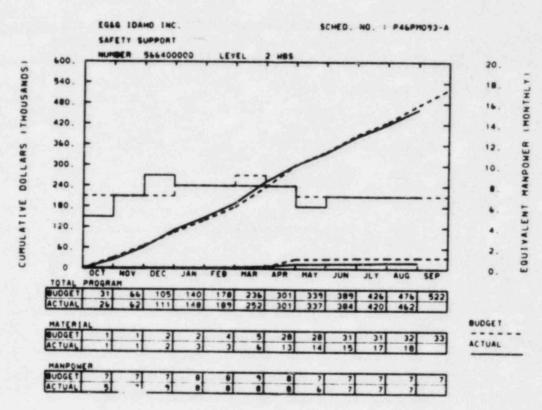
The underrun is due to a reduction in Hot Shop Support and scope. CCB 82-94 has been submitted to return excess to Management Reserve.



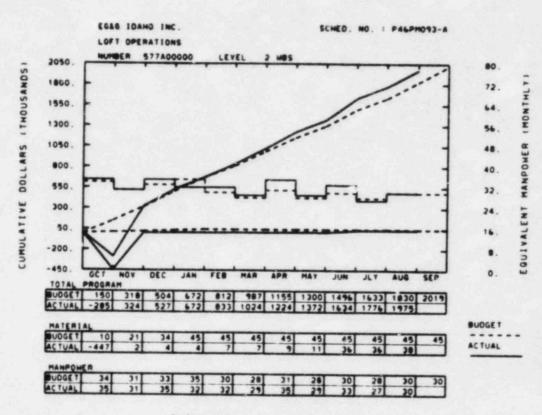
No significant variance.



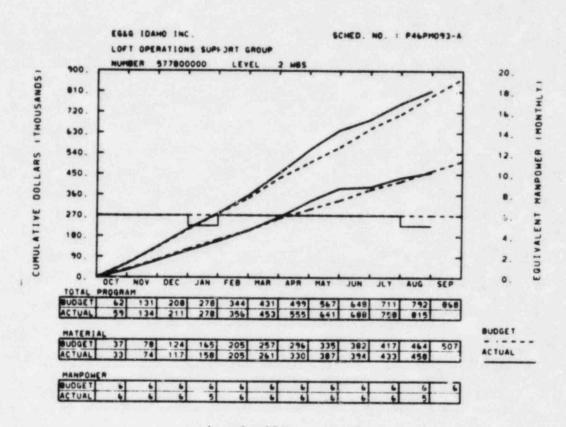
The underrun of \$50K (6%) is due to continuing cost effective program applications. No major problems are anticipated by fiscal year end.



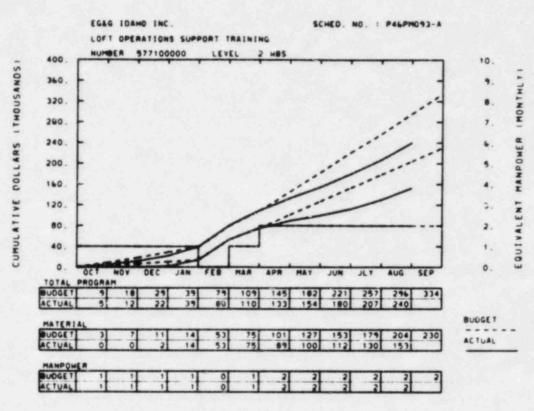
No significant variance.



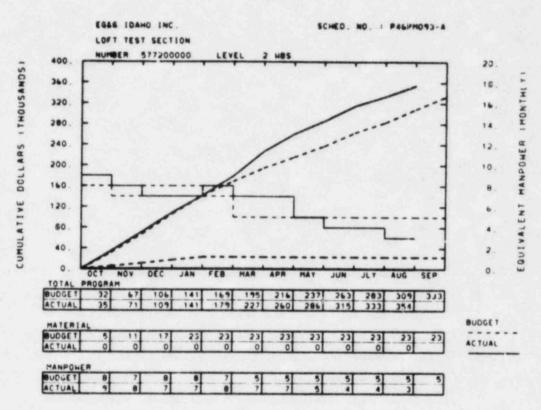
The overrun is due to: (a) additional manpower hours were expended on LOFT specific tests and (b) labor rates are higher than budgeted. Overrun, of approximately \$150K, is anticipated by fiscal year end. This overrun will be absorbed at the operations 189 Level.



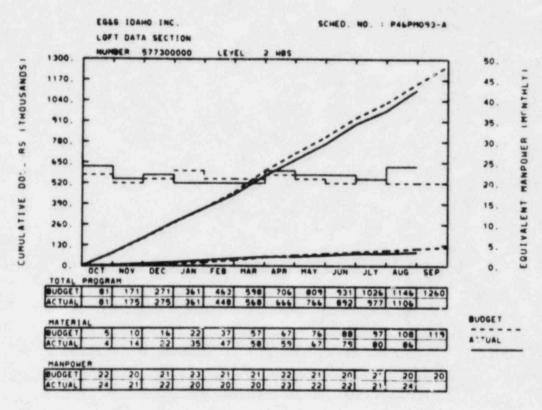
No significant variance.



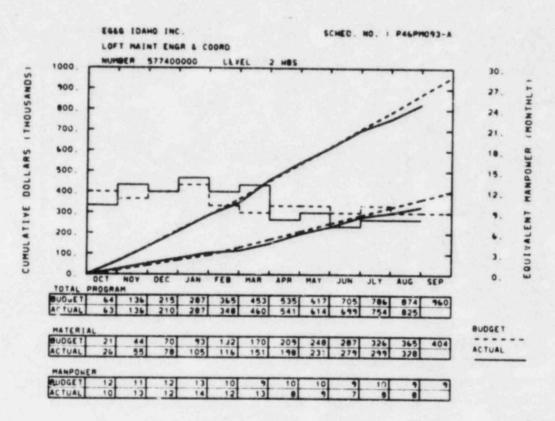
Underrun caused by delay in ordering and receiving of material for PLATO. A portion of the material underrun (46K) is being carried over into FY-1983.



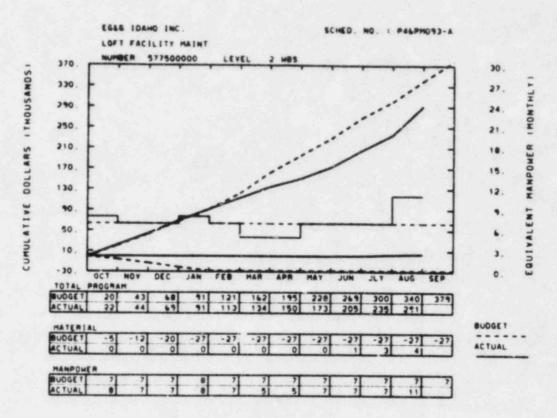
Overrun is still caused by previous month's overrun. This overrun will be absorbed within the Operations 189.



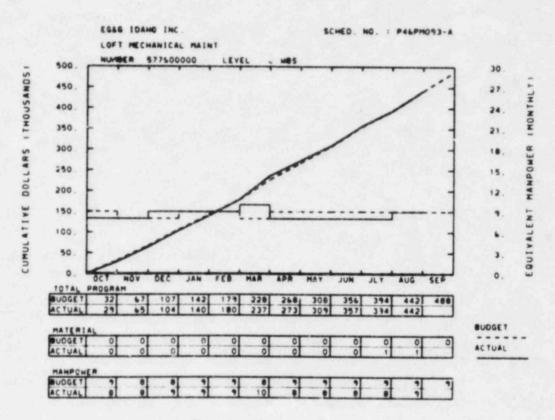
No significant variance.



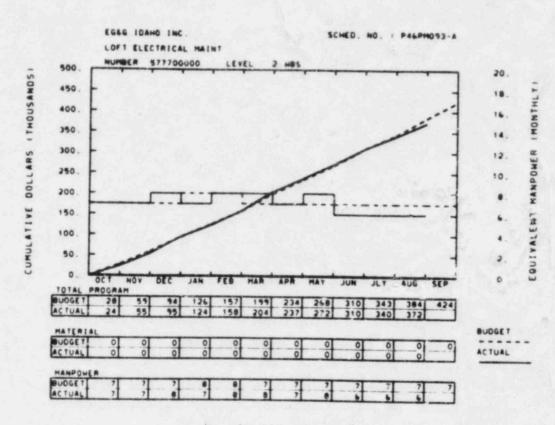
No significant variance.



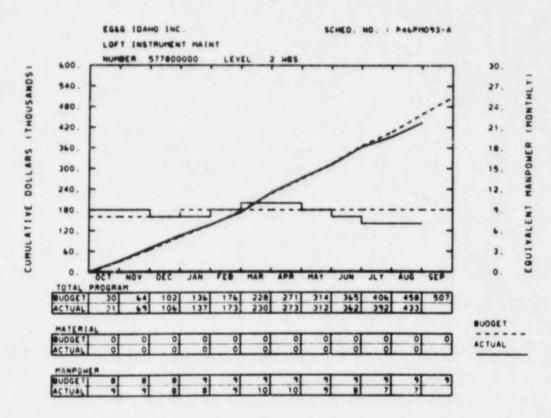
No significant variance.



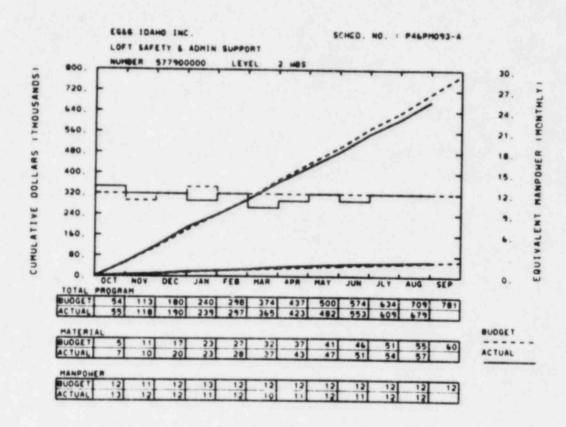
No significant variance.



No significant variance.



No significant variance.



No significant variance.

TABLE 1. PLANNED LOFT EXPERIMENT SEQUENCE

07/09/81ª	Required test of containment leak				
	Required test of containment leak integrity.				
07/31/81a	Simulated turbine trip multiple failure continuation of L6-7.				
10/26/81a	Intermediate size break (accumulator line).				
11/16/81ª	Core uncovery at high decay heat level.				
11/19/81 through 01/29/82a	F1 center fuel pressurized to 350 psig.				
04/07/82a	Anticipated transient without scram (ATWS) loss of feedwater.				
04/21/82ª	Boron dilution from cold shutdown.				
06/16/82ª	200% cold leg break at 50 MW to produce the worst probable core thermal-hydraulic conditions, without fuel damage.				
10/21/82ª	Three anticipated transients.				
11/18/82	ATWS.				
02/23/83	F2 fuel bundle pressurized.				
09/29/83	In standbycold without core.				
	11/16/81 ^a 11/19/81 through 01/29/82 ^a 04/07/82 ^a 04/21/82 ^a 06/16/82 ^a 10/21/82 ^a 11/18/82 02/23/83				

a. Completed.

TABLE 2. LOFT FY-1982 SUMMARY STATUS REPORT--NUCLEAR REGULATORY COMMISSION (In Thousands of Dollars)

WBS No.	189 No.	Q82-2-4	Approved CCBs	Q82-2-4A Current PMBa	Current BACb	
RES-NRC:						
51XX	A6048 3,015 2,7		2,744	2,640		
52XX	XX A6053 3,857 3,85		3,857	3,515		
53XX	A6043	6,903		5,435	4,990	
54XX	A6107	7,746		8,031	7,565	
55XX	A6122	4,473		3,864	3,673	
56XX	A6110	2,876		2,876	2,917	
57XX	A6054	8,354		8,353	8,355	
5XXX		37,224		35,160	33,655	
Supplem	entary pro	grams (LTSF	2,003	2,003		
Estimat	ed carryove	er	6,977	8,482		
Total R	ES-NRC fund	ding (FY-198	82)		44,140	
RES Other	:					
5H	A6384	100	0	100	90	
5T	A6363	218	300	518	125	
5K	6GE402	200	0	200	200	
58	A6108	316	105	421	400	
59	A6308	516	220	736	470	
Total RES Other 1,350 625				1,975	1,285	
Estima	ted carryov	er			690	
Total fund	ing				46,115	

a. PMB--performance measurement baseline.

b. BAC--budget at completion.

TABLE 3. LOFT FUNDING SUMMARY FOR FY-1982 (In Thousands of Dollars)

Funds	Current FIN Plan 10	Current Budget File (Q82-2-4A)		
LOFT foreign funds	4,999	4,999		
NRC RES-Operating funds	44,140b	42,137		
LTSF		2,003		
Total		44,140		
Total LOFT funding ^a	49,139	49,139		

a. Excludes RES-Other, Capital Equipment, and Improved Licensing Criteria.

b. Includes GSO.

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TABLE 4. LOFT FY-1982 SUMMARY BUDGET STATUS REPORT OF LOFT FOREIGN FUNDS (In Thousands of Dollars)

5FXX A63 5NXX A62 5GXX A61 5JXX A61 Total	273 362 271	6 2,429	40 1,346	46	40		
5NXX A62 5GXX A61 5JXX A61 Total			1.346		10.00	6	187
5GXX A61 5JXX A61 Total	271	F.40		2,429	3	1,397	2,000
5JXX A61 Total		540	418	540		107	640
Total	104	3,284	2,634	3,284	<5>	1,217	6,260
	113	2,977	2,465	2,977	44	1,838	7,000
r		9,2368	6,861	9,236a	82	4,565	16,087
Foreign manage	ement	reserves					82
Total FY-1982 LOFT foreign fund work packages						4,565	
Foreign funds spent through FY-1981						11,086	
Foreign funds budgeted in FY-1983						4,671	
Total foreign funds received to date						20,4040	

a. Includes \$4,320K anticipated funds not yet received.

b. Includes <\3K> rounding variance.

TABLE 5. LOFT CAPITAL EQUIPMENT STATUS REPORT THROUGH AUGUST 1982

Form			Costs ^b				
	Title	Total Authorizeda	Prior Years	Current Month	Current Year	PO/WR Commitments	Uncommitted Uncosted Authorizations
A-6061 9RL	Experimental Measurements	1,970,121	508,739	126,629	877,017	66,687	517,678
A-6084 9RT	Integral System Design & Fabrication	1,543,341	801,678	7,228	577,080	75,827	88,756
A-6088	LOFT Operations	67,227	3,375	3,351	23,973	6,862	33,017
	Total NRC/LOFT	3,580,689	1,313,792	137,208	1,478,070	149,376	635, 451

a. This amount will increase as closing costs are expected against items not presently included as FY-1982 authorized items.

b. Figures represent active items carried over from previous years plus new funded items for FY-1982.