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WBS: 9.3.7
QA: N/A

**Civilian Radioactive Waste Management System
Management & Operating Contractor**

Monthly Summary Report

September 1995

Prepared for:

U.S. Department of Energy
Office of Civilian Radioactive Waste Management
1000 Independence Avenue SW.
Washington, DC 20585

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Under Contract Number
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"ENCLOSURE" 1

EXECUTIVE SUMMARY

General Manager's Summary:

The Exploratory Studies Facility (ESF) achieved two significant project milestones in September. The main tunnel surpassed a mile in length on September 9, 1995, and reached the 20+00 meter benchmark on September 29, 1995. The tunneling team closed out the year by setting new ESF tunneling records for best single shift, day, week, and month. FY95 tunneling finished 7 weeks ahead of the program baseline schedule.

The "Transport of Radionuclides by Fracture Flow Through Natural Fractures Under Saturated Condition" and "Stratigraphy, Trace-Element Chemistry, and Surface Evidence for Reaction Among Calcites in Tuffs of Yucca Mountain, Nevada" reports present encouraging conclusions in support of Yucca Mountain site suitability. The prototype three-dimensional geologic framework model was also completed in September 1995 and will play an important role in further site evaluation.

The superstone deliverable "Disposal Criticality Analysis Technical Report, Initial Draft" covers repository burnup credit information and disposal criticality methodology, including the use of probabilistic evaluations. The report will be briefed to the Nuclear Regulatory Commission at a technical exchange on October 10, 1995.

The M&O team downsized and developed contingency plans to meet anticipated FY96 funding decreases. We also postured for the continuing resolution and deferred work. We ended FY95 prepared to proceed with the redirected Program.

Further highlights for the reporting period include:

- Issued the DOE Superstone "Waste Handling Building Final Design Report." The study's scope of the design effort is limited to the development of facility general arrangement drawings based on mechanical handling and Heating, Ventilation, and Air Conditioning (HVAC) concepts for waste emplacement operations on shipping casks, waste forms, and disposal containers.
- Finalized the "Licensing Support System (LSS) Phase 2 Functional Requirements." This document identifies the Phase 1 and Phase 2 LSS functional requirements and is the basis for all future design, development, and acquisition of an LSS. The Phase 1 and Phase 2 requirements have been approved by the LSS Advisory Review Panel.
- Delivered the "Reference Transportation Data and Assumptions Report" to RW-40. The report contains a significant new section entitled "Transportation Risk Data," which provides data for estimating radiological exposures during truck and rail transportation of spent nuclear fuel.
- Completed Milestones MOL244, "Metal Containment Barrier Materials Testing and Modeling" and MOL246, "Technical Data Assumption Substantiation Update." This completes all of the deliverables under container material testing.

- Completed the "Transport of Radionuclides by Fracture Flow Through Natural Fractures Under Saturated Condition" report. This report indicates that even under fast flow rates non-sorbing radionuclides are retarded by diffusion.
- Described studies of calcite from Yucca Mountain tuffs in the "Stratigraphy, Trace-Element Chemistry, and Surface Evidence for Reaction Among Calcites in Tuffs of Yucca Mountain, Nevada" report. The studies indicate that transport of heavy elements like actinides may be retarded in situations where calcite is precipitating and that ^{14}C may be entrapped in the process.
- Completed hydraulic testing of the saturated-zone hydrologic system in borehole UE-25 WT-12. The data returned from these hydraulic tests are essential to total system performance assessment of numerical radionuclide-transport modeling in the saturated zone.
- Completed the prototype three-dimensional geologic framework model for Yucca Mountain. This model synthesizes results on stratigraphy and structure to provide a baseline model for evaluating the site.
- Forwarded the Multi-Purpose Canister (MPC) Stainless Steel Boron Neutron Absorber Material Study to RW-40 on September 29, 1995. It summarizes the results of the Boron Stainless Steel Conceptual Design Study and concludes stainless steel-based absorber material would increase cost \$70K - \$130K per MPC.

Performance Measurement Cost and Schedule Variance

WASTE MANAGEMENT SYSTEM

FY 1995
 04/8 SEPTEMBER
 CWBS M&O PMS DATA (0000)

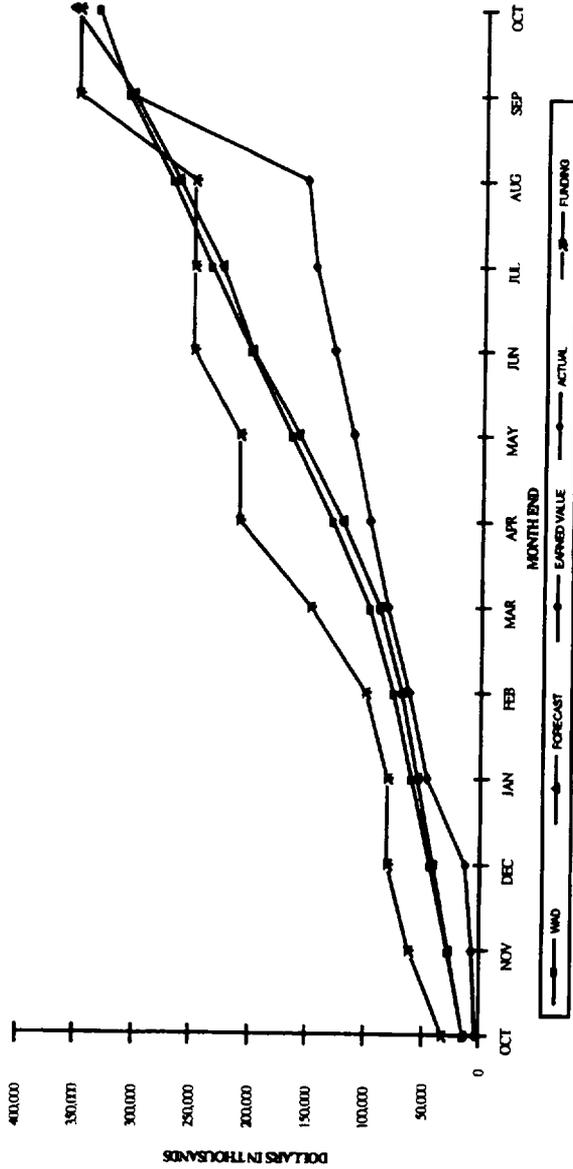
WBS	TITLE	CURRENT MONTH					FISCAL YEAR-TO-DATE					AT COMPLETE		
		BARNED		ACRUALS	VARIANCE		BARNED		ACRUALS	VARIANCE		BUDGET	PCBT	VAC
		BUDGET	VALUE		SCHED	COST	BUDGET	VALUE		SCHED	COST			
1.2	YMP	31,385	145,926	35,287	114,541	110,639	237,184	236,669	243,504	(525)	(6,845)	237,184	263.431	(26,247)
3.0	WAST PROJECT	3,435	3,749	2,048	314	1,701	27,783	27,360	22,748	(433)	4,602	45,302	43,922	1,380
9.1	PROGRAM QUALITY ASSURANCE	313	313	219	0	94	3,764	3,764	3,255	0	509	3,764	3,259	505
9.2/9.3.2/9.3.3/9.3.5	PROGRAM MANAGEMENT & INTEGRATION	1,904	2,155	1,396	251	759	17,695	17,326	15,937	(369)	1,389	17,695	17,077	618
9.3.4/9.3.6	EXTERNAL RELATIONS/INFO RESOURCE MGMT	1,200	1,200	521	0	679	13,341	13,341	11,284	0	2,057	13,341	12,730	611
9.3.52	YMCO RENT (Rent for DOE)	165	165	109	0	56	725	725	476	0	249	725	717	8
9.3.7	CONTRACT BUSINESS MANAGEMENT	407	407	386	0	22	7,425	7,425	6,334	0	1,091	15,925	13,809	2,116
1.0.10.11	REPOSITORY IMPACTS	82	82	27	0	55	1,257	1,256	992	(1)	264	1,257	1,235	22
TOTAL PROGRAM		38,891	153,997	39,992	115,106	114,005	309,171	307,845	304,532	(1,326)	3,313	335,190	356,182	(20,992)

NOTE: The YMP WAD is being revised to reflect the latest CSCR's REECo Capital, and EG&G adjustment.

Variations

- **CWBS 1.2 Yucca Mountain Site Characterization Project** - Information not available.
- **CWBS 3.0 Waste Acceptance, Storage and Transportation** - The cumulative cost variance of \$4,605K/17% is due primarily to Project Management attrition, less support required for Environmental Impact Statement (EIS) activities than originally anticipated, Monitored Retrievable Storage (MRS) institutional requirements placed on hold or canceled, late booking of FY94 carryover costs, delayed start of the Legal Weight Truck (LWT) Tractor Test, and delayed tasking and billing lags for work performed at the national laboratories.
- **CWBS 9.1 Quality Assurance** - As forecasted, the 13% cost underrun at complete was primarily driven by: 1) a reduction in travel due to transferring the Audit function to OCRWM; 2) the deletion of MPC potential vendor reviews; and 3) delay in hiring for a previously filled position.
- **CWBS 9.3.4 and 9.3.6 External Relations/Information Resource Management** - Carryover commitments and FY95 deferred are not recognized in the cumulative cost position, driving a 15% cost underrun at year-end. Variance at complete is within tolerance.
- **CWBS 1.0.10 Repository Impacts** - Carryover commitments and FY95 deferred efforts are not recognized in the cumulative cost position, driving a 21% cost underrun at year-end. Variance at complete is within tolerance.
- All other variances are within tolerance.

WASTE MANAGEMENT SYSTEMS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	14,109	14,453	15,771	16,470	16,453	20,330	32,909	35,795	38,027	33,098	34,047	38,891	28,019
FORECAST	13,692	13,630	14,495	13,659	13,613	19,047	32,288	38,747	41,521	28,489	37,209	39,892	51,650
EARNED VALUE	3,317	3,354	5,950	34,419	15,772	16,534	15,633	14,981	16,875	17,119	7,895	153,997	
MONTH ACTUAL	13,692	13,630	14,495	13,659	13,613	19,047	32,288	38,747	41,521	28,489	37,209	39,892	
VARSCH	(10,792)	(11,087)	(9,821)	17,046	269	(1,998)	(17,276)	(21,814)	(19,152)	(16,567)	(25,152)	115,106	
VARPOST	(10,375)	(10,278)	(8,515)	20,739	2,159	(513)	(16,755)	(23,766)	(24,646)	(8,320)	(29,414)	114,005	
WAD	14,109	28,562	44,333	60,803	76,256	96,816	129,725	166,520	202,547	238,233	270,260	309,171	335,180
FORECAST	13,692	27,322	41,767	55,446	69,059	88,108	120,484	159,241	200,762	227,231	264,540	304,532	356,182
EARNED VALUE	3,317	6,671	12,621	47,039	62,811	81,345	98,878	111,659	128,834	145,933	153,849	307,845	
ACTUAL	13,692	27,322	41,767	55,446	69,059	88,108	120,484	159,241	200,762	227,231	264,540	304,532	
VARSCH	(10,792)	(21,651)	(31,712)	(13,704)	(13,478)	(15,471)	(32,747)	(54,561)	(72,713)	(90,267)	(116,432)	(1,326)	
VARPOST	(10,375)	(20,651)	(29,109)	(6,407)	(6,246)	(6,761)	(23,516)	(47,282)	(71,209)	(81,278)	(110,932)	3,313	
FYRS FUNDING	30,000	59,534	59,534	59,534	79,096	127,047	190,046	190,046	229,066	229,066	229,066	331,824	331,824
PREV. FUNDED	2,508	2,508	20,982	20,982	20,982	20,982	20,982	20,982	20,982	20,982	20,982	19,305	19,305
TOTAL FUNDING	32,508	62,042	80,520	80,520	100,068	148,028	211,028	211,028	250,048	250,048	250,048	351,129	351,129

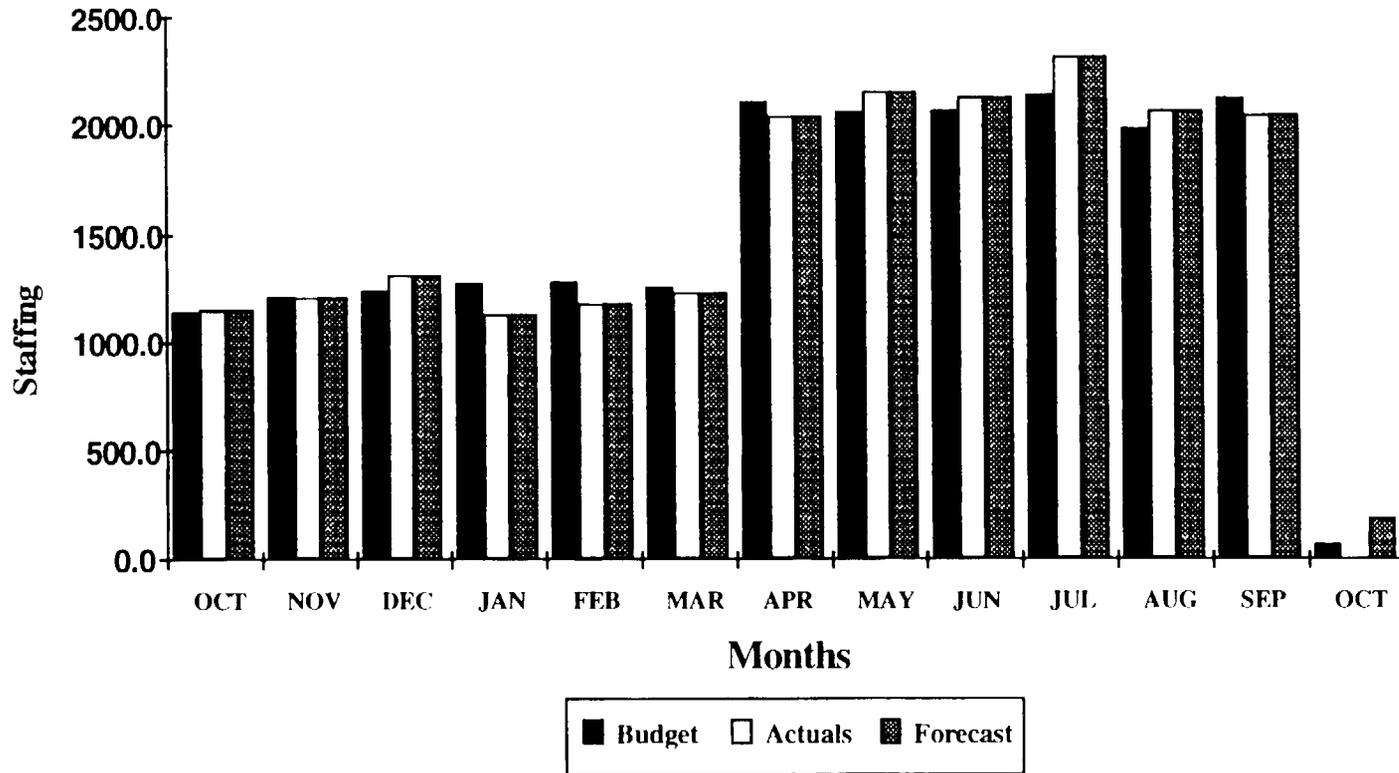
NOTE: The YMP WAD is being revised to reflect the latest CSCR's REECo Capital, and EG&G adjustment. The total program WAD value will change accordingly.

Total Program Financial Status

Total Program Staffing

Actuals Thru 9/30/1995

WASTE MANAGEMENT SYSTEMS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Forecast	1155.3	1215.0	1321.4	1133.3	1182.8	1236.1	2041.4	2157.9	2130.8	2317.5	2068.8	2047.9	189.6
Budget	1144.9	1219.1	1244.8	1280.5	1286.8	1262.4	2111.6	2062.9	2068.8	2143.2	1987.4	2128.3	68.8
Actuals	1155.3	1215.0	1321.4	1133.3	1182.8	1236.1	2041.4	2157.9	2130.8	2317.5	2068.8	2047.9	0.0

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1. INTRODUCTION

1.1 PURPOSE AND SCOPE

This Management and Operating (M&O) Contractor's Monthly Summary Report (MSR) has been prepared to provide both the M&O and Office of Civilian Waste Management (OCRWM) managers with activity and cost updates. The MSR is a compilation of reports that addresses both the M&O Management and Contract Work Breakdown Structure (CWBS) (direct) elements. Each CWBS area reports Budget and Reporting (B&R) progress by describing activities during the reporting period, publications and presentations, and documenting issues and concerns.

1.2 ORGANIZATION OF THE MONTHLY STATUS REPORT

Section 1, Introduction, describes the purpose, scope, and organization of the M&O MSR and the criteria for Program Management Analysis and Performance.

Section 2, M&O Management Staff Activities, provides monthly activity summaries from Contracts and Subcontracts (C&SC), Finance and Administration (F&A), Human Resources (HR), Information Management Services (IMS), and Management Systems (MS) non-B&R activities when these activities meet the Program Management Performance Criteria stated in paragraph 1.4, below.

Section 3, Major System Acquisition (MSA) Projects, provides detailed summary reports from the Yucca Mountain Site Characterization Project (YMP) and the Waste Acceptance, Storage and Transportation (WAST) Project CWBS areas. Cost and schedule variances are reported following the Program Management Organization section of YMP and Project Integration Section of WAS with accompanying data charts.

Section 4, Program Support (PS) provides Work Authorization Directive (WAD) level CWBS reports and includes Program Control and Administration (PC&A) Program, Quality Assurance (QA), Systems Integration, Regulatory and Licensing (R&L), Strategic Planning (SP), International Waste Management Technology (IWMT), External Relations (ER), IMS, and Repository Impacts. Cost and schedule variances are reported at the end of each WAD section.

Appendix A, FY95 M&O Major Deliverable Status, identifies all major M&O deliverables as defined in the WADs. It further shows which items were delivered early, on-time, late, and/or have a changed date through the Baseline Change Request (BCR) process.

Appendix B, M&O Monthly Progress/Update Summary, provides monthly financial reporting data representing the B&R cumulative values for budgets, forecasts, Financial Information System (FIS) actuals, and variances.

1.3 PROGRAM MANAGEMENT ANALYSIS CRITERIA

Variance analysis thresholds for FY95 are calculated at the WAD level. These variance thresholds are +/- 10% for the cumulative cost and schedule.

The data is provided as a cost graph at the WAD level. Graphs are also provided at CWBS levels 2 and 3 for areas that contribute to a variance breaking a threshold at the WAD levels. The data contained in the graph represents budget, earned value, and forecast for new FY95 work, approved deferred work from FY94, and carryover work for FY94. The actual costs represent all of the above plus the FY94-95 carryover. Cost graphs also depict FY95 funding, previously funded values (FY94-95 deferred and carryover work), and a total with the two funding sources combined.

Basic and award fees will be shown in Appendix B, B&R #DB093700, Contract Business Management, which includes lease termination funds. These fees have not been budgeted nor booked since the FY95 Annual Plan and Fee Proposal have not been negotiated.

1.4 PROGRAM MANAGEMENT PERFORMANCE CRITERIA

Progress During Report Period lists activities related directly to the B&R. These activities represent significant M&O contributions and involvement and include:

- Progress toward achieving the milestones referred to as "superstones"
- Progress in accomplishing the applicable Performance Evaluation Plan (PEP) criteria
- Actions to correct previous deficiencies
- Significant developments that required expenditure of unplanned resources
- Significant presentations and publications.

Issues and Concerns

- Actions impeding progress toward achieving milestones
- Issues requiring DOE involvement or resolution
- Problems with program or project performance.

2. M&O MANAGEMENT STAFF ACTIVITIES

2.1 CONTRACTS AND SUBCONTRACTS

Contracts

- The DOE Contracting Officer, reported that all subcontracts under review by DOE procurement and under the new procurement threshold of \$5M are now released to TRW for approval. Discussions confirmed that no subcontracts (at any value) included in the M&O Annual Plan will require additional DOE procurement, which will come at the time of the prime contract negotiations.
- Advised by RW-14 that the final FY95 Procurement Request (PR) Authorization (\$39.3M) would be issued to DOE procurement on September 19, 1995, to bring the total contract value to \$330,509,435 at the cost line.
- Received FY95 Technical Direction letters concerning deferred work and dollars from RW-14. Anticipate approximately \$20M of FY96 funding on October 4, 1995.
- Received the approval from REECo to execute the Kiewit assignment on September 28, 1995.

Subcontracts

- Helped revise the Scope of Work for Kiewit Construction Company Subcontract 1-YUC-01-2 to reduce funding for FY96.
- Received FY96 and FY97 proposals from all teammates. Provided copies of proposals to Contracting Officer's Technical Representatives (COTRs) for Technical Evaluation.
- Received 2-week funding PRs for teammates for FY96.
- GAO dismissed the three protests on the MPC procurement.

2.2 FINANCE AND ADMINISTRATION

- Provided weekly and monthly letter of credit reporting requirements to the Contracting Officer and the Controller's Office.
- Provided input to the Travel Reduction Task Team for the DOE FY96 Plan.
- Reassessing FY96 PM&I submittal for reductions with estimated funding levels.
- Worked with the DOE Inspector General regarding the FY95 year-end Voucher Accounting Net Expenditures Accrued (VANEA) audit.

2.3 HUMAN RESOURCES

- QA conducted verification and closed the completed corrective action for Deficiency Report VAMO-95-D-004 in accordance with AP-16.1Q.
- Launched a pilot mentor program.
- Held HR Director and Manager Teammate meeting using video between Vienna and Las Vegas. Three teammate HR Directors and Managers attended in Vienna, two HR Directors and Managers attended in Las Vegas, and two individuals were hooked up via teleconference. Items discussed included program status, M&O destaffing process, and outplacement. Feedback on the meeting was very positive.
- Corrective Action Report (CAR) Deficiency Report VAMO-95-D-004 reported conditions have been investigated and actions conducted to correct performance conditions. Response implementation is complete and ready for Quality Assurance Representative (QAR) verification in accordance with AP-16.1Q.
- CAR Deficiency Report VAMO-95-D-005 corrective actions are in progress and due to be completed by October 30, 1995.
- CAR 94-QV-C-018 has been extended; corrective action is due to be completed by September 30, 1995.
- Developed an Affirmative Action Plan (AAP) Equal Employment Opportunity (EEO) impact analysis on the potential layoff candidate listing.
- Completed diversity training for Las Vegas and Vienna. Eighty-nine percent of M&O managers received training.
- Finalized TRW Destaffing Policy and Procedures; facilitated senior management discussion of program-wide staffing issues; conducted management briefings on layoff notification; developed a database calculating required notice periods, costs, (WARN), and EEO data; designed a training session and employee briefing for destaffing; and worked with all of the facility, property, and records managers to develop a more extensive and user-friendly out processing checklist for employees.
- Conducted Quality Assurance program indoctrination for four BWFC people in Lynchburg, Virginia. These personnel will perform Multi-Purpose Canister (MPC) shielding analysis for the Waste Package Development Department in Las Vegas.
- Hosted a working group with representatives from DOE, M&O, and Quality Assurance Technical Services Support (QATSS). The group's charter is to simplify the training procedures used by Headquarters, YMP, and the M&O. Reached a consensus to create an AP that would have program-wide application for training. A draft is in review and will be agreed upon near

the end of September. Addressed the issue of Position Descriptions (PDs) and Verifications of Education and Experience (VOEEs) and valid requirements.

2.4 ISSUES AND CONCERNS

- None.

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3. MAJOR SYSTEM ACQUISITION PROJECTS

3.1 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT CWBS 1.2

MANAGER: L. D. Foust

3.1.1 Engineering and Integration Operations

MANAGER: R. D. Snell

OBJECTIVE(S): Provide overall Systems Engineering services supporting the Yucca Mountain Site Characterization Project (YMP). Provide Exploratory Studies Facility (ESF), Repository, and Waste Package Design and Construction support services [Mined Geologic Disposal System (MGDS) Development]. Provide Repository Project Engineering services. Conduct product integrity technical assurance and cost effectiveness evaluation and analysis. Provide strategic planning and technical support and integration for the YMP.

3.1.1.1 Progress During Report Period

MGDS Development

- Completed and issued Milestone MOL105 "Interim Report on High Level Waste Glass Testing Under Unsaturated Conditions" and Milestone TM243 "Status Report on Supplemental Site Characterization Analysis Responses."
- Received the first shipment of test specimens for long-term comprehensive corrosion tests. More shipments are expected soon. Prepared two Technical Implementation Plans to control specimen identity and the handling and storage of the specimens.
- Received additional analytical results for test solutions used in the scoping studies. These data will be added to the more widely distributed University of California Research Laboratory (UCRL)-series technical report being prepared.
- Sent the concurrence draft of Quality Administrative Procedure (QAP)-3-12 "Transmittal of Design Input" to all Quality Review Board (QRB) reviewers for approval of incorporated comments. Concurrence signatures were received from all QRB members. An approval date of October 5, 1995, is established and an effective date will be established for release of the procedure.
- Delivered the draft "Waste Package Engineered Barrier Segment Conceptual Design Report" to DOE on schedule, September 29, 1995. This satisfies M&O deliverable number TM202. This is the fourth and final "draft" submittal. The Conceptual Design Report will be reviewed in accordance with M&O QAP-3-1. The report will go through a 2-month review cycle and be issued in January 1996.

- The QAP-3-9 Design Analysis "Long-Term Criticality Control Issues for the MPC" is still in interdiscipline review. The comment resolution process reached an impasse and was escalated to management for resolution. The suggested resolution is to modify the current design analysis with a smaller scope which can be agreed upon. The results of structural analyses show that the uncanistered fuel waste package will withstand the loads from the 60g end-drop and 100g side-drop hypothetical accident scenarios required under 10 CFR 71. These analyses will be incorporated into the Conceptual Design Report.
- Issued the "Disposal Criticality Analysis Technical Report, Initial Draft" superstone deliverable TM253. The report covers the repository burnup credit information that will be needed and disposal criticality analysis methodology, including the use of probabilistic evaluations. The report will be briefed to the NRC at a Technical Exchange on October 10, 1995.
- Submitted an estimate comparing the capacity of various waste packages on a per-fuel assembly to Yucca Mountain Site Characterization Office (YMSCO). The estimate reaffirmed that the larger capacity waste packages are significantly less expensive on a per-assembly basis.
- Completed Milestones MOL244, "Metal Containment Barrier Materials Testing and Modeling" and MOL246, "Technical Data Assumption Substantiation Update." This completes all of the deliverables under container material testing. The three-volume Engineered Materials Characteristics Report was formally published and distributed as UCRL-ID-119564. Completed a revised draft copy of the degradation mode survey on Ni-Cu alloys. This document is being prepared for release as a Lawrence Livermore National Laboratory (LLNL) deliverable.
- Provided several status reports as LLNL deliverables. They include: MOL144, "Technical Data Assumption Substantiation Update;" MOL210, "Interim Report: Spent Fuel Dissolution Model;" MOL211, "Interim Report: UO₂ Dissolution Testing;" MOL212, "Interim Report: Thermogravimetric Analysis (TGA) Oxidation Testing and Modeling;" and MOL213, "Interim Report: Oven Dry Bath Oxidation." This completes all of the deliverables under waste form testing.
- Issued Level III Milestone TM577 "Retrieval Conditions Evaluation Report," an assessment of expected retrieval conditions accounting for both normal and abnormal events and processes during the preclosure period when retrievability is to be maintained. Retrieval of the inventory under the expected or "normal" conditions should be feasible using equipment similar to that used for the original emplacement. Retrieval under normal conditions will essentially be the reverse of the emplacement process.
- Issued Level III Milestone TM427 "Waste Handling Building Advanced Conceptual Design Report for FY 1995" on September 28, 1995. This deliverable completes the DOE Superstone "Waste Handling Building Final Design Report." The study's scope of the design effort is limited to the development of facility general arrangement drawings based on mechanical handling and HVAC concepts for waste emplacement operations on shipping casks, waste forms, and disposal containers.

- Issued Level III Milestone TM424A "Waste Treatment Building Interim Design Study for FY 1995" on September 28, 1995. This report presents conceptual design effort interim results for the MGDS Waste Treatment Building (WTB). The WTB conceptual design includes flow diagrams, material balances, process descriptions, summary tables listing utility and operating requirements, a description of the arrangement of the WTB, and an equipment specification listing.
- Issued Level III Milestone TM444 "Review of Design and Requirements for Cask Operations" on September 28, 1995. The report examines alternate modes of performing cask maintenance operations at a repository. This effort includes a review of current industry experience and technology in cask maintenance, including past Monitored Retrievable Storage concepts, a compilation of applicable requirements and design criteria, and a cask throughput simulation model.

Product Integrity

- The Management Plan for Resolving Quality Affecting Issues Resulting from M&O and DOE Audits and Surveillances requires an external review of all quality affecting design products. The Office of Product Integrity (OPI) has been requested to assist with the reviews. Thirty-eight design products were reviewed, resulting in 39 recommendations. These design products were made up of one analysis, 5 Determination of Importance Evaluations (DIEs), 30 drawings, and 2 Technical Reports.

Repository Alternative Conceptual Design (ACD)

- Evaluated the cost and effort required to prepare a computer simulated presentation of the MGDS design and concept of operations. Development of the presentation is a high priority for the planned MGDS Reference Design to be delivered to YMSCO in March 1996.
- Prepared a description of the descoped Advanced Conceptual Design content in response to DOE direction to complete MGDS ACD by March 1996. The M&O has agreed to redefine ACD completion to allow for early closure, 1 year before the previously planned completion date. The following are described: a YMSCO Project Manager package consisting of a video presentation, high level presentation material, and MGDS models; DOE YMP back-up material consisting of a Site Characterization Program Baseline update and, Waste Package and Repository Design Documents; M&O planning material consisting of the Critical Path to Investment Decision (CP2ID) network, Planning and Control System (PACS) data and a detailed schedule to complete the descoped ACD.
- Modified the Critical Path to Investment Decision (CP2ID) Network, a subset of the Critical Path to License Application Logic Network (CP2LA), in response to YMSCO comments. The directed scenario consisted of a \$250M declining budget and commitment to support an Investment Decision before calendar year 2000. Significant enhancements were made to the Design, Systems Engineering, and Site Programs in response to YMSCO concerns. A short turnaround for this major effort was required to support projected Staffing plans, Requests for

Proposal preparation, and FY96 detailed planning. The results were included in Appendix A of the FY96 Draft Proposal provided to DOE.

- Prepared a preliminary draft description and implementation guidelines for the Investment Decision Design. Established top-level ground rules and assumptions that were then applied to specific requirements for each area of Engineering and Integration. The preliminary draft description, the basis for all contributing activity descriptions, is a key activity description in the CP2ID Network. Provided a draft briefing describing the Investment Decision Design to YMSCO preparatory to an upcoming Nuclear Waste Technical Review Board (NWTRB) meeting.

Systems Engineering

- Submitted YMP "Systems Engineering Management Plan, Revision 5 Status Report," deliverable TM100K, to YMSCO. The status report was compiled by the M&O Systems Engineering Requirements Department and reviewed by the Integrated Product Team.
- Submitted the "Site Design and Test Requirements Document (SD&TRD), Revision 2" to the Change Control Board (CCB) in accordance with YAP-3.5Q, Technical Document Preparation. An impact analysis determining there are no unbudgeted or unscheduled impacts as a result of the SD&TRD revision was performed. The changes to the SD&TRD that affect the ESF Design Requirements (ESFDR) document and the Surface-Based Testing Facilities Requirements Document (SBTFRD) are being incorporated as a part of continuing document revisions.
- Delivered the ESF Main Drift (External Review 2) Determination of Importance Evaluation to YMSCO, deliverable TM141.
- Completed Category II DIE for ESF Surface Tracers, Fluids, and Materials Exemptions.
- Completed the Requirements Relevancy and Reduction Value Engineering (VE) Study. The study focused on reducing compliance with DOE Orders and was based on the initial analysis conducted during the Focus Integrated Requirements Management effort. About 120 DOE Orders were evaluated with more than 57% recommended for full or partial exemption. The VE Team Leader reported the results to DOE Assistant Managers (AMs) on September 20, 1995.

3.1.1.2 Issues and Concerns

- None.

3.1.2 Scientific Program Operations

MANAGER: C. T. Statton

OBJECTIVE(S): Provide a scientific basis for evaluating site suitability. Coordinate surface-based and ESF testing activities. Conduct site investigation activities to implement annual and long-range plans. Support suitability evaluations, license preparation, performance assessments, design, construction, and National Environmental Protection Agency (NEPA) activities. Support International program activities that impact Yucca Mountain site characterization.

3.1.2.1 Progress During Report Period

- Completed hydraulic testing of the saturated-zone hydrologic system in borehole UE-25 WT-12. The data returned from these hydraulic tests will enable evaluation and estimation of transmittal and storage hydrologic properties within the upper saturated-zone flow system beneath the Yucca Mountain area down-gradient from the potential repository. These data are essential to total system performance assessment of numerical radionuclide-transport modeling in the saturated zone.
- Completed detailed planning and instrument-package assembly for installation in borehole USW UZ-7a that penetrates the Topopah Spring welded unit in the Ghost Dance fault zone near the alignment of the Main Drift in the ESF. The instruments will monitor pneumatic pressure, temperature, humidity and other parameters in selected isolated zones within the borehole. The monitoring will record barometric response within the unsaturated zone transected by the fault and will provide essential data for assessing the pneumatic and hydraulic behavior of faults.
- Obtained carbon-14 radiologic dating results indicating that paleo-spring deposits within 25 kilometers of Yucca Mountain were active between 10,000 and 15,000 years ago. These data may indicate the occurrence of a higher stand of the water table beneath Yucca Mountain during that time and are consistent with estimates of past water table altitudes beneath Yucca Mountain of 80 to 100 meters higher than present-day altitudes.
- Completed the prototype three-dimensional geologic framework model for Yucca Mountain. This model synthesizes results on stratigraphy and structure to provide a baseline model for evaluating the site.
- Completed a report synthesizing geological, geophysical, and seismic results for use in characterizing seismic sources. This report will be used to evaluate seismic sources as part of the probabilistic seismic hazard assessment for Yucca Mountain in FY97.
- Completed the "Main Drift Geotechnical Report." This report provides formal input documentation for the ESF main drift design.
- Completed the "Transport of Radionuclides by Fracture Flow Through Natural Fractures Under Saturated Condition" report. This report indicates that even under fast flow rates non-sorbing radionuclides are retarded by diffusion. Under unsaturated conditions this effect is enhanced by

the additional force of matrix imbibition. Retardation is enhanced for even modestly sorbing radionuclides. This indicates that "fast paths" for the flow of water are not necessarily equated with fast transport of waste.

- Completed the "Modeling and Experimental Results on Saturated Zone Water Chemistry" report. This report identifies probable reactions and processes that control variations in water chemistry at Yucca Mountain. This is a key development leading to a conceptual model of groundwater evolution in FY96.
- Completed the report "Revised Probability Estimates for the Yucca Mountain Region Calculations." This report updates calculations for the probability that a new volcano will affect a potential repository at Yucca Mountain.
- Described studies of calcite from Yucca Mountain tuffs in the "Stratigraphy, Trace-Element Chemistry, and Surface Evidence for Reaction Among Calcites in Tuffs of Yucca Mountain, Nevada" report. The studies indicate that transport of heavy elements like actinides may be retarded in situations where calcite is precipitating and that ^{14}C may be entrapped in the process
- Completed preparations to qualify Ni and Zr thermodynamic data for use in radionuclide solubility and transport calculations. Ni and Zr may contribute significantly to water-borne radionuclide doses if water contacts spent fuel during the first few thousand years after emplacement. They were given high priority for thermodynamic data qualification by the Solubility Working Group (SOLWOG). The milestone reports completion of step one of SOLWOG's two-step qualification process, including obtaining 95% of the original references cited in tabulations of thermodynamic data and online searches of bibliographic databases.
- Reported on model predictions and sensitivity analyses of thermo-hydrological behavior for proposed ESF heater test designs. This report defines hypotheses to be tested by in-situ heater tests and the measurements that discriminate among alternative mechanisms controlling long-term hydrothermal behavior driven by radioactive decay heat from a potential repository at Yucca Mountain. It will be the basis for detailed FY96 test design calculations.
- Conducted a preliminary geomechanical test investigating thermal-mechanical, thermal-hydrological, and thermal-chemical processes on a 0.5m (nominal) block of fractured Topopah Springs welded tuff using the new block-testing apparatus at LLNL. Reported deformation and sonic velocity measurements on a scale large enough to contain multiple fractures. Use of the apparatus in FY96 will provide the first experimental data on these coupled processes in nearfield host rock.

3.1.2.2 Issues and Concerns

- None.

3.1.3 Support Operations

MANAGER: D. K. Chandler

OBJECTIVE(S): Provides the products and services to support the CRWMS M&O contract for the YMP in Las Vegas, Nevada, in the areas of Information Management; Training; Institutional and External Affairs; and Environment, Safety, and Regional programs. The support operations include developing computer-based information applications; processing YMP records; providing performance-based training classes; implementing environmental, radiological, and safety and health monitoring and compliance programs; conducting regional socioeconomic studies; and providing public outreach programs, media and communications support, information products, and intergovernmental interactions.

3.1.3.1 Progress During Report Period

Environmental Safety and Health

- Provided technical and logistical support to eight public scoping meetings for the Repository Environmental Impact Statement (EIS). The meetings allowed the public to provide comments relating to the scope of the repository EIS. They were held in Pahrump, NV, Boise, ID, Reno, NV, Chicago, IL, Las Vegas, NV, Denver, CO, Sacramento, CA, Caliente, NV, and Dallas, TX.
- Submitted the CRWMS M&O revised Radiological Protection Program to the YMSCO Project Manager for approval. The document describes how the CRWMS M&O will implement Federal Regulation 10 CFR 835 "Radiation Protection for Occupational Workers."
- Completed the identification of Near Field Continuous Air Sampler locations using the existing Radiological Field Programs Department Global Positioning System (GPS). Use of the GPS system to identify sampling locations meets the expectations of the Quality Assurance Requirements Document and ensures good scientific practice by accurately recording sample collection locations.
- Updated the FY95 Annual Report of Disturbed Acreage describing the total acreage disturbed by the project to date at the Yucca Mountain Site.
- Completed the map of vegetation communities for Yucca Mountain. This map will be used for ecosystem impact modeling and for studies of hydrology and soils.
- Submitted a State of Nevada animal handling permit application. This permit is required to continue terrestrial ecosystem monitoring programs including mitigation actions for the desert tortoise.
- Completed the Government Sector Profile for the Assistant Manager for Environment, Safety, and Health. This profile focuses upon summary-level employment characteristics of government economic activities in Clark and Nye counties and provides a general background for

understanding the potential effect the various governmental entities may have on southern Nevada.

Information Management

- Formed a natural working group on how to implement Approval Authorization and Electronic Signature.
- Created the Acronyms and Abbreviations Lotus Notes database on YMLN4 for quick access to acronyms and abbreviations commonly used on the YMP. This is a Total Quality Management (TQM) initiative to combine several WordPerfect and VAX databases into an easily accessible tool.
- The Records Information System (RIS) II records indexing system went on-line.
- Forwarded Decontrol Notices to all personnel holding controlled hard-copy procedures that are now accessible throughout OCRWM Program Procedures Database (OPPD). This joint effort of the Plans and Procedures Department and the Document Control Center will result in a significant cost savings for the Program.

Institutional and External Affairs

- Gave general overview presentations to 461 people. Presentations were given to the Wisconsin Section of the American Nuclear Society (ANS), the University of Wisconsin student branch of the ANS, guests of the National Association of Retired Federal Employees, guests at the University of Seattle, Washington, 10 OCRWM Historically Black Colleges and Universities Scholarship Students, guests of Federally Employed Women in Las Vegas, Nevada, and guests at the University of Nevada Reno Lecture Series.
- Conducted Yucca Mountain tours for 10 OCRWM Historically Black Colleges and Universities Scholarship Students, 7 guests from the Environmental Protection Agency, and 18 guests from the Nevada Legislature's Committee on High-Level Radioactive Waste.
- Distributed more than 600 copies of the August 1995 New Work Update video to the media and stakeholders. The 5-minute tape covers Tunnel Boring Machine (TBM) progress at the 1-mile mark, North Portal surface construction, UZ-4 Borehole air and moisture monitoring, and environmental reclamation work.

Training

- Conducted the following training classes:
 - General Employee Training
 - GET Annual Refresher Test
 - Exploratory Studies Facility Visitor's Briefing
 - Standard First Aid

- General Underground Training
- RIDS
- Operations and Maintenance Overview
- CAR 95-QN-C-006 Lessons Learned briefing
- M&O Program Indoctrination
- Computer Security Awareness
- Federal Records Awareness
- TQM Awareness
- Nevada Line Procedure (NLP)-3-18 Briefing
- AP-16.1Q/AP-16.2Q
- YMP Orientation
- Seven Habits of Highly Effective People
- Cultural Diversity.

3.1.3.2 Issues and Concerns

- None.

3.1.4 Site Construction and Operations

MANAGER: R. M. Sandifer

OBJECTIVE(S): Provide integrated Field Construction and Operations Services in support of the Yucca Mountain Site Characterization Office (YMSCO). Provide the strategic planning and technical integration of all field activities to ensure the execution of project priorities.

3.1.4.1 Progress During Report Period

Construction

- The TBM reached two significant project milestones this reporting period. A mile (1,609.8 meters [m]) of tunnel, was excavated as of September 9, 1995, and the 20+00m benchmark was achieved on September 29, 1995. The TBM advanced to station 20+02.1m/6,566.9 feet by month's end, making 587.3m/1,926.3 feet progress for the month. Project records were achieved for the best month (587.3m), week (149.4m), day (50.0m), and shift (19.6m) during this reporting period. The average daily advance rate was 27.95m per day for the month. During the best week, the TBM advanced 29.88m per day.
- The period began with the TBM in Category 1 ground (rockbolts), briefly went to category 4 ground (steel sets) for one shift, and returned to category one ground for the balance of the month. The conveyor was shut down on September 8, 1995, to install a Booster Drive Unit. In all, the TBM lost eight shifts of production during the month, three for the Labor Day holiday and five for items related to the conveyor installation and repairs.
- The overall to-date percentage of tunnel using steel sets dropped from approximately 55% to approximately 39%. From July 16 through September 30, 1995, the percentage of steel tunnel using sets is approximately 14.82% over 863.9m/2,833.6 feet of tunnel advancement.
- The TBM is anticipated to encounter the Drill Hole Wash zone the first week of October 1995, and the ground conditions are expected to deteriorate at that time. The change in ground conditions may adversely affect the TBM advance rate and the steel set usage factor.
- Completed the final mapping of alcove #3. Planning for Alcove #4 is nearly complete.
- Installed roof panels, fire protection piping, HVAC duct work, and siding at the sidewalks for the change house. Also insulated the north roof, roughed-in interior plumbing, and placed rebar for the mechanical equipment slab.
- Installed the power conduit, hydro tested piping to the outlet meters, excavated and placed grounding wire at the 200,000 gallon tank on Exile Hill. Excavated for the chlorine house foundation.

Drilling

- Performed geophysical logging at USW SD-7 borehole on September 20, 1995. Progress for the month was 449 feet cored to a total depth of 2,109.95 feet.
- Performed geophysical logging at borehole USW SD-12 on September 6-8, 1995, and USW WT-10 on September 6-8, 1995.
- Completed U.S. Geological Survey (USGS) pump testing at borehole USW WT-12 and removed the progressive pump. Set a 2 3/8-inch casing string filled with formation water to a depth of 1,278.67- feet for temperature surveys and a 2 7/8-inch monitoring string with well screen to a depth of 1,268.73 feet.
- Completed coring operations (10-inch diameter by approximately 2 feet long) in ESF Alcove No. 2 boreholes ESF-AL#2-AF-1, ESF-AL#2-AF-2, ESF-TO-IF#3A, ESF-TC-IF#4A, and ESF-TC-IF#5A. Progress for the month in all of the alcove boreholes was 7.49 feet.
- Distributed the USW UZ-7a Composite Borehole Log (Revision 0) and the USW WT-24 Borehole Prognosis (Revision 1).
- USGS completed a temperature survey in borehole at USW G-2 and set a new bridge plug assembly in the borehole at a depth of 2607.13 feet for hydraulic testing.
- Opened the sliding sleeve and set the bull plug in the pumping borehole UE-25c #3 at the C-Hole Complex for upcoming hydraulic testing.

Project Engineering

- Returned 10 vehicles to the Nevada Test Site (NTS) motor pool as a cost savings effort. This is an ongoing effort to significantly reduce the Area 25 Motorpool in accordance with the anticipated reduction in field activities in FY96.
- Field Operations Center Ranch Control reports included:
 - A REECO employee working at the ESF pad suffered a sprained ankle and was released from duty for the shift on September 20, 1995.
 - An earthquake was felt in Area 25 on September 20, 1995. The quake's epicenter was 10 miles north of Ridgecrest, California, and registered 5.5 on the Richter scale. No damage or injury occurred at Yucca Mountain.
 - A REECO employee working at the ESF pad injured his back after falling into a 3-foot ditch on September 21, 1995. The employee was treated by Area 25 medics and transported to Mercury Medical for further evaluation.

- The O-ring in a hoist at the precast yard failed, spilling 3-4 gallons of hydraulic fluid on September 22, 1995. M&O Environmental cleaned up the spill.
 - Approximately 50 gallons of lube oil were spilled at the TBM cutterhead at 0200 on September 26, 1995. All of the oil was contained on a secondary attachment pan and cleaned up.
 - A REECo employee injured his left ring finger working on a hydraulic line at the ESF pad on September 23, 1995. The employee was given a tetanus shot, and the finger was bandaged by Area 25 medics. The employee went to a private physician on September 24, 1995.
 - A REECo employee working at the ESF pad suffered an injury to the right shoulder on September 25, 1995, when boom section stop bolts were sheared off and the section fell on the employee's shoulder. The employee was seen by the Mercury Medical physician and returned to work.
- Prepared and issued 38 YMP Work Instructions to the NTS M&O (REECo) for services to be furnished to YMP organizations in FY96. This activity was required because of the transition of REECo YMP scope of work to the CRWMS M&O.
 - Returned 22 of the 74 chemical toilets in Area 25 to the NTS M&O, a reduction of 30 percent. This represents an annual savings of approximately \$72,000. Monitoring will continue to ensure that only the essential number of units are maintained.
 - A Line Management Safety Walkdown was implemented in Building 4015, Area 25, of the NTS. This program was developed to enhance employee safety awareness and improve the safety margin. The program will be implemented in all Area 25 facilities during the coming year.
 - Returned 16 "E" plate vehicles to Mercury motor pool as part of the ongoing cost-saving efforts in the field. Twenty-five vehicles have been returned thus far in FY95, meeting the 10% by October 1, 1995, goal.
 - Returned 59 hand-held portable radios and 3 radio consoles to NTS M&O Communications in Mercury as part of the ongoing cost-saving efforts in the field. It is estimated that 150 radios will be returned by the end of first quarter FY96. When completed, this will represent an annual savings of \$68,400.

3.1.4.2 Issues and Concerns

- None.

3.1.5 Suitability and Licensing Operations

MANAGER: J. L. Younker

OBJECTIVE(S): Assure site related compliance with Nuclear Regulatory Commission (NRC) agreements, requirements, and policies. Evaluate the performance of the natural, engineered barrier, and total system for meeting regulatory standards. Manage, compile, and maintain technical data and information developed for project related activities. Develop, review, and validate levels of confidence for data and information to be used in Technical Site Suitability (TSS) and Licensing Application documentation. Provide evaluations of the potential impacts to waste isolation and integrity of all in-situ disturbing activities conducted at the site.

3.1.5.1 Progress During Report Period

- Developed Variation Analysis Reports (VARs) for Work Breakdown Structure (WBS) element 1.2.6 for FY95.
- Completed inputs for WBS elements 1.2.6 and 1.2.7 for Chapter 5 of the FY96 Plan.
- Revised the Kiewit Parsons Brinkerhoff (PB) Statement of Work (SOW) for all WBS elements. The SOW was provided to Kiewit PB the week of September 23, 1995, for revision to their proposal.
- Participated in fact-finding with Kiewit PB on staffing and FY96 tasking to streamline organizational structure and eliminate staffing overlap.

3.1.5.2 Issues and Concerns

- None.

3.1.6 Business Management

MANAGER: D. B. Abel

OBJECTIVE(S): Provide overall Project Management, Project Control, Scheduling, and Administration and Facilities for the M&O.

3.1.6.1 Progress During Report Period

Project Management

- Successfully designed and implemented a run-time graphics interface for the TOUGH2. This graphical interface is implemented on the HP workstation and is capable of displaying all the primary variables in run-time. This code is also able to display the vector field at the desired time.
- Reviewed the draft Department of Energy Supplemental Comments on 40 CFR Part 194 "Compliance Criteria for the Waste Isolation Pilot Plant" and informed YMSCO that the comments have no adverse impact on Yucca Mountain.
- Completed revisions on Sections 6.0, 6.1, and 6.5 of Chapter 6 of "Overall Performance Assessment of Revision 1 of the License Application Annotated Outline" reflecting Total System Performance Assessment (TSPA)-1995 and addressing the NRC's Key Technical Uncertainties. Completed adding planned completion dates, activity numbers, and WBS numbers to the Information Needs forms of this chapter using information from the License Application Interactive Project System.
- Presented eight briefings on the TSPA-1995 document for the dry run for the Fall Full Board NWTRB meeting. Will revise the briefings based on comments received.

3.1.6.2 Issues and Concerns

- None.

3.1.7 Program Management Organization

MANAGER: C. Metzger

OBJECTIVE(S): The Project Management Organization (PMO) provides management support to the YMSCO, including the Project Manager (PM), Deputy PM, and all of the Assistant Managers. The PMO assist the Project in the preparation of the annual planning guidance, review of the M&O's annual plan and evaluates the progress of the M&O and other Project participants. Using the PACS reports and data, the PMO provided financial and schedule analyses and recommendations. The PMO facilitates and assist in the preparation of the Director's Project Review (DPR) materials. The PMO assist the YMSCO in the preparation and review of plans, including the Yucca Mountain portion of the OCWRM Management Plan.

3.1.7.1 Progress During Report Period

- Conducted a field visit to review and assess the hydrology operations of the Seamist borehole liner system is being placed in borehole UZ-6 to collect uncontaminated in situ gas chemistry samples.
- Closed 26 of the 33 action items from the June 1995 Geochemistry Waste Package Performance Assessment Workshop; closed the action items assigned from the July and August Geochemistry Integration meetings.
- Identified and described potential policy-level issues relating to the Investment Decision. Submitted these issues to YMSCO management for consideration for discussion and treatment by RW-1 at the upcoming NWTRB meeting in October.
- Finalized the "Licensing Support System (LSS) Phase 2 Functional Requirements." This document identifies the Phase 1 and Phase 2 LSS functional requirements and is the basis for all future design, development, and acquisition of an LSS. The Phase 1 and Phase 2 requirements have been approved by the LSS Advisory Review Panel.

3.1.7.2 Issues and Concerns

- None.

3.1.8 Health and Safety

MANAGER: C. W. Parker

OBJECTIVE(S): Provide management and oversight of all M&O safety and health functions. Develop and implement M&O safety and health plans, policies and procedures. Maintain recording and record keeping of injuries and illnesses. Perform fire hazards analyses and fire assessments on M&O facilities. Coordinate activities of the M&O Safety Steering Committee and the M&O Employees Safety Committee.

3.1.8.1 Progress During Report Period

- Worked with Configuration Management Organization and Kiewit PB to close remaining action items as a result of the Conveyor Phase IV Readiness Review.
- Conducted surveillances of ESF and Field Operations Center facilities.
- Completed a draft of the YMP Safety and Health Plan.

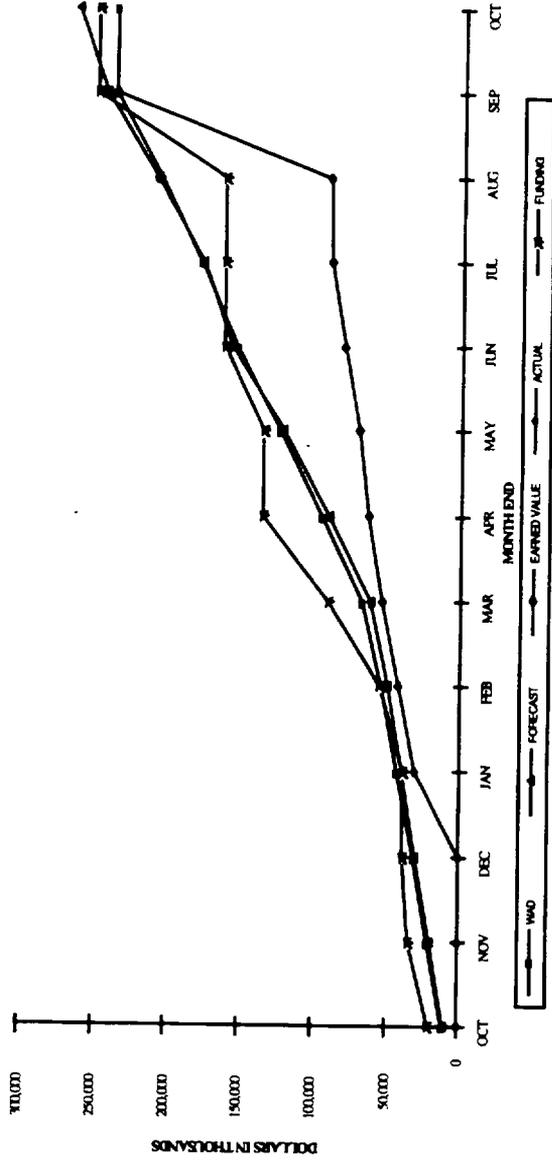
3.1.8.2 Issues and Concerns

- None.

3.1.9 Variances

- Information not available.

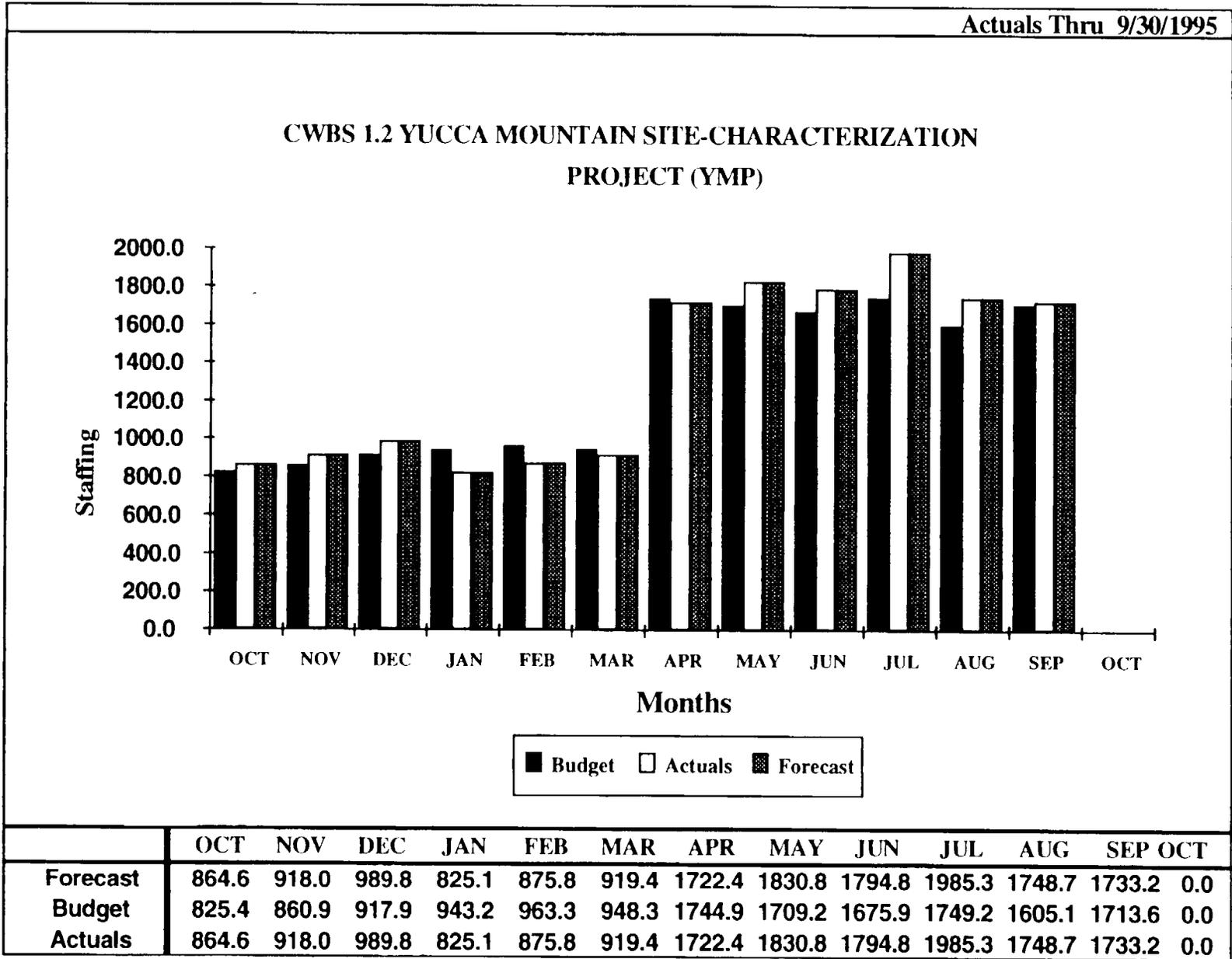
CWBS 1.2 YUCCA MOUNTAIN SITE-CHARACTERIZATION PROJECT (YMP)



MONTH	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	10,564	10,564	9,798	12,155	11,469	13,269	27,379	28,680	29,351	25,434	27,086	31,385	0
FORECAST	9,472	9,783	10,659	9,408	10,240	12,261	28,195	31,310	35,791	20,031	31,086	35,267	19,827
EARNED VALUE	0	0	0	30,388	11,801	11,591	9,782	6,908	10,210	9,090	955	145,826	
MONTH ACTUAL	9,472	9,783	10,659	9,408	10,240	12,261	28,195	31,310	35,791	20,031	31,086	35,267	
VARIOSH	(10,564)	(10,564)	(9,798)	18,243	302	(1,670)	(17,597)	(21,764)	(19,141)	(16,344)	(26,111)	114,541	
VARCOST	(9,472)	(8,783)	(10,659)	20,889	1,581	(950)	(18,413)	(24,404)	(25,591)	(10,941)	(30,111)	110,639	
WAD	10,564	21,158	30,856	43,111	54,810	67,879	85,258	123,948	153,299	178,733	205,799	237,184	237,184
FORECAST	9,472	19,235	29,884	39,303	49,543	61,824	80,019	121,229	157,120	177,151	208,217	243,504	283,431
EARNED VALUE	0	0	0	30,388	42,199	53,790	83,572	70,478	80,888	89,778	90,733	238,659	
ACTUAL	9,472	19,235	29,884	39,303	49,543	61,824	80,019	121,229	157,120	177,151	208,217	243,504	
VARIOSH	(10,564)	(21,158)	(30,856)	(12,713)	(12,411)	(14,089)	(31,689)	(53,470)	(72,611)	(88,955)	(115,089)	(1525)	
VARCOST	(9,472)	(19,235)	(29,884)	(8,905)	(7,344)	(6,034)	(20,447)	(50,851)	(76,432)	(87,373)	(117,484)	(6,845)	
FY86 FUNDING	20,000	34,055	34,055	34,055	50,816	86,185	130,288	130,288	157,716	157,716	157,716	246,304	246,304
PREV. FUNDED	0	0	4,360	4,360	4,360	4,360	4,360	4,360	4,360	4,360	4,360	4,360	3,412
TOTAL FUNDING	20,000	34,055	38,415	38,415	55,176	90,525	134,648	134,648	162,078	162,078	182,078	249,718	249,718

NOTE: The YMP WAD is being revised to reflect the latest CSCR's REECO Capital, and EG&G adjustment. The final value will be \$256,627 versus \$237,184 as currently shown.

Figure 2. Yucca Mountain Staffing



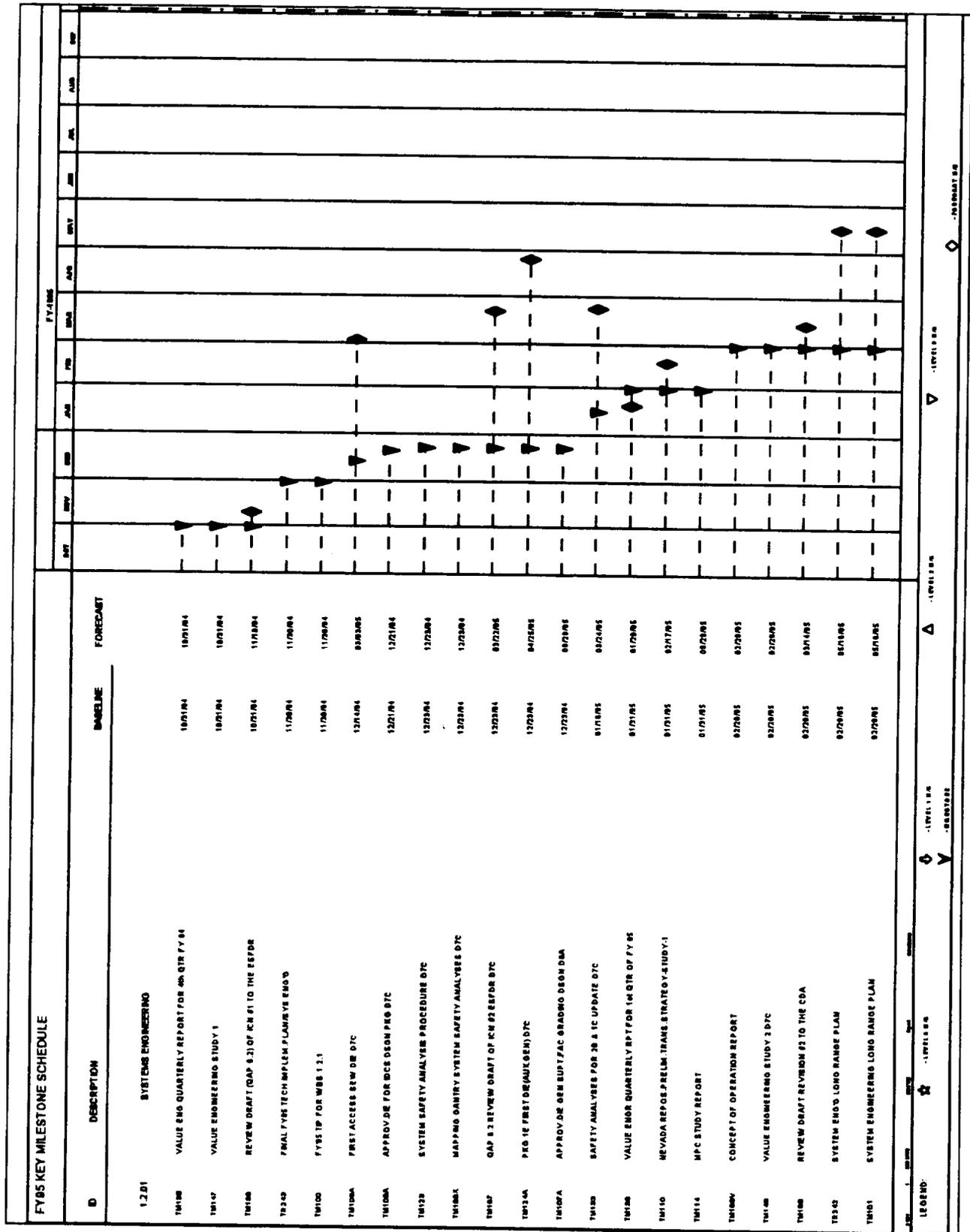


Figure 3. Yucca Mountain Key Milestone Schedule

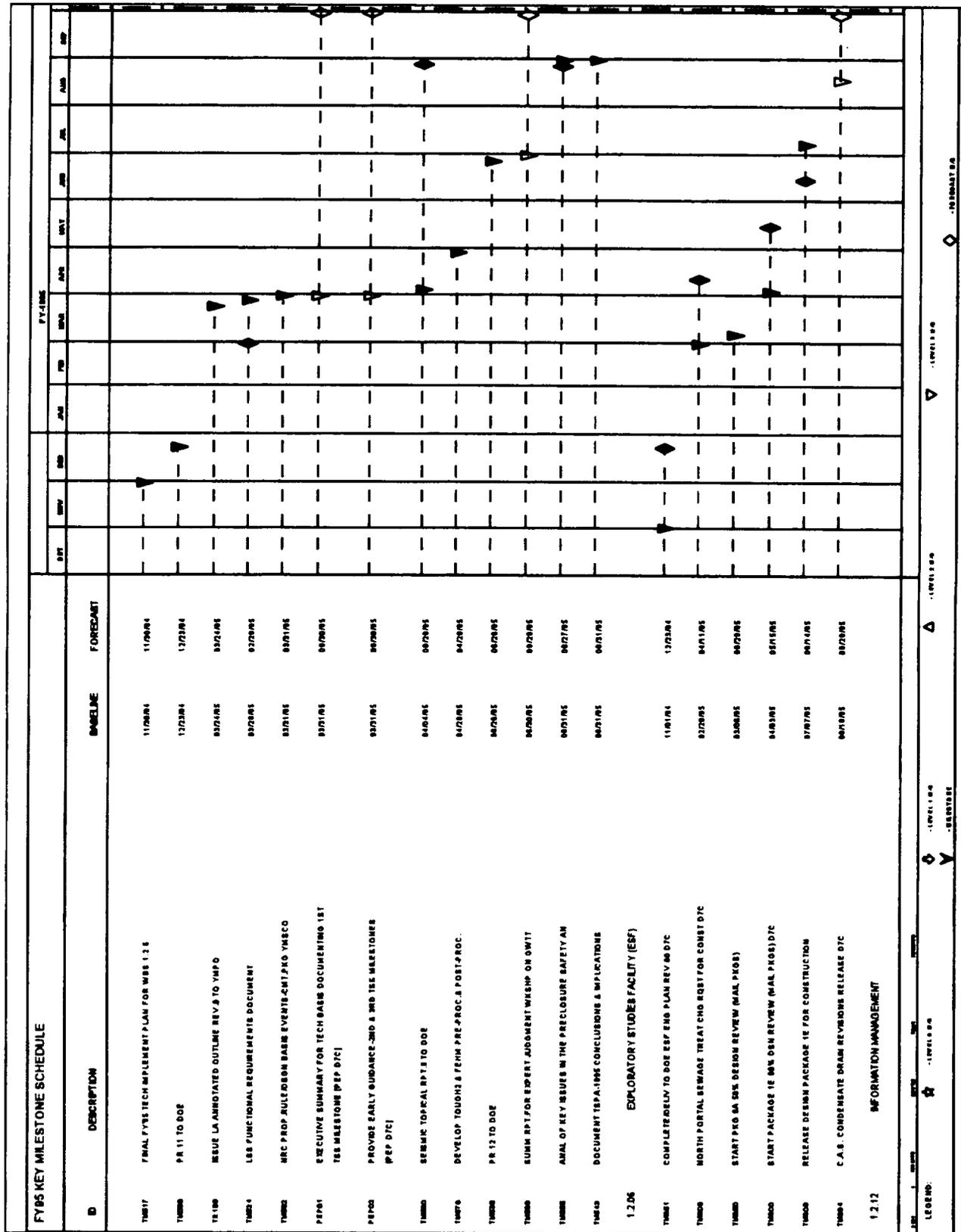


Figure 3. Yucca Mountain Key Milestone Schedule (Continued)

3.2 WASTE ACCEPTANCE, STORAGE AND TRANSPORTATION PROJECT CWBS 3.0

MANAGER: A. S. Kubo

3.2.1 Multi-Purpose Canister

MANAGER: J. R. Clark/L. S. Smith

OBJECTIVE(S): Provide technical management and integration of activities relating to development of the Multi-Purpose Canister (MPC) Subsystems and Dry Transfer System (DTS). Provide technical solicitation evaluation support and management of the MPC Subsystems subcontract. Assist the Office of Civilian Radioactive Waste Management (OCRWM) in all aspects of the Waste Acceptance, Storage and Transportation (WAST) MPC licensing process. Assist OCRWM in the development of the MPC Environmental Impact Statement (EIS). Assist OCRWM in supporting public information and institutional tasks regarding MPC activities.

3.2.1.1 Progress During Report Period

Engineering Development

- Received a decision issued by the U.S. General Accounting Office (GAO) agreeing with the M&O and DOE that the MPC subcontract had been properly awarded to Westinghouse Electric and the three protests of that award are without merit.
- Observed the DOE OCRWM Quality Assurance (QA) implementation audit of the Westinghouse GESCO/SEG QA program September 11 through 15, 1995. The evaluation was unsatisfactory. Forwarded Deficiency Reports and Corrective Action Reports (CARs) resulting from the OCRWM QA audit of Westinghouse GESCO to Westinghouse for action. Briefed Science Engineering Group (SEG) QA on completion of QA CAR responses.
- Observed the PacTec QA Program completion of all discrepancies and issues related to GESCO's August 2, 1995, Stop Work Order.
- Submitted Preliminary Draft, Revision 1, On-Site Transfer/On-Site Storage (OST/OSS) Segments Design Requirement Document (DRD) to RW-40 on September 20, 1995. The document was forwarded to Project System Engineering for review and approval by the WAST Project Office baseline Change Control Board.
- Completed a white paper study summarizing the Option 6 concept for a simplified Interim Storage facility. In addition, completed and distributed revised Option 6 Dan Dreyfus/Lake Barrett briefing books.
- Completed and delivered a presentation to RW-2 and RW-46 on the video animation of the DOE/Electric Power Research Institute (EPRI) Dry Transfer System and the static display model of the DOE/EPRI Dry Transfer System Facility.

- Prepared Interim Storage Facility Site Land Acquisition Requirements based on Dose Rate criteria for RW-46. The acreage needed for several different potential risks of public exposure were calculated for a facility holding the entire 86,000 metric ton commercial spent nuclear fuel inventory.
- Submitted the Preliminary Draft Revision 1, MPC Subsystem and MPC Transportation Cask Subsystem DRDs to RW-40 on September 29, 1995. The documents were forwarded to Project System Engineering for review and approval by the WAST Project Office baseline Change Control Board.
- Forwarded the MPC Stainless Steel Boron Neutron Absorber Material Study Deliverable to RW-40 on September 29, 1995. It summarizes the results of the Boron Stainless Steel Conceptual Design Study and concludes stainless steel-based absorber material would increase cost \$70K - \$130K per MPC.
- Prepared a Westinghouse MPC Design Input Data Analysis in response to a Quality Administrative Procedure (QAP)-3-12 request received from Mined Geologic Disposal System (MGDS). The analysis was distributed for interdiscipline review.

Regulatory and Licensing

- Facilitated the September 7, 1995, Westinghouse meeting with the Nuclear Regulatory Commission (NRC). Held a Dry Run with Westinghouse, M&O, and DOE participation September 6, 1995.
- Prepared M&O and DOE staff for the October 5, 1995, Quarterly DOE and NRC Management Meeting. Developed a briefing book containing issue papers on agenda topics for senior DOE and M&O management use.
- Transmitted the "Certification Plan for the Multi-Purpose Canister" to DOE on September 9, 1995.

Environmental, Safety and Health

- Incorporating the agreements from the MPC EIS Integration Group comment resolution workshop into the MPC Draft EIS for DOE final concurrence in November 1995 and issue to the public in December 1995. The formal EH-1/GC-1 concurrence review of the MPC Draft EIS is scheduled for November 13-17, 1995.
- Briefed RW-46 staff (J. Jones) on the status of contingency planning for an interim storage facility site as specified in the August 2, 1995, version of HR1020 and the September 25, 1995, version of S.1271. Planning included developing site investigation geologic requirements, transportation routes, water and land requirements, biological assessments and opinions from U.S. Fish and Wildlife Service, and permitting information. Contingency planning on these topics continues.

3.2.1.2 Issues and Concerns

- Issues and concerns being addressed are 1) improving QA compliance by Westinghouse and its subcontractors and 2) fine-tuning the MPC design procurement specifications to reduce costs and increase usefulness.

3.2.2 Transportation System

MANAGER: B. R. Teer/L. S. Smith

OBJECTIVE(S): Provide management and integration of all activities relating to transportation cask development, transportation planning and operations, service and maintenance of transportation equipment, application of Systems Engineering to Transportation, collection and maintenance of site-specific engineering and operations data, transportation economic and systems analysis, and integration of transportation with other Civilian Radioactive Waste Management System (CRWMS) program elements. Manage transportation database formulations, model development, and computer code development activities. Assist OCRWM in supporting policy analysis and issue resolution.

3.2.2.1 Progress During Report Period

System Engineering

- Delivered the "Reference Transportation Data and Assumptions Report" to RW-40. The report contains a significant new section entitled "Transportation Risk Data," which provides data for estimating radiological exposures during truck and rail transportation of spent nuclear fuel. Also delivered the "Electronic Reference Transportation Data and Assumptions (RTDA) Users Manual" to RW-40. The RTDA report is now available to OCRWM LAN users through the Lotus Notes work space.
- Completed the "Transportation Geographic Information System (TGIS) Database Report" and forwarded it to RW-40. This report documents and displays samples of current TGIS databases.

Casks

- Completed the General Atomics (GA)-4 dummy cask drop test on September 21, 1995. The drop went according to plan, although a loose wire prevented collection of data on one channel. General Atomics continues to prepare the GA-4 cask model for drop testing. Tooling problems at Lee Goebel Enterprises (LGE) (impact limiter fabricator) were resolved, and General Atomics anticipates the first drop of the GA-4 half-scale model cask in October 1995.
- Reviewed CERES reports received from AEA Technology, Dorchester, U.K., through Sandia National Laboratories (SNL). The data will be used to support burnup credit involving fission product isotopes. The reports were forwarded to RW-40.
- Performed a review of General Atomics's revised licensing strategy for the GA-4 cask drop analyses. GA will meet with the Nuclear Regulatory Commission on October 3, 1995, in Rockville, Maryland, to present their revised structural approach addressing the NRC's comments. Mr. Tim McGinty has replaced Ms. Nancy Osgoode as NRC's project manager for the GA-4/9 cask.
- Submitted a letter containing the M&O comments and recommendations on the "GA-9 Legal Weight Truck (LWT) Trailer Test Evaluation Report" to RW-40 on September 22, 1995.

Transportation Support Systems

- Forwarded the Emergency Response and Recovery Study to RW-40.
- Modified the scope of the over-the-road legal-weight truck tractor trailer testing at the direction of RW-46. Stops will not be made at selected utility sites as originally planned.
- Revised the Period of Performance for the Allied Signal Automotive Proving Ground (AAPG) contract to reflect the difference between the anticipated and actual date testing began. The final data report is due from AAPG on or before May 31, 1996.
- Evaluated and accepted proposal from AAPG and Golden Dome Productions to videotape highlights of the LWT testing effort.
- The LWT successfully completed anti-lock braking tests on split-coefficient surfaces while braking in a 500' radius curve. The anti-lock brakes failed during the first attempt to pass the test August 7, 1995, so AAPG refurbished the System.
- Obtained valuable insight on how to develop a responsive, cost-effective rail service to transport spent nuclear fuel during a seminar on building good business relationships with the rail industry. Topics included negotiating for rail and intermodal carload services and prices, legal rules of the game, how rail services are being used to strategically serve customer needs partnering shipper and carrier expectations, and performance measures.

Project Management

- M&O Las Vegas delivered the "Nevada Potential Repository Preliminary Transportation Strategy Study 2" to DOE on September 29, 1995, after completing the final review, comment, and concurrence.
- Provided additional data in response to questions on the Transportation FY96 Contingency budget raised during the RW-1 and RW-2 review August 31, 1995. Prepared a proposed staffing plan and developed quarterly spending requirements.

Environmental, Safety and Health

- Completed a draft white paper "Description of Transportation Risk Codes Used in the MPC EIS" for RW-45. The paper presents an overview of the analysis process and describes the transportation risk assessment codes used in the MPC Environmental Impact Statement (EIS).
- Completed a white paper "Proposed Strategy for Providing Public Access to Transportation Data" for RW-45. The paper shows how Transportation could provide public access to the technical data and information being used in performing transportation studies.

- Supported RW-45 in a briefing for RW-2 on legal issues associated with the status of shipper of record and perception-based impacts on the OCRWM program. Received a follow-on research project as result of the presentation.

Institutional

- Completed the Section 180(c) working group white paper recommending a policy to implement Section 180(c) of the Nuclear Waste Policy Act (NWPA) of 1982. The objective of the paper is to stimulate discussion, help reach a conclusion regarding Section 180(c) policy, and provide a basis of estimate for the first 3 years of transportation. The proposed Section 180(c) policy will be published in the Federal Register in March 1996.
- Estimated the potential cost of payments for oversight grants and Payments-Equal-To-Taxes (PETT) for an interim storage facility, rail spur, and intermodal transfer that would be incurred under HR 1020.

3.2.2.2 Issues and Concerns

- None.

3.2.3 Waste Acceptance

MANAGER: B. M. Cole

OBJECTIVE(S): Provide management and integration of all activities relating to the Standard Disposal Contract, the Spent Nuclear Fuel (SNF) Verification Plan, Waste Acceptance Criteria (WAC) for Alternative Waste Forms, Materials Control and Accountability (MC&A), Safeguards and Security, Waste Acceptance Operations Plan, application of Systems Engineering to Waste Acceptance, interaction with the Energy Information Administration (EIA), support of Integrated Database (IDB) preparation, and development of a unified database (UDB) system.

3.2.3.1 Progress During Report Period

Contract Policy and Procedures

- Completed a preliminary draft white paper addressing options and recommendations for the priority ranking and acceptance queue. This was a follow-up action to the RW-1/2 transportation briefing and supports the view that there is no compelling reason to change from the OFF basis at this time.
- Completed an internal draft analysis (QAP-3-9) to qualify data for MPC International Atomic Energy Agency (IAEA) Safeguards and Security Requirements sent to the MPC Design Group via a QAP-3-12 data transmittal. An interdisciplinary review of the analysis will follow.
- Discussed an annotated outline of the proposed Standard Contract sub-agreements with RW-44. This outline would be used as a model for planned FY96 utility discussions.

Preacceptance Operations

- Delivered "Evaluation of Delivery Commitment Schedules (DCS) Exchange Requests" and continued processing Delivery Commitment Schedules.
- Constructing an Acceptance Priority Ranking/Acceptance Criteria Report (APR/ACR) master file to develop the 1996 APR/ACR report and began preparation of the report.
- Began evaluation of the Final Delivery Schedule process to determine needed changes and incorporated RW-44 comments on a proposed modification to Appendix F to the standard Disposal Contract.
- Continued development of draft Procedures for SNF Loading Verification and Canister Surveillance supporting planned loading at Rancho Seco.

Waste Acceptance Criteria

- Consolidated comments on the Defense Waste Processing Facility (DWPF) Operational Readiness Review (ORR) Plan of Action (POA) review.

- Developed a Waste Acceptance Criteria (WAC) development plan defining resource usage for FY96.
- Preparing a white paper on German Cesium/Strontium borosilicate glass canisters in response to a memo from RW-44 to DOE-RL on disposal cost estimates.
- Provided comments to RW-44 on DWPF Wasteform Qualification Report, Volume 1, (Chemical Composition Projections) in preparation for the Technical Review Group meeting in Aiken, SC, on October 3-4, 1995.

High-Level Waste (HLW) Generator Agreement

- Completed a preliminary draft Waste Acceptance and Transportation Task Team report for the SNF Steering Group summarizing the activities of the Task Team. The report discusses issues identified and addressed and FY96 activities required to support the Task Team.
- Reviewing alternative fee methodologies for DOE wastes and identifying and evaluating RW DOE Office of Environment Management (EM) Memorandum of Agreement related issues.

Waste Acceptance Operations

- Completed a white paper on a Specific Approach to IAEA Safeguards including an option to postpone IAEA Safeguards until sealed canisters are opened before final disposal at the repository.
- Attended a meeting with the NRC on IAEA Safeguards issues relating to approach and financing of IAEA inspections at Purchasers and Central Storage Facility, responsibility for notifying Purchasers of IAEA safeguards requirements, procurement and training for safeguards equipment, and traceability of IAEA requirements to source documents.
- Attended a meeting with RW-44 and the Sacramento Municipal Utility District (SMUD) to discuss SMUD's plans for loading SNF canisters at Rancho Seco beginning in 1996. RW is planning to initiate the SNF verification process during the SMUD loadings. This initial session discussed coordination and integration between SMUD and RW on this matter.
- Delivered the "Preliminary Draft Integrated Safeguards and Security Requirements Analysis (ISSRA)" to DOE.
- Delivered the "Preliminary Draft of Implementing Verification Procedures" to support the loading effort at Rancho Seco to DOE.

Logistics and Systems Planning

- Provided Waste Acceptance QAP-3-1 review comments and signed off on concurrence drafts of the MPC, MPC Transportation Cask, and OST/OSS DRDs, Revision 1.

- Resolved Waste Acceptance QAP-3-1 review comments on the Transportation Site/Systems Requirements Document (SRD), Revision 2.

Project Management

- Supported FY96 budget preparation activities, including development of staffing requirements and preparation of statements of work. Prepared Individual Work Authorization/Teammate IWA (IWA/TIWA) QAP-2-0 analysis to implement continuing resolution for the first quarter of FY96.
- Preparing a markup of the Program Plan addressing proposed changes reflecting various programmatic options and scenarios under consideration.

Quality Assurance

- Completed an internal draft analysis (QAP-3-9) to qualify data for MPC IAEA Safeguards and Security Requirements sent to the MPC Design Group via a QAP-3-12 data transmittal. An inter-disciplinary review of the analysis will follow.

Nuclear Fuel Data

- Delivered the 1994 RW-859 Database Evaluation Report Final Draft to DOE.
- Met with DOE EIA and DOE contractor Z Inc., to finalize the cross-walk map among the proposed RW-859 5-year supplement database, the current RW-859 database, and the FICA database. Based on the map, agreement was reached on the design of the prototype for the RW-859 5- year supplement database. Work has started on building the dBase-type files to load the database.

Energy and Spent Fuel Discharge Projections

- Continued the 1995 EIA Projections database evaluation final draft. Began a projection methodology development to extend the Utility projections to the end of plant life to be used to examine the EIA projections.

Spent Fuel Storage Requirements

- Began development of the master file used to prepare the 1995 Spent Fuel Storage Requirements report. Updated the graphics procedures.

Unified DataBase System (UDB)

- Completed a review of the latest version of the UDB prototype (version P0816) from Pacific Northwest Laboratory. Demonstrated the UDB prototype (version P0911) to RW-44 and loaded the UDB prototype version 091195 onto a laptop computer for a demonstration to RW-40.

- Continued development of the UDB “Functional Description Document (FDD)”; preparing requirements to reflect QA and Code of Federal Regulations (CFR) needs, and restructuring functional-area inputs into a uniform format. Incorporated initial internal review comments and began incorporation of WA Element DRD functional structure and draft descriptions.
- Continued preparation of a revised “UDB Phase I Technical Management Plan (TMP)” and a new “UDB Phase I, Safeguards and Security Subsystem, Life Cycle Plan (QAP-SI-2).”
- Presented a paper on “The Initial Efforts for the Integration of Information for OCRWM Waste Acceptance” at the Fifth International Conference on Facility Operations Safeguards Interface in Jackson Hole, Wyoming.

3.2.3.2 Issues and Concerns

- None.

3.2.4 Project Integration

MANAGER: T. R. Stevens

OBJECTIVE(S): Conduct project financial and technical integration activities across the WAST project to maintain the WAST project development.

3.2.4.1 Progress During Report Period

Project Scheduling and Control

- The WAST Project Cost and Schedule Baseline Update (BCP-03-95-0002 Rev 01) was approved by the Program Baseline Change Control Board on September 19, 1995. Changes to the document to incorporate resolved comments were completed, and it was distributed on September 28, 1995, to DOE, Weston, and M&O personnel.
- The WAST Project Work Breakdown Structure (BCP-03-95-0003) was approved by the Project Office Baseline Change Control Board on September 19, 1995. Resolved comments were incorporated, and the document was distributed on September 28, 1995, to DOE, Weston, and M&O personnel.
- Completed work on the WAST portion of the Program Cost and Schedule Baseline for inclusion in the Program Cost and Schedule Baseline update. The M&O submitted a redline/strikeout of this document to RW-40 on September 27, 1995, to satisfy a WAD deliverable.
- Updated the Program Plan Vol III redline/strikeout incorporating changes necessitated by BCP-03-95-0002 Revision 1. The document, along with a Document Change Notice, will be submitted to RW-40 in early October.
- Supported FY96 Full Time Equivalent analysis for the M&O, including the National Laboratories. Developed a database identifying time-phased staffing requirements by skill, WBS, performer, on board personnel, etc. The data will be used for first quarter planning and Statements of Work. Working to minimize the immediate ramp up required to implement the contingency plan.
- Working on the development of procedures and criteria allowing detailed schedules to feed the performance measurement system and roll up into summary schedules. The intent is to feed earned value to the performance measurement system, and schedule data to Planning and Control; Potentially Adverse Condition (PAC). A uniform numbering system would be used to uniquely identify each activity, deliverable, or milestone in all tracking and status systems.
- Developed a strawman, using the draft guidance, showing the structure and format for the next OMB submittal package in anticipation of guidance from RW-35.

- Analyzed the correlation between Program Plan metrics, Annual Work Plan milestones, Cost and Schedule Baseline milestones, and Project schedules in response to a request from the Rapid Response Team.

Project Systems Engineering

- Completed the final WAST Traceability Tool consisting of a User's Guide and diskettes and delivered it to RW-40. Demonstrated the operation and features of the tool to RW-46 staff. This tool provides a mechanism for documenting requirements in a relational database used to establish and document traceability.
- Completed the final M&O WAST Project Life-Cycle Cost Plan and delivered it to RW-40. This internal M&O document establishes the WAST plan for managing Life-Cycle Cost (LCC) activities and documenting LCC estimates and their bases.
- Participated in the joint OCRWM M&O Operations Functions Team. The team is preparing a draft revision to the CRWMS functional hierarchy in response to a Directors Program Review action item.

3.2.4.2 Issues and Concerns

- None.

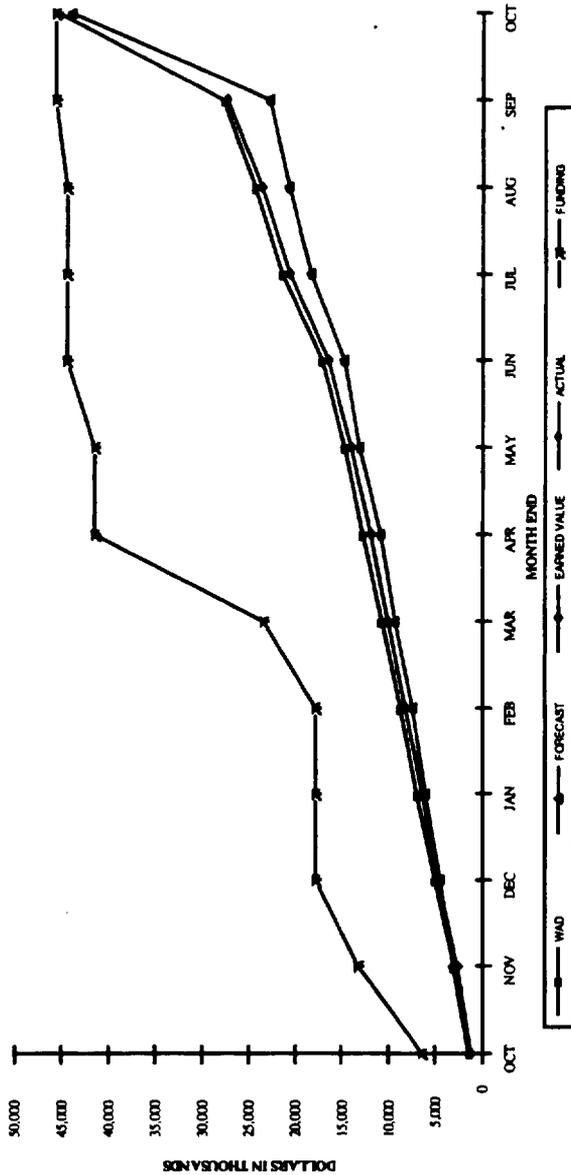
3.2.5 Variances

- The cumulative cost variance of \$4,602K/17% is due primarily to Project Management attrition, less support required for Environmental Impact Statement (EIS) activities than originally anticipated, Monitored Retrievable Storage (MRS) institutional requirements placed on hold or canceled, late booking of FY94 carryover costs, delayed start of the Legal Weight Truck (LWT) Tractor Test, and delayed tasking and billing lags for work performed at the national laboratories.
- **DB03.01.01 System Engineering** - The cumulative cost variance of \$247K/26% and at complete variance of \$222K/24% are due primarily to lower than expected WAST Project Traceability Tool development efforts. Also, the preliminary Life-Cycle Cost Plan, MPC Management Plan, MPC Acceptance Plan, and the WAST Q-List were completed with less than expected resources.
- **DB03.01.03 Site Investigation** - The cumulative cost variance of \$15K/40% and at complete variance of \$12K/35% are due to Draft preparation of the white paper on Post-Negotiator options and issues sent to RW-45 requiring fewer resources than planned.
- **DB03.01.09 Project Management** - The cumulative cost variance of \$434K/24% and at complete variance of \$303K/17% are due to the loss of senior staff members including a Strategic Planner, a senior Project Control Administrator, and a senior scheduler. The required Project Management effort was accomplished with available staff working extended hours and employing less expensive temporary help.
- **DB03.01.11 Quality Assurance** - The cumulative cost variance of \$42K/22% and at complete variance of \$36K/19% are due to personnel budgeted for WAST Project QA supporting MPC subcontract effort, Program QA, and other activities.
- **DB03.01.13 Environment, Safety, and Health** - The cumulative cost variance of \$324K/22% and at complete variance of \$321K/22% are due to less activity than originally anticipated for EIS activities.
- **DB03.01.14 Institutional** - The cumulative cost variance of \$482K/59% and at complete variance of \$468K/57% are due primarily to several activities being postponed or canceled including Monitored Retrievable Storage (MRS) host interactions and negotiator support.
- **DB03.02.01 System Engineering** - The cumulative cost variance of \$74K/13% and at complete variance of \$120K/19% are due primarily to a shift in emphasis from a DOE/OCRWM expanded routing criteria to regulatory policy more limited in scope. This shift eliminated the purchase of a TGIS database. Also, Analytical Studies underran because the MPC On-Site Dose Exposure Study was not required.
- **DB03.02.02 Systems Casks** - The cumulative cost variance of \$483K/14% is due primarily to underrun of carryover costs and billing lags for FY95 national laboratories' costs.

- **DB03.02.04 Support Systems** - The cumulative cost variance of \$1059K/46% is due primarily to the delayed start of the LWT Tractor Test. Most costs associated with this effort will not book this fiscal year. Also, the "Draft SSSP for Oyster Creek" and "Draft SSSP for Haddam Neck" deliverables were deleted per Baseline Change Request TRN-95-018D, and resources required to accomplish highway and rail issues were less than projected
- **DB03.02.05 Regulatory** - The cumulative cost variance of \$54K/62% and at complete variance of \$47K/28% are due to budgeted personnel being reassigned to higher priority tasks and less than budgeted temporary labor acquired.
- **DB03.02.11 Quality Assurance** - The cumulative cost variance of \$72K/30% is attributed to late booking of FY94 carryover costs. The at complete variance of (\$26K/11%) is due to unprogrammed support for Quality Review Boards (QRBs), QAP compliance, and QA liaison support.
- **DB03.02.12 Information Management** - The cumulative cost variance of \$44K/89% and at complete variance of \$19K/39% are attributed to less than anticipated need for management review of data-related tasks.
- **DB03.02.13 Environment, Safety, and Health** - The cumulative cost variance of \$559K/56% is due to late billings from the national laboratories and cost variances associated with deferred tasks including Risk Development, Risk Strategy, Severe Accident Study, and Human Factors. The cost variance is also impacted by descoped Lawrence Livermore National Laboratory general environmental support. The at complete variance \$266K/19% is due to descoping effort and deferred tasks costing less than budgeted.

Actuals Thru 9/30/1985

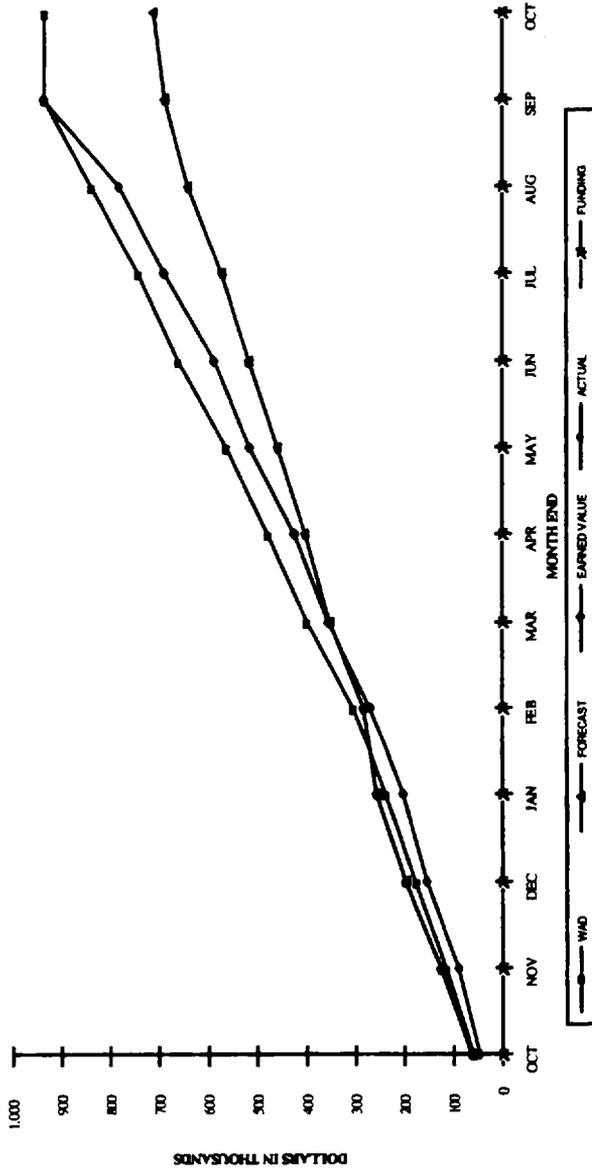
CWBS 3.0 WASTE ACCEPTANCE, STORAGE & TRANSPORTATION (WAST) PROJECT



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
MONTH													
WAD	1,343	1,715	1,985	1,985	1,788	1,980	1,984	1,977	2,428	4,258	2,807	3,405	17,519
FORECAST	1,480	1,827	1,371	1,807	1,346	1,916	1,524	2,239	1,574	3,649	2,387	2,048	21,174
EARNED VALUE	1,235	1,417	2,050	1,742	1,801	1,864	1,787	2,100	2,487	4,148	2,980	3,749	
MONTH ACTUAL	1,480	1,827	1,371	1,807	1,346	1,916	1,524	2,238	1,574	3,649	2,387	2,048	
VAR(SCH)	(108)	(289)	65	(253)	35	(66)	(217)	123	59	(110)	53	314	
VAR(COST)	(245)	(210)	678	135	455	(52)	243	(129)	913	489	823	1,701	
WAD	1,343	3,058	5,043	7,038	8,804	10,784	12,748	14,725	17,153	21,411	24,348	27,783	45,302
FORECAST	1,480	3,107	4,478	6,065	7,431	9,347	10,871	13,110	14,894	18,333	20,700	22,748	43,822
EARNED VALUE	1,235	2,652	4,702	6,444	8,245	10,109	11,876	13,978	16,483	20,611	23,601	27,350	
ACTUAL	1,480	3,107	4,478	6,085	7,431	9,347	10,871	13,110	14,894	18,333	20,700	22,748	
VAR(SCH)	(108)	(468)	(341)	(584)	(558)	(655)	(872)	(740)	(880)	(800)	(747)	(433)	
VAR(COST)	(245)	(455)	224	359	814	782	1,005	808	1,779	2,278	2,801	4,802	
FY85 FUNDING	5,000	11,786	11,786	11,786	11,786	17,423	35,551	35,551	36,412	36,412	36,412	36,815	36,815
PREV. FUNDED	1,439	1,439	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987
TOTAL FUNDING	6,439	13,225	17,783	17,783	17,783	23,420	41,548	41,548	44,400	44,400	44,400	45,822	45,822
CUM													
WAD													
FORECAST													
EARNED VALUE													
ACTUAL													
FUNDING													

Figure 4. WAST Project Financial Status

DB-03-01-01 SYSTEMS ENGINEERING

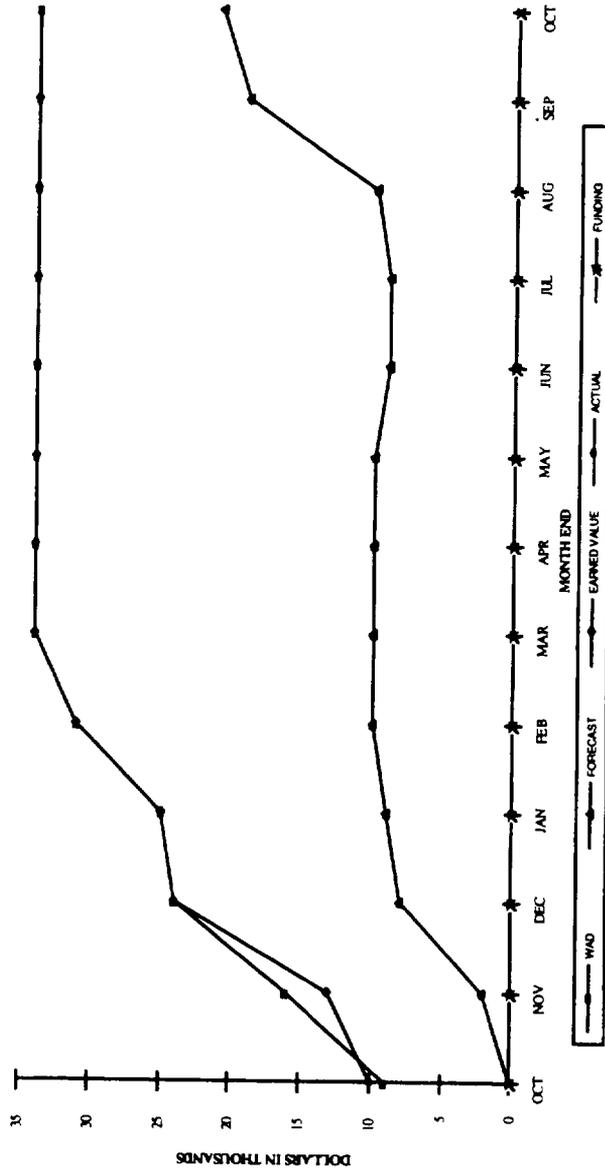


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	60	56	62	61	66	94	81	84	98	80	97	95	0
FORECAST	64	60	71	59	27	69	50	56	59	55	69	46	18
EARNED VALUE	47	44	64	49	66	85	70	91	72	102	91	154	
MONTH ACTUAL	64	63	71	59	27	69	50	56	59	55	69	46	
VAR/SCH	(13)	(12)	2	(12)	0	(9)	(11)	7	(26)	22	(6)	59	
VAR/COST	(17)	(19)	(7)	(10)	39	16	20	35	13	47	22	109	
WAD	60	116	178	239	305	399	480	564	662	742	839	924	924
FORECAST	64	127	198	257	284	353	403	459	518	573	642	688	711
EARNED VALUE	47	91	165	204	270	355	425	516	588	690	781	935	
ACTUAL	64	127	198	267	284	353	403	459	518	573	642	688	
VAR/SCH	(12)	(23)	(23)	(35)	(35)	(44)	(55)	(49)	(74)	(52)	(58)	1	
VAR/COST	(17)	(39)	(43)	(53)	(14)	2	22	57	70	117	139	247	
FY'S FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 6. Systems Engineering Financial Status

Actuals Thru 8/30/1995

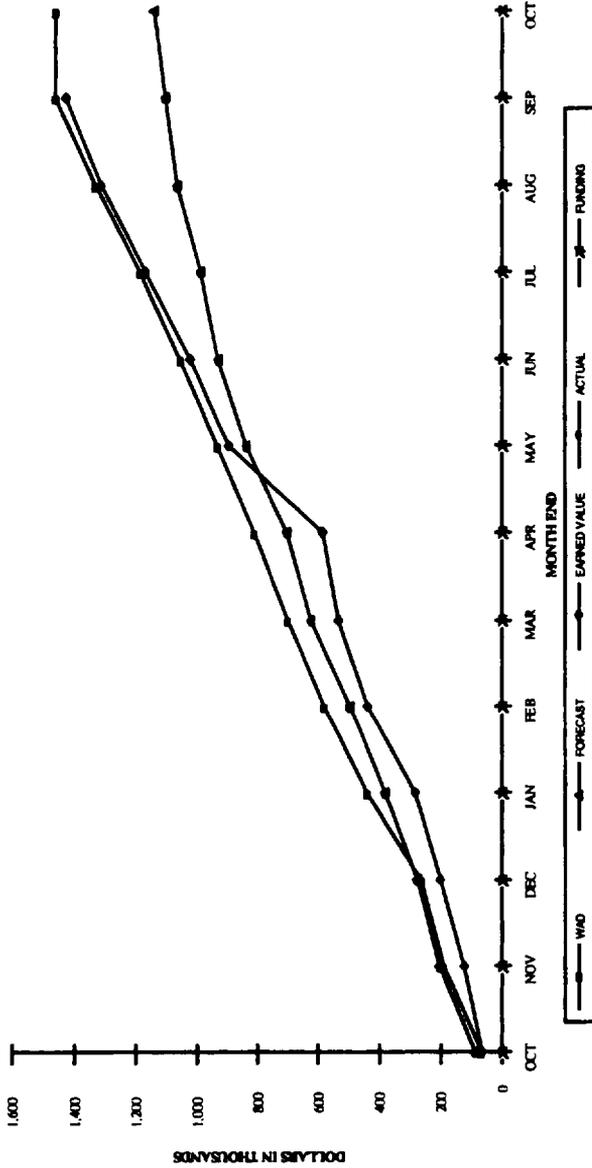
DB-03-01-03 SITE INVESTIGATIONS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	9	7	8	1	6	3	0	0	0	0	0	0	0
FORECAST	0	2	6	1	1	0	0	0	(1)	0	1	9	2
EARNED VALUE	10	3	11	1	6	3	0	0	0	0	0	0	0
MONTH ACTUAL	0	2	6	1	1	0	0	0	(1)	0	1	9	0
VAR/SCH	1	(4)	3	0	0	0	0	0	0	0	0	0	0
VAR/COST	10	1	5	0	5	3	0	0	0	0	(1)	(9)	0
WAD	9	16	24	25	31	34	34	34	34	34	34	34	34
FORECAST	0	2	8	9	10	10	10	10	9	9	10	19	21
EARNED VALUE	10	13	24	25	31	34	34	34	34	34	34	34	34
ACTUAL	0	2	8	9	10	10	10	10	9	9	10	19	0
VAR/SCH	1	(3)	0	0	0	0	0	0	0	0	0	0	0
VAR/COST	10	11	16	16	21	24	24	24	25	25	24	15	0
FY'S FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 7. Site Investigations Financial Status

DB-03-01-13 ENVIRONMENT, SAFETY, AND HEALTH

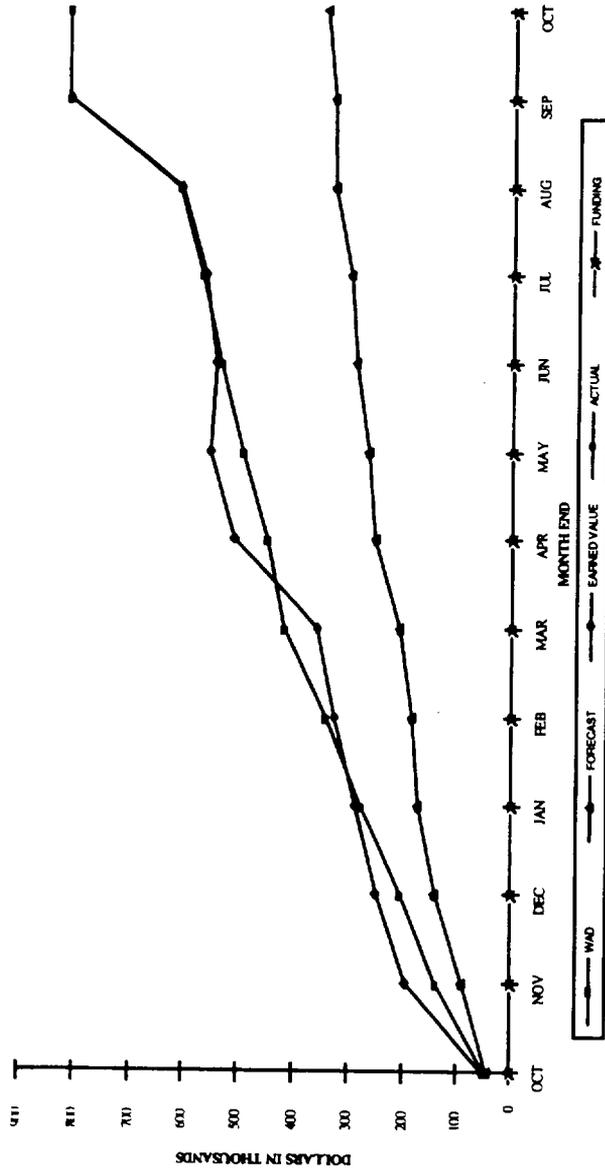


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	66	123	73	175	140	121	112	122	122	129	147	129	0
FORECAST	90	116	71	106	114	129	80	134	93	57	78	37	37
EARNED VALUE	66	58	78	80	156	94	52	312	128	145	146	114	
MONTH ACTUAL	90	115	71	105	114	129	80	134	93	57	78	37	
VAR/SCH	(2)	(65)	5	(35)	16	(27)	(60)	190	4	18	(1)	(15)	
VAR/PCOST	(24)	(57)	7	(25)	42	(35)	(28)	178	33	88	68	77	
WAD	66	191	264	439	579	700	812	924	1,056	1,185	1,332	1,461	1,461
FORECAST	90	205	276	381	495	624	704	838	931	988	1,066	1,103	1,140
EARNED VALUE	66	124	202	282	438	532	584	806	1,022	1,187	1,313	1,427	
ACTUAL	90	205	276	381	495	624	704	838	931	988	1,066	1,103	
VAR/SCH	(2)	(67)	(82)	(157)	(141)	(169)	(228)	(58)	(34)	(19)	(19)	(34)	
VAR/PCOST	(24)	(81)	(74)	(99)	(57)	(92)	(128)	58	91	179	247	324	
FY/95 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 10. Environment, Safety, and Health Financial Status

Actuals Thru 8/30/1986

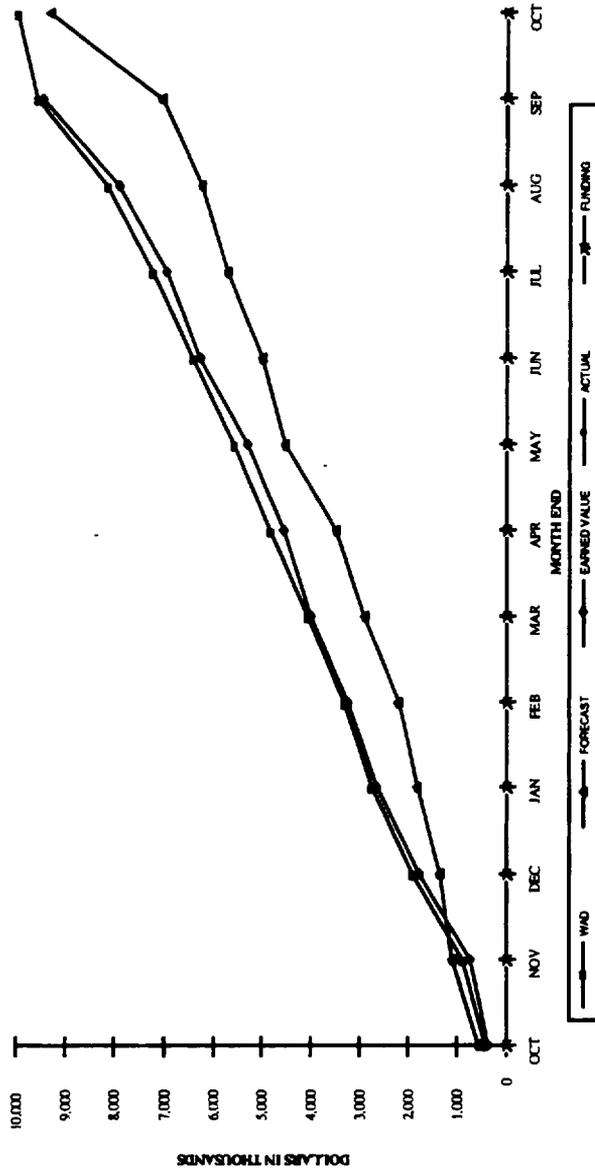
IR 03.01.14 INSTITUTIONAL



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	48	52	66	72	65	76	31	44	40	35	44	202	0
FORECAST	42	46	52	31	12	23	46	12	23	11	30	2	15
EARNED VALUE	52	143	54	38	38	32	150	44	(11)	20	47	205	
MONTH ACTUAL	42	48	52	31	12	23	46	12	23	11	30	2	
VAR/BSCH	4	51	(12)	(33)	(26)	(44)	119	0	(51)	(15)	3		
VAR/COST	10	95	2	8	27	9	104	32	(34)	9	17	203	
WAD	48	140	208	278	343	418	450	494	534	569	613	815	815
FORECAST	42	90	142	173	185	208	254	266	289	300	330	332	347
EARNED VALUE	52	195	249	288	327	359	509	553	542	562	608	814	
ACTUAL	42	90	142	173	185	208	254	266	289	300	330	332	
VAR/BSCH	4	55	43	10	(16)	(90)	59	59	8	(7)	(4)	(1)	
VAR/COST	10	105	107	115	142	151	255	287	253	262	278	482	
FY86 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 11. Institutional Financial Status

TRANSPORTATION SYSTEMS

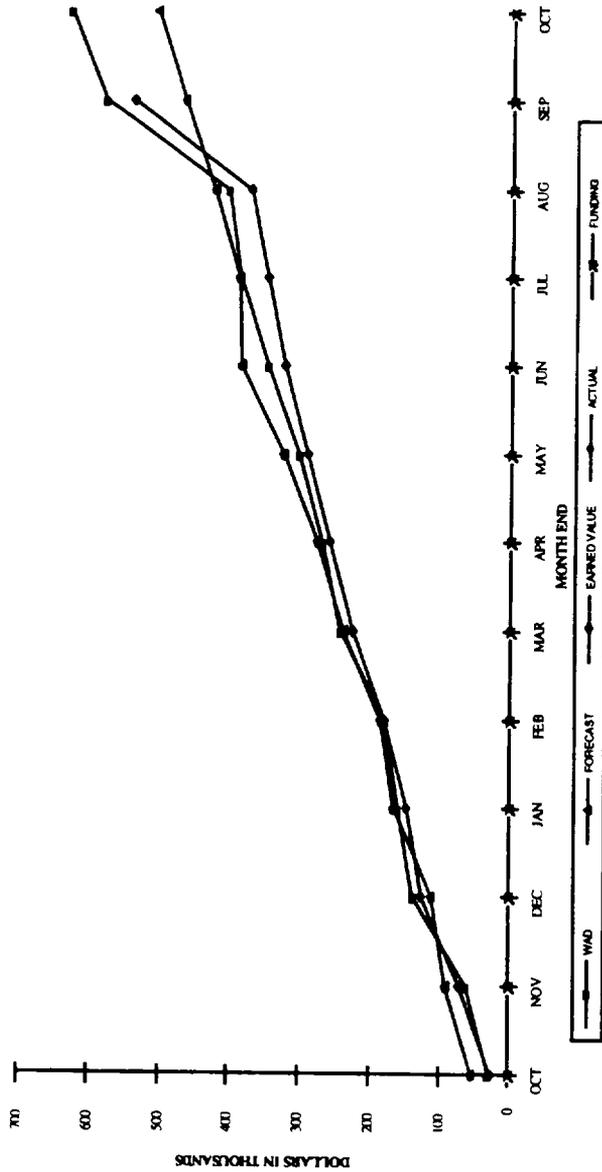


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
MONTH													
WAD	436	445	1,030	843	560	752	771	748	855	798	805	1,439	403
FORECAST	568	526	254	487	386	694	588	1,041	485	723	547	783	2,263
EARNED VALUE	368	358	1,040	876	588	763	563	739	897	687	841	1,555	
MONTH ACTUAL	568	526	254	487	386	694	588	1,041	485	723	547	783	
VAR/VSCH	(86)	(86)	10	35	28	11	(209)	(9)	142	(131)	36	116	
VAR/PCOST	(200)	(187)	786	411	202	69	(25)	(302)	632	(56)	364	782	
CUM													
WAD	436	881	1,911	2,754	3,314	4,066	4,837	5,565	6,440	7,238	8,143	9,582	9,985
FORECAST	568	1,094	1,348	1,815	2,201	2,895	3,483	4,524	4,989	5,712	6,259	7,052	9,315
EARNED VALUE	368	727	1,787	2,645	3,233	3,996	4,559	5,286	6,285	6,982	7,803	9,458	
ACTUAL	568	1,084	1,348	1,815	2,201	2,895	3,483	4,524	4,989	5,712	6,259	7,052	
VAR/VSCH	(86)	(154)	(144)	(109)	(81)	(70)	(278)	(287)	(145)	(276)	(240)	(124)	
VAR/PCOST	(200)	(387)	418	500	1,032	1,101	1,076	774	1,306	1,250	1,644	2,406	
FY86 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 12. Transportation Systems Financial Status

Actuals Thru 9/28/1988

DB-03-02-01 SYSTEMS ENGINEERING

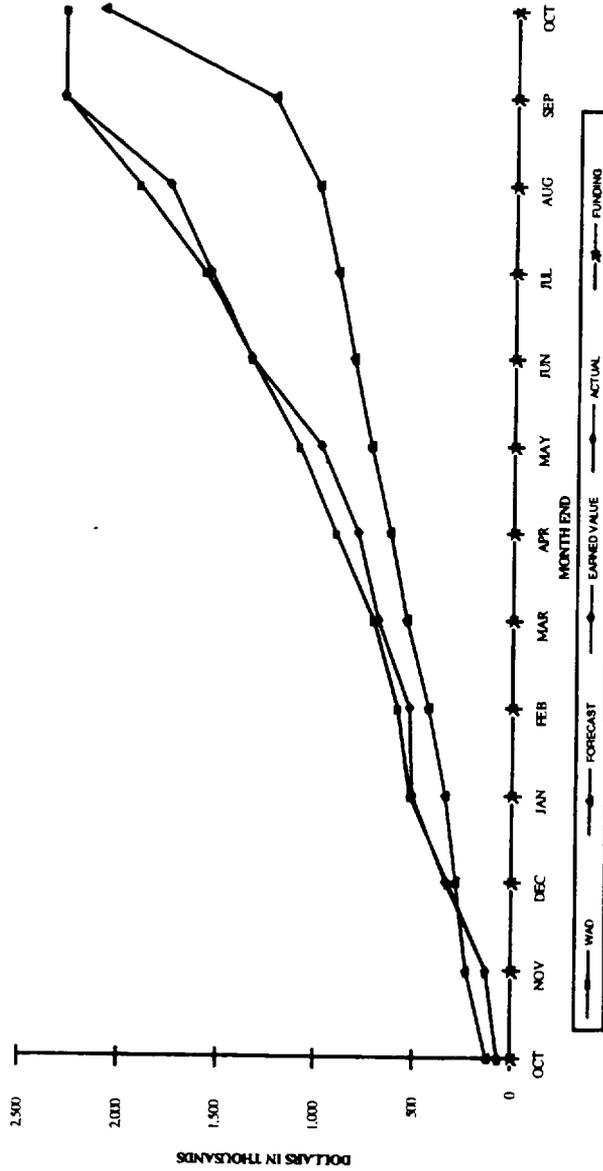


	OCT	NOV	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
MONTH											
WAD	28	33	78	18	27	32	45	40	17	178	48
FORECAST	53	38	21	20	37	48	61	3	36	43	41
EARNED VALUE	25	46	58	21	32	31	33	25	24	169	
MONTH ACTUAL	53	38	21	54	37	48	61	3	36	43	
VAR/BSCH	(3)	13	(22)	(1)	6	(1)	(12)	(15)	7	(7)	
VAR/COST	(28)	6	35	(33)	(4)	(17)	(28)	22	(12)	128	
WAD	28	61	139	181	270	302	347	387	404	580	829
FORECAST	53	91	112	186	278	324	385	388	424	487	508
EARNED VALUE	25	71	127	148	259	290	323	348	372	541	
ACTUAL	53	91	112	166	276	324	385	388	424	487	
VAR/BSCH	(3)	10	(12)	(13)	(11)	(12)	(24)	(38)	(32)	(38)	
VAR/COST	(28)	(20)	15	(19)	(17)	(34)	(82)	(40)	(52)	74	
FY85 FUNDING	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0

Figure 13. Systems Engineering Financial Status

Actuals Thru 8/30/1986

DB-03-02-04 SUPPORT SYSTEMS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	65	80	202	196	65	123	184	189	246	241	338	370	0
FORECAST	122	108	54	55	90	116	82	100	87	87	99	233	667
EARNED VALUE	66	59	213	173	17	159	103	191	360	212	207	532	
MONTH ACTUAL	122	108	54	55	90	116	82	100	87	87	99	233	
VAR/SCH	1	(1)	11	(23)	(48)	36	(91)	2	114	(20)	(131)	162	
VAR/COST	(56)	(49)	159	118	(73)	43	21	91	273	125	108	269	
WAD	65	125	327	523	588	711	905	1,064	1,340	1,581	1,919	2,289	2,289
FORECAST	122	230	284	339	429	545	627	727	814	901	1,000	1,233	2,100
EARNED VALUE	66	125	338	511	528	667	790	961	1,341	1,553	1,760	2,292	
ACTUAL	122	230	284	339	429	545	627	727	814	901	1,000	1,233	
VAR/SCH	1	0	11	(12)	(80)	(24)	(115)	(113)	1	(28)	(157)	3	
VAR/COST	(56)	(105)	54	172	99	142	183	254	527	652	760	1,059	
FY85 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 15. Support Systems Financial Status

MONTH	MONTH										CUM				FUNDING			
	WAD	FORECAST	EARNED VALUE	MONTH ACTUAL	VARSOCH	VARCOST	WAD	FORECAST	EARNED VALUE	ACTUAL	VARSOCH	VARCOST	FY95 FUNDING	PREV FUNDED	TOTAL FUNDING			
OCT	0	0	0	0	(1)	24	25	0	0	0	(1)	24	0	0	0			
NOV	0	0	0	0	(48)	(24)	49	0	0	0	(49)	0	0	0	0			
DEC	0	0	0	0	(20)	18	70	0	0	0	(69)	1	0	0	0			
JAN	0	0	1	0	4	17	72	4	22	4	(50)	18	0	0	0			
FEB	2	4	21	4	4	17	72	8	43	8	(29)	35	0	0	0			
MAR	0	4	21	4	4	17	72	12	57	12	(15)	45	0	0	0			
APR	0	4	14	4	4	14	72	16	60	16	(12)	44	0	0	0			
MAY	0	4	3	4	4	10	72	18	60	18	(11)	54	0	0	0			
JUN	13	4	14	4	1	10	85	20	74	20	(4)	61	0	0	0			
JUL	0	0	7	0	7	7	85	20	81	20	0	57	0	0	0			
AUG	0	0	4	0	4	4	85	28	85	28	0	57	0	0	0			
SEP	0	3	4	3	0	4	85	31	85	31	0	54	0	0	0			
OCT	81	87	0	3	0	0	168	118	85	31	0	0	0	0	0			

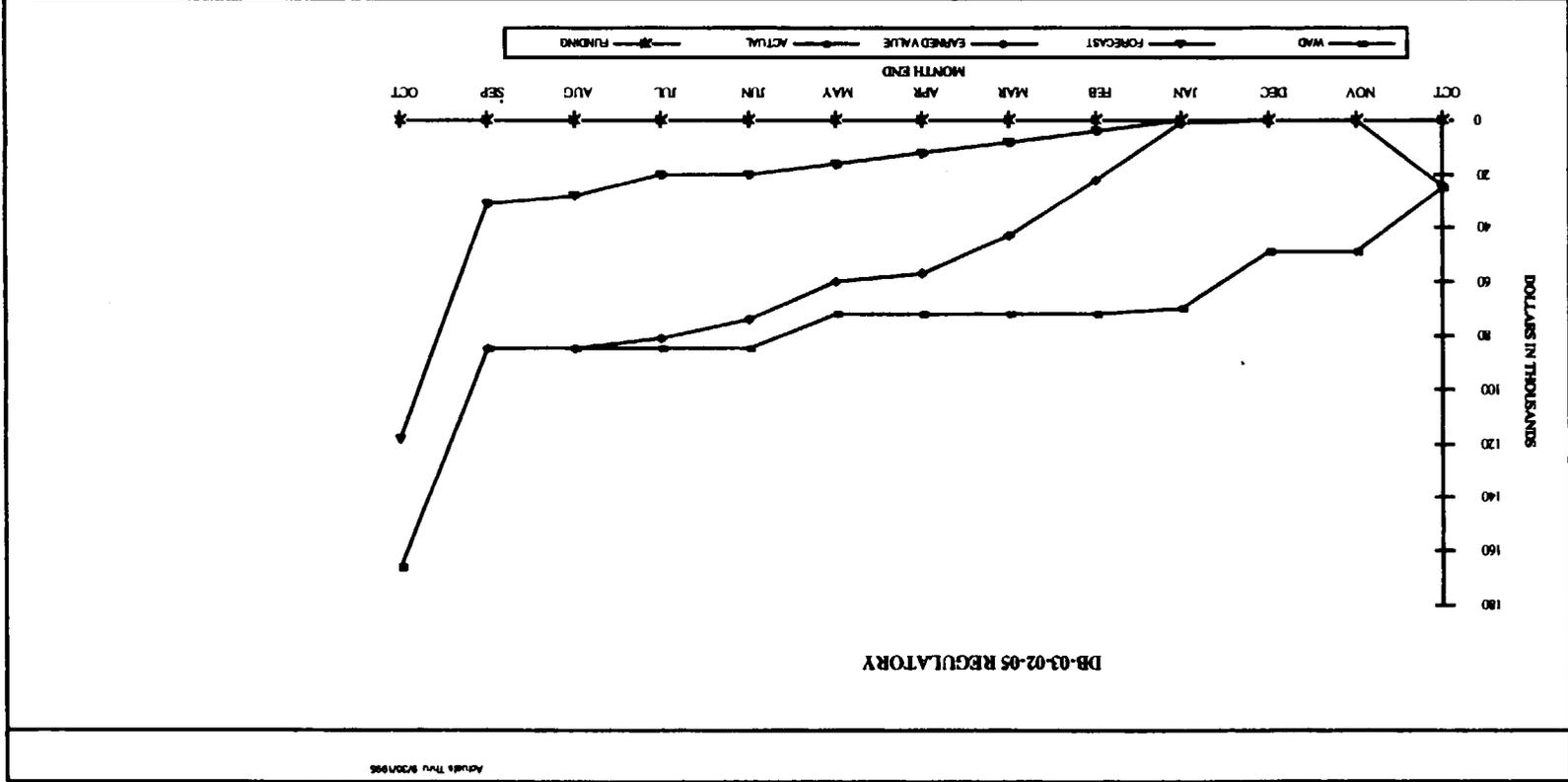
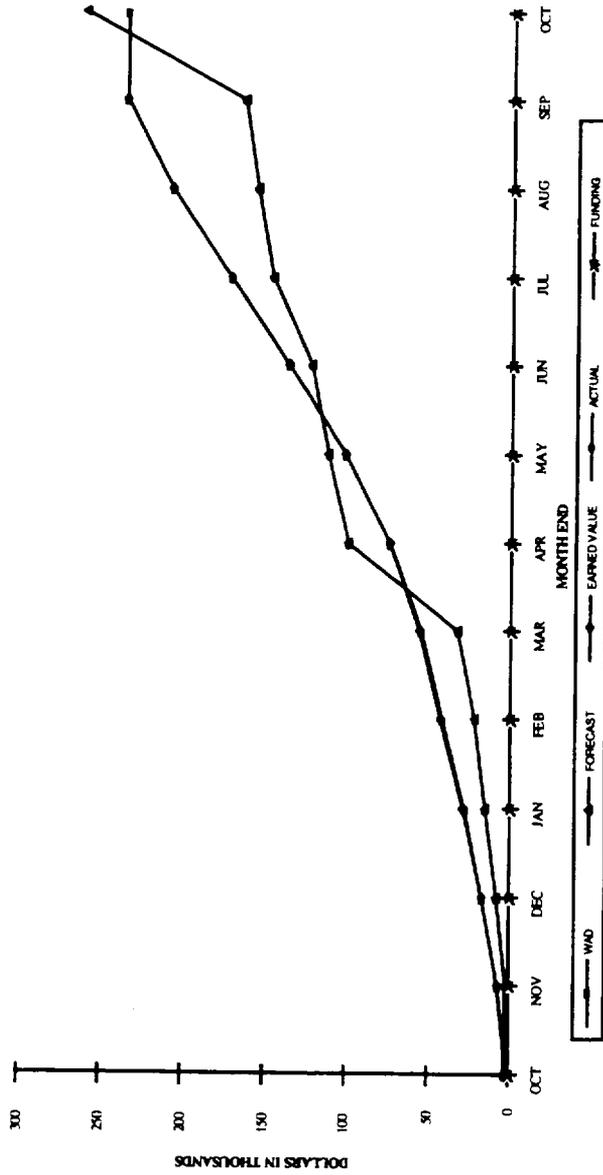


Figure 16. Regulatory Financial Status

Actuals Thru 8/31/96

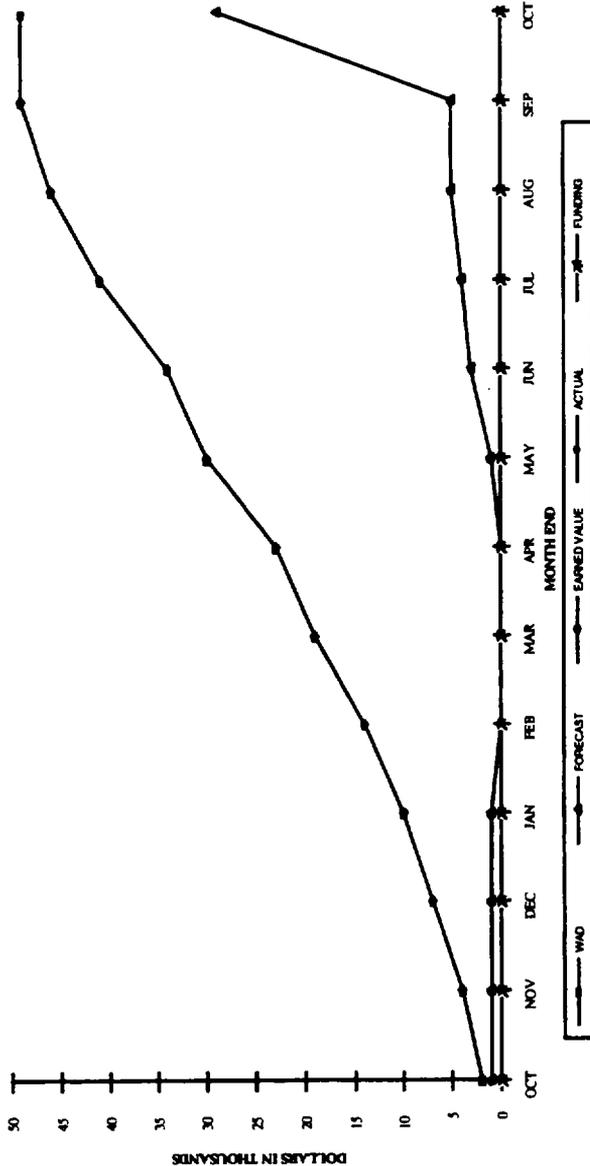
DB-03-02-11 QUALITY ASSURANCE



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
MONTH													
WAD	1	6	10	11	14	13	19	27	36	35	36	28	0
FORECAST	3	(1)	6	7	7	11	66	13	11	24	9	8	97
EARNED VALUE	1	6	10	12	14	13	18	27	36	35	36	28	
MONTH ACTUAL	3	(1)	6	7	7	11	66	13	11	24	9	8	
VAR/SCH	0	0	0	1	0	0	(1)	0	0	0	0	0	0
VAR/COST	(2)	7	4	5	7	2	(46)	14	25	11	27	20	0
CUM													
WAD	1	7	17	28	42	56	74	101	137	172	208	236	236
FORECAST	3	2	8	15	22	33	99	112	123	147	156	164	261
EARNED VALUE	1	7	17	29	43	56	74	101	137	172	208	236	261
ACTUAL	3	2	8	15	22	33	99	112	123	147	156	164	261
VAR/SCH	0	0	0	1	1	1	0	0	0	0	0	0	0
VAR/COST	(2)	5	8	14	21	23	(25)	(11)	14	25	52	72	72
FUNDING													
FY96 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 17. Quality Assurance Financial Status

DB-03-02-12 INFORMATION MANAGEMENT

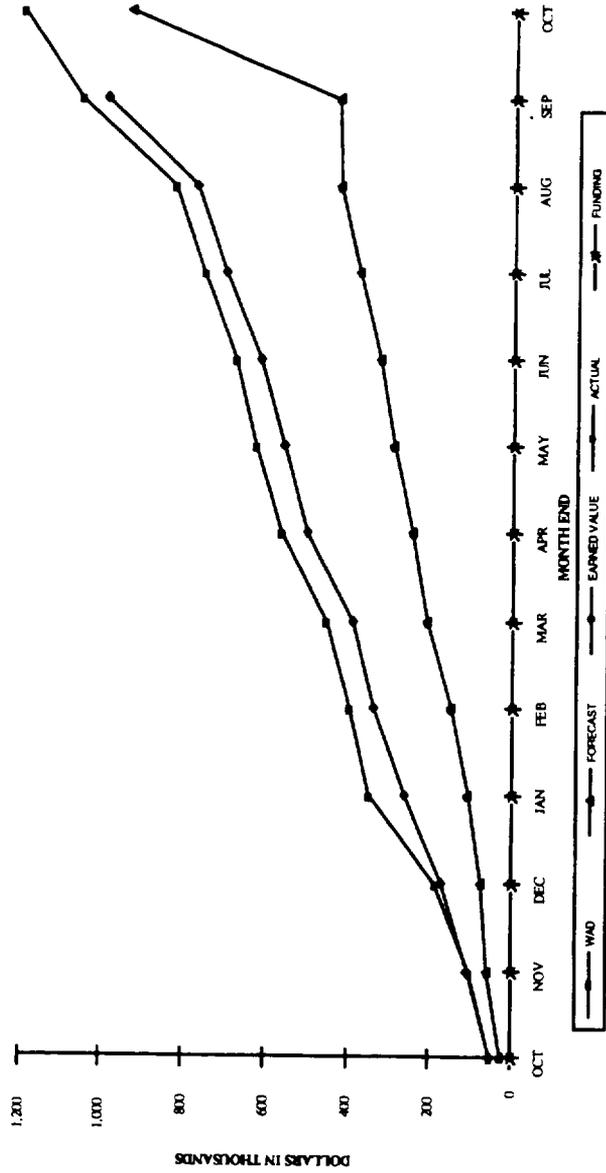


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	2	2	3	3	4	5	4	7	4	7	5	3	0
FORECAST	1	0	0	0	(1)	0	0	1	2	1	1	0	24
EARNED VALUE	2	2	3	3	4	5	4	7	4	7	5	3	
MONTH ACTUAL	1	0	0	0	(1)	0	0	1	2	1	1	0	
VAR/SCH	0	0	0	0	0	0	0	0	0	0	0	0	
VAR/PCST	1	2	3	3	5	5	4	6	2	6	4	3	
WAD	2	4	7	10	14	19	23	30	34	41	46	48	48
FORECAST	1	1	1	1	0	0	0	1	3	4	5	5	29
EARNED VALUE	2	4	7	10	14	19	23	30	34	41	46	48	
ACTUAL	1	1	1	1	0	0	0	1	3	4	5	5	
VAR/SCH	0	0	0	0	0	0	0	0	0	0	0	0	
VAR/PCST	1	3	6	9	14	19	23	29	31	37	41	44	
FY/5 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 18. Information Management Financial Status

Actuals Thru 8/30/95

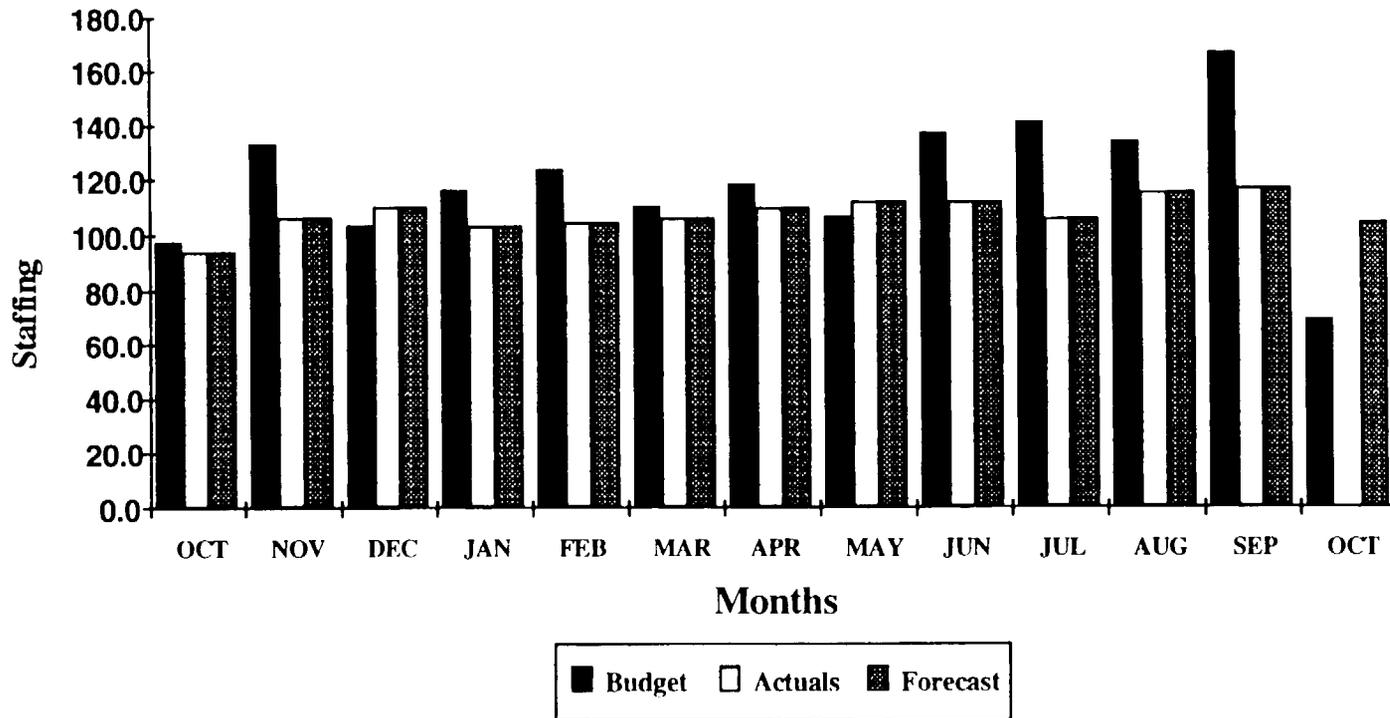
DB-03-02-13 ENVIRONMENT, SAFETY, AND HEALTH



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	51	52	84	182	48	57	111	61	50	78	71	228	147
FORECAST	26	32	16	33	41	59	37	47	34	51	49	3	505
EARNED VALUE	51	56	62	83	78	50	114	55	56	66	71	217	
MONTH ACTUAL	26	32	16	33	41	59	37	47	34	51	49	3	
VAR/VSCH	0	4	(22)	(69)	28	(7)	3	(6)	8	8	0	(11)	
VAR/COST	25	24	46	80	35	(9)	77	8	24	35	22	214	
WAD	51	103	187	349	387	454	565	628	676	754	825	1,053	1,200
FORECAST	26	56	74	107	148	207	244	281	325	376	425	428	933
EARNED VALUE	51	107	169	262	338	388	502	557	615	701	772	989	
ACTUAL	26	56	74	107	148	207	244	281	325	376	425	428	
VAR/VSCH	0	4	(18)	(87)	(59)	(66)	(63)	(69)	(81)	(52)	(53)	(64)	
VAR/COST	25	49	95	155	190	181	258	266	290	325	347	561	
FY95 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 19. Environment, Safety, and Health Financial Status

CWBS 3.0 WASTE ACCEPTANCE, STORAGE & TRANSPORTATION (WAST) PROJECT



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Forecast	94.4	106.7	110.5	103.6	104.7	106.5	109.9	112.4	112.4	106.2	115.7	117.0	104.7
Budget	98.1	133.5	103.8	116.2	123.8	110.6	118.4	107.0	137.4	141.5	134.2	167.1	69.2
Actuals	94.4	106.7	110.5	103.6	104.7	106.5	109.9	112.4	112.4	106.2	115.7	117.0	0.0

Figure 20. WAST Project Staffing

4. PROGRAM SUPPORT CWBS 9.0

4.1 PROGRAM QUALITY ASSURANCE CWBS 9.1

MANAGER: R. P. Ruth

OBJECTIVE(S): Establish a quality assurance program that meets Office of Civilian Radioactive Waste Management (OCRWM) Program Quality Assurance Requirements and Description (QARD) requirements and is maintained through surveillances and reviews of all Civilian Radioactive Waste Management System (CRWMS) M&O quality-affecting activities.

4.1.1 Progress During Report Period

Las Vegas

- Prepared the following procedures for or within the Quality Review Board (QRB) review cycle: Quality Administrative Procedure (QAP)-1-0 "M&O Organization"; QAP-2-4, Revision 6, Cancellation of "Quality Assurance Program Status and Trend Reporting"; QAP-2-5 "M&O Surveillances"; QAP-3-0, Revision 4, "Design Control Process"; QAP-3-9, Revision 6, "Design Analyses"; QAP-3-12, Revision 6, "Transmittal of Design Inputs"; the QAP-7 Series procurement procedures; QAP-16-2, Revision 3, Cancellation of "Stop Work"; and QAP-18-1 "Auditor Qualifications."
- Prepared or reviewed the following procedures outside of the QRB process: DOE/RW-0333P, Revision 4, Concurrence Draft C, "Quality Assurance Requirements and Description"; OCRWM AP-16.4Q, Revision 0, "Root Cause Determination"; Nevada Line Procedure (NLP)-17-5, Revision 3, "Storage and Retrieval of QA Records by Security Archives of Nevada"; NLP-3-27, Revision 0, "Support Engineering Calculations"; NLP-3-31, Revision 0, "Review and Acceptance of Submittals"; NLP-5-2, Revision 0, "Sandia National Laboratory, Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, and U.S. Geological Survey Alternate Procedure Format"; NLP-6-3 "Control of Vendor Manual/Vendor Technical Information (VM/VTI)"; NLP-SIII-5, Revision 0, "Test Management"; Nevada Work Instruction (NWI)-QA-001Q, Revision 0, Draft A, Review and Acceptance of the Quality Assurance Requirements Matrix; NWI-QA-003, Revision 3, "Supplier Evaluation"; NWI-GL-001Q, Revision 0, Draft A, "Verification and Processing of Geophysical Log Data"; NWI-GL-002Q, Revision 0, Draft A, "Forensic Evaluation of Geophysical Log Data"; and Nevada Administrative Procedure (NAP)-IM-001 Revision 0 "Software Management."
- Completed surveillances 95-Nevada Site Surveillance (NSS)-39 "REECO Transition Plan," 95-NSS-041 "Procedure Action Requests (PARs)," 95-NSS-043 "Completion of Field Verification Procedure (FVP)-008," 95-NSS-044 "Geophysical Logging," and 95-NSS-054 "REECO Acceptance of Kiewit Parsons Brinkerhoff (Kiewit/PB) QA Program."

- Reviewed the preliminary draft to be used in formal QAP-2-3 classification analyses. This input was generated by the Q-List Review and Revision Working Group effort.
- Met with Surface Based Testing Coordination to review the UZN 16/UZN-55T VSP -Borehole test interference incident. The Principal Investigator (PI) was requested to specify the degree of interference with UZN-55T future testing. The information will be used to determine if a Deficiency Report will be written against the Determination of Importance Evaluation process.
- Approved a revised Safety Evaluation Report for Bay Geophysical. Restrictions on Qualified Suppliers List (QSL) were removed. Approved Supplier Evaluation Reports for COLOG, Inc. (not Qualified), and Baker Hughes INTEQ (Qualified), and submitted the reports to Yucca Mountain Quality Assurance Division as input to the QSL.
- Conducted a Lessons Learned briefing on Corrective Action Report (CAR) YM-95-028 with the LV Training Department.

Vienna

- Completed the Management Report of OCRWM OQA Corrective Action Request HQ-94-015 Review Team Activities. This report describes the process used to perform the review for M&O Program QAP-2-0 Activity Evaluations.
- Completed surveillances 95-VIS-029 "Design Analyses," 95-VIS-34 "GESCO Audit of PacTec," 95-VIS-36 "GESCO Evaluation of Sub-tier Suppliers," and 95-VIS-040 "GESCO Surveillance of PacTec."
- Resolved comments with OCRWM regarding the DOE Spent Nuclear Fuel Requirements Document.

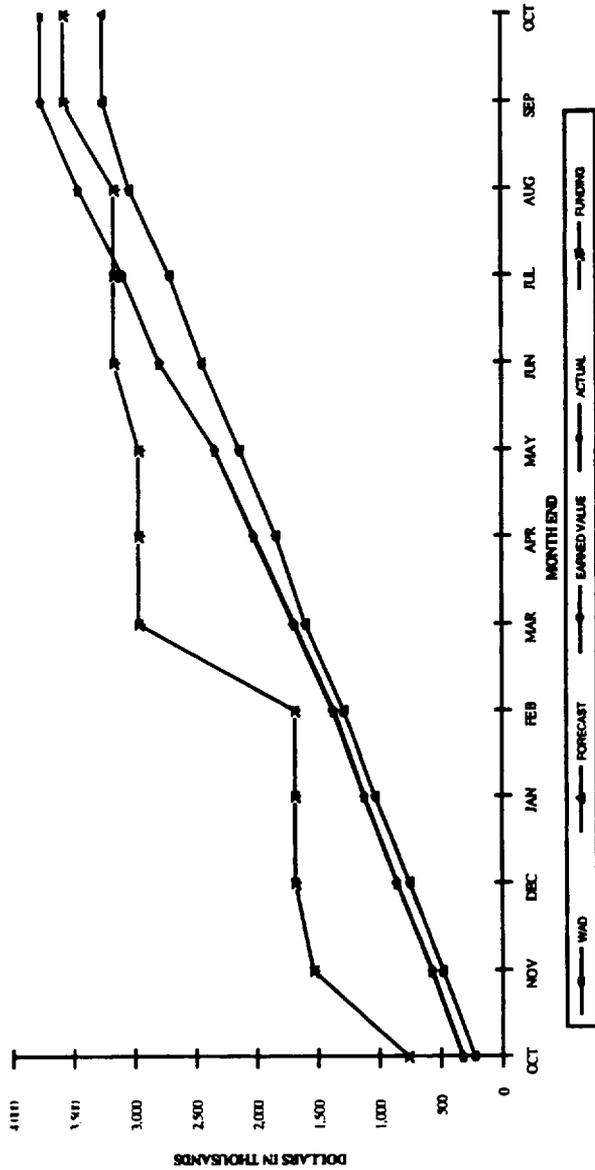
4.1.2 Issues and Concerns

- None.

4.1.3 Variances

- As forecast, the 13% cost underrun at complete was primarily driven by: 1) a reduction in travel due to transferring the Audit function to OCRWM; 2) the deletion of MPC potential vendor reviews; and 3) delay in hiring for a previously filled position.

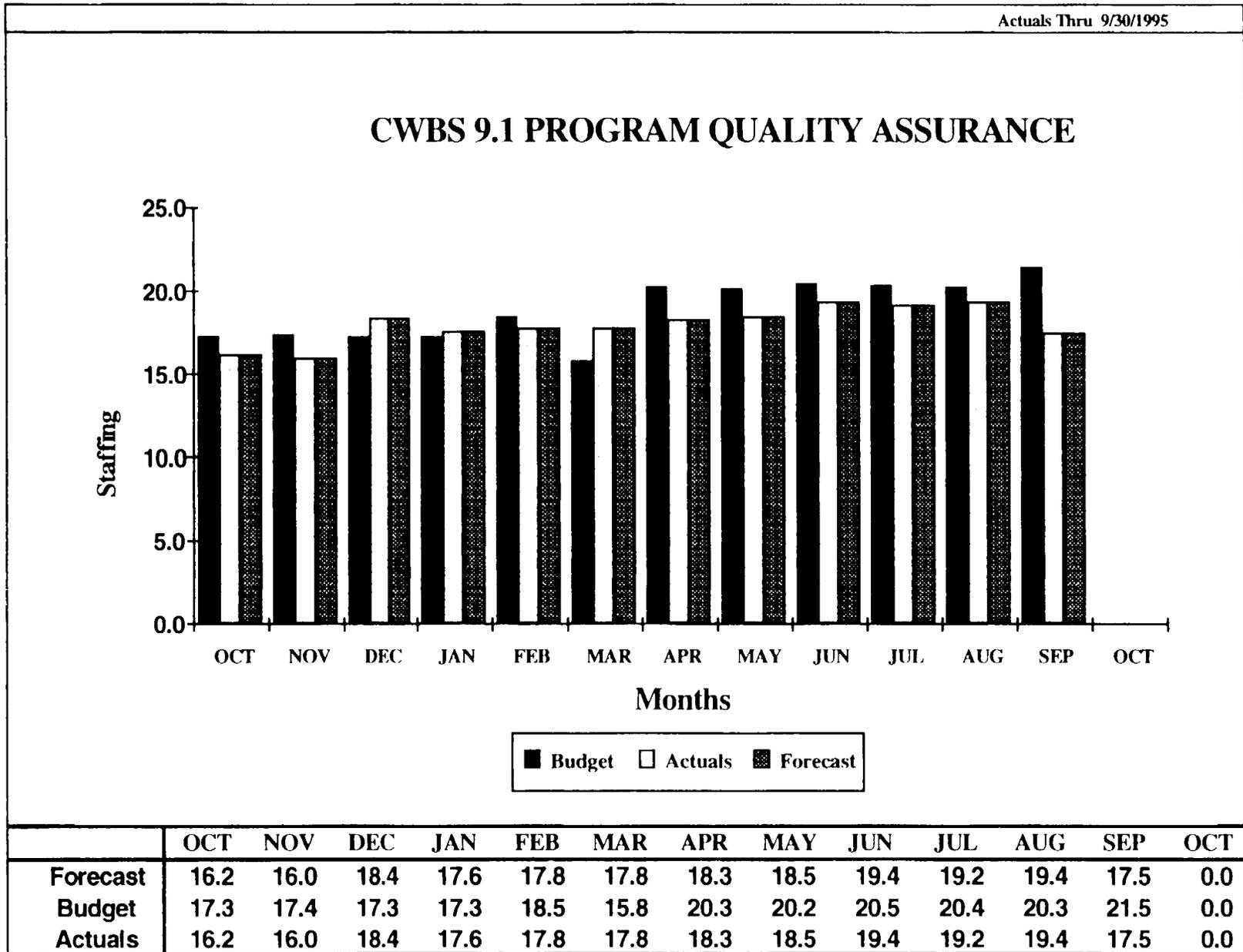
CYRS 91 PREM: RAN: QUALITY ASSURANCE F



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	323	254	282	258	253	322	325	324	462	300	358	313	0
FORECAST	228	257	273	276	253	311	247	292	308	263	328	219	4
EARNED VALUE	325	255	284	258	254	324	326	314	452	300	358	313	
MONTH ACTUAL	228	257	273	276	253	311	247	292	308	263	328	219	
VAR/SCH	2	1	2	1	1	2	1	(10)	0	0	0	0	
VAR/COST	97	(2)	11	(17)	1	13	79	22	144	37	30	84	
WAD	323	577	859	1,117	1,370	1,692	2,017	2,341	2,793	3,093	3,451	3,764	3,764
FORECAST	228	485	758	1,004	1,287	1,598	1,845	2,137	2,445	2,708	3,036	3,255	3,259
EARNED VALUE	325	590	894	1,123	1,377	1,701	2,027	2,341	2,783	3,083	3,451	3,764	
ACTUAL	228	485	758	1,034	1,287	1,598	1,845	2,137	2,445	2,708	3,036	3,255	
VAR/SCH	2	3	5	6	7	9	10	0	0	0	0	0	
VAR/COST	97	96	106	89	90	103	182	204	348	385	415	509	
FY'S FUNDING	768	1,540	1,540	1,540	1,540	2,815	2,815	2,815	3,015	3,015	3,015	3,455	3,455
PREV FUNDED	0	0	150	150	150	150	150	150	150	150	150	118	118
TOTAL FUNDING	768	1,540	1,690	1,690	1,690	2,965	2,965	2,965	3,165	3,165	3,165	3,574	3,574

Figure 22. Program Quality Assurance Financial Status

Figure 23. Program Quality Assurance Staffing



4.2 PROGRAM MANAGEMENT AND INTEGRATION

CWBS 9.2.1, 9.2.2, 9.3.2, 9.3.3, 9.3.5

4.2.1 Systems Integration

MANAGER: G. A. Caruth

OBJECTIVE(S): Develop management system documentation, develop automated system for the management of system requirements, integrate engineering specialties, perform system safety and risk assessments, and establish technical performance measurement system and conducts evaluation. Identify systems analysis requirements; develop, integrate, and allocate system requirements; develop program test and evaluation program; maintain the system technical baseline; and verify the adequacy of designs and construction and compliance with system requirements.

4.2.1.1 Progress During Report Period

System Planning and Integration

- Briefed RW-2 and RW-40 representatives on Multi-Purpose Canister (MPC) criticality control issues and proposed resolutions. Drafted a letter to formally transmit recommendations to DOE on the MPC neutron absorber materials issue. This information provided the basis for the determination not to alter the current MPC contract with Westinghouse.
- Completed review of the Strategy for Demonstrating Waste Containment and Isolation. The paper was updated to deliver to Yucca Mountain Site Characterization Office (YMSCO) and will serve as one of the bases for determining the allocation of FY96 efforts at Yucca Mountain.
- Delivered a revised draft of the Program Concept of Operations (CONOPS) to OCRWM. The draft incorporated RW-37 comments and included some additional comments received from M&O organizations. CONOPS describes the operational interactions among system elements in achieving overall system performance objectives.
- Completed a Program Risk Management Approach preliminary draft. The approach was briefed to RW-37, and a copy of the draft was hand-delivered for information and review. This draft establishes an overall structure to identify, track, and develop mitigating actions for program risks.

System Requirements and Design

- Completed the QAP-3-1 technical review of the CRWMS Requirements Document (CRD), Revision 2. This is the first general revision to the requirements documents and completes incorporation of the Program Approach into the technical baseline.
- Delivered the Revision 2 review draft of the Mined Geologic Disposal System (MGDS) Requirements Document, incorporating the Program Approach, to RW-37. The revision also

contains resolved comments deferred from Revision 1. Appendix C changes bring Functional Descriptions into alignment with the current Advanced Conceptual Design, and adds an Appendix D defining critical programmatic requirements. Major emphasis was placed on coordinating the revision with MGDS systems and design engineers.

- Completed the technical review draft and initiated the QAP-3-1 technical review of the Waste Acceptance Systems Requirements Document (SRD), Revision 2. This revision ensures that the WA-SRD accurately reflects the Program Approach.
- Continued QAP-3-1 technical review comment resolution for Revision 2 of both the Transportation and Storage SRDs. Completion of these technical reviews is anticipated in October.
- Facilitated a meeting of the RW and M&O Operations Functions Task Team that took place September 12-14, 1995. The team's results will be used to develop a program-level Baseline Change Proposal (BCP). The BCP is expected to resolve long-standing issues regarding allocation of responsibility for operations functions.
- Presented a draft of the DOE Spent Nuclear Fuel Steering Group Program Task Team Report to the Steering Group for comment on September 28, 1995. This key report identifies program issues and strategies for resolution. The strategies are necessary to ensure that DOE spent nuclear fuel is acceptable for disposal in the CRWMS.
- Conducted a joint RW, M&O, and DOE Office of Environment Management (EM) comment resolution meeting on September 29, 1995, to evaluate comments received during the QAP-3-1 technical review of the DOE Spent Nuclear Fuel (SNF) Requirements Report. This effort ensures that the Requirements Report accurately reflects the requirements other DOE SNF must meet for acceptance in the CRWMS. This activity is particularly critical now, because EM is developing its program for the disposal of the DOE SNF and needs acceptance requirements guidance.
- Submitted the Configuration Information System (CIS) Software Requirements Specification with the functionality needed for YMSCO Level 2 Baseline Change Control Board approval. The document serves as the basis for the acceptance test of the Level 2 segment of CIS.
- Qualified the ORIGEN-ARP by completing validation testing and preparing the Software Qualification Report and Version Description Document. ORIGEN-ARP was baselined by the M&O Software Change Control Board as QA validated software. This accomplishment makes a major piece of QA qualified Science and Engineering software available to all program participants.

4.2.1.2 Issues and Concerns

- None.

4.2.2 Regulatory and Licensing

CWBS 9.2.2

MANAGER: D. F. Fenster

OBJECTIVE(S): Coordinate and develop an integrated OCRWM programmatic approach and strategies for regulatory compliance and licensing issues. Coordinate and develop regulatory interpretation and guidance documents. Lead the National Environmental Protection Agency (NEPA) policy and compliance approach process. Serve as a point of contact on policy for environmental, safety and health compliance. Coordinate and facilitate NRC interactions.

4.2.2.1 Progress During Report Period

Environmental Requirements and Compliance

- Reviewed the Preliminary MPC Environmental Impact Statement for Commercial and Naval Spent Nuclear Fuel and participated in comment resolution meetings.
- Reviewed the Charter for the National Environmental Policy Act (NEPA) Follow-up Quality Improvement Team and provided RW-36 with OCRWM headquarters responses to the associated NEPA Questionnaire.
- Reviewed the Draft Amendments to the Department of Energy's National Environmental Policy Act Implementing Procedures (10 CFR 1021). The categorical exclusion (CX) that OCRWM suggested for the purchase and use of NRC-certified packaging was not included in these amendments. EH-42 believes the purchase and lease of NRC-certified casks was not appropriate for a CX and that at least an environmental assessment would be required to determine the impacts of that action.

Licensing and Regulatory Program Support

- Prepared RW-2 viewgraphs and briefing materials for the September 6, 1995, DOE and NRC Management Meeting and participated in the meeting.
- Provided RW-36 with the Draft OCRWM Headquarters Administrative Guideline NRC Interactions.
- Developed the Draft M&O and NRC Informal Interaction Guidelines.
- Successfully demonstrated the Regulatory Tracking System (RTS) to RW-2 on September 8, 1995. Submitted an administrative procedure on managing regulatory commitment and requests using the RTS for DOE review.

- Revised the 10 CFR 21 Program-wide Administrative Procedure in accordance with agreements made during comment resolution meetings. Provided the revised procedure to DOE for publication.
- Briefed DOE Management on the MPC Part 60 Considerations Report on September 18, 1995. Completed the preliminary draft of the report and distributed it for DOE/M&O review as scheduled on September 29, 1995.
- Prepared a briefing on NRC's NEPA track record on licensing actions in response to a question from RW-2.
- Fulfilled rapid response requests to update FY95 YMSCO activities for the Directors Resource Book and respond to the public question, "Would groundwater become contaminated in a repository environment?"

4.2.2.2 Issues and Concerns

- Evaluation of OCRWM's licensing strategy and regulatory compliance program in the context of a constrained budget and revised program approach remains a concern.

4.2.3 Strategic Planning

CWBS 9.3.2

MANAGER: F. Ridolphi

OBJECTIVE(S): Provide complete strategic and system analyses to DOE OCRWM and to the general manager of the M&O contract

4.2.3.1 Progress During Report Period

- Delivered a copy of the redline/strikeout version of the Program Plan to RW-35. This version contained the final updates resulting from RW-2's approval of the FY95 Annual Work Plans and the incorporation of BCP-0005 into the Program Baseline. RW-35 guidance is to forego additional changes because of proposed legislation.
- Prepared a Program Plan concept for RW-35 incorporating the Program Baseline update with the development of the Program Plan. RW-30 subsequently transferred responsibility for the Program Plan back to RW-34. The M&O will support RW-34 in developing the Plan and coordinating it with the Program Baseline update to ensure consistency.
- Prepared an FY97 draft program budget to be used as an example by RW-35 for the RW budget call. This effort was placed on hold until program direction is provided as a result of new legislation.
- The Director's Resource Book (DRB) was released to the program on September 18, 1995, ending a 3-month integrated effort involving most M&O departments, RW, and Weston. The hard copy version will be followed by an electronic version in October or November, enabling real-time update of the information.

4.2.3.2 Issues and Concerns

- None.

4.2.4 International Waste Management Technology CWBS 9.3.3

MANAGER: F. Ridolphi

OBJECTIVE(S): Maintain an awareness of international activities relating to the disposal of spent fuel and high-level waste (HLW) in order to integrate information from these foreign programs into the domestic program. Report on special issues regarding international program activities and provide specific recommendations.

4.2.4.1 Progress During the Reporting Period

- Obtained information on status and plans for the Second Grimsel Test Site (GTS) Phase IV program during the GTS Phase IV meeting in Handeck, Switzerland.
- Presented a paper at the 1995 International Volcanic Hazards Conference in Rome, Italy, and helped describe explosive volcanism on the field trip associated with the conference.
- Presented a paper on the results of U.S. tests on spent fuel dissolution at the 1995 Spent Fuel Workshop in Uberlingen, Germany.
- Presented a paper and chaired a session at the fifth International Conference on Radioactive Waste Management and Remediation in Berlin, Germany.

4.2.4.2 Issues and Concerns

- None.

4.2.5 Program Control and Administration CWBS 9.3.5

MANAGERS: J. L. Stern/M. H. King

OBJECTIVE(S): Provide Program Control and Administrative support to OCRWM by implementing and maintaining a Program Control System (PCS) for the program and program support elements. Prepare Monthly Program Status Reports and Charts and bi-monthly Director's Program Reviews (DPRs). Develop the FY95 Total System Life-Cycle Cost (TSLCC) analysis; maintain the Program Cost and Schedule Baseline (PCSB) and WBS dictionaries; and publish weekly and bi-weekly reports from the Management Tracking System (MTS) and Operations Management Tracking System (OMTS) databases.

4.2.5.1 Progress During Report Period

- Baselined the Program Integration Element, prior project cost, and Yucca Mountain and WAST Projects for the Program Baseline Change Control Board (PBCCB) review of Baseline Change Proposals (BCPs) revising the program Work Breakdown Structure (WBS). Prepared briefings and participated in discussions and issue resolution sessions. All four BCPs were approved by the PBCCB on September 19, 1995.
- Submitted the draft Fee Adequacy Analysis Report to OCRWM for review and approval. The report is based on the recently completed Life Cycle Cost (LCC) analysis and confirms the current One-Mil per kilowatt hour fee is adequate.

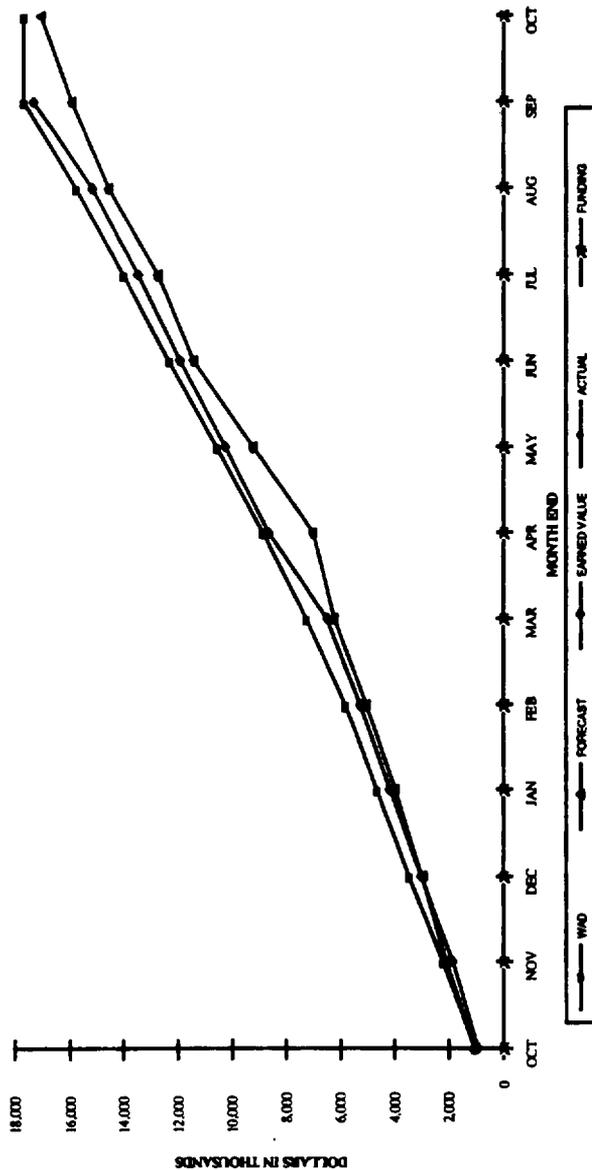
4.2.5.2 Issues and Concerns

- Program management policy finalization is being delayed because the Yucca Mountain organizations (DOE and M&O) have not engaged in meaningful issue identification and resolution dialogue.

4.2.6 Program Management and Integration Variances

- PM&I cost and schedule variances are within tolerance.

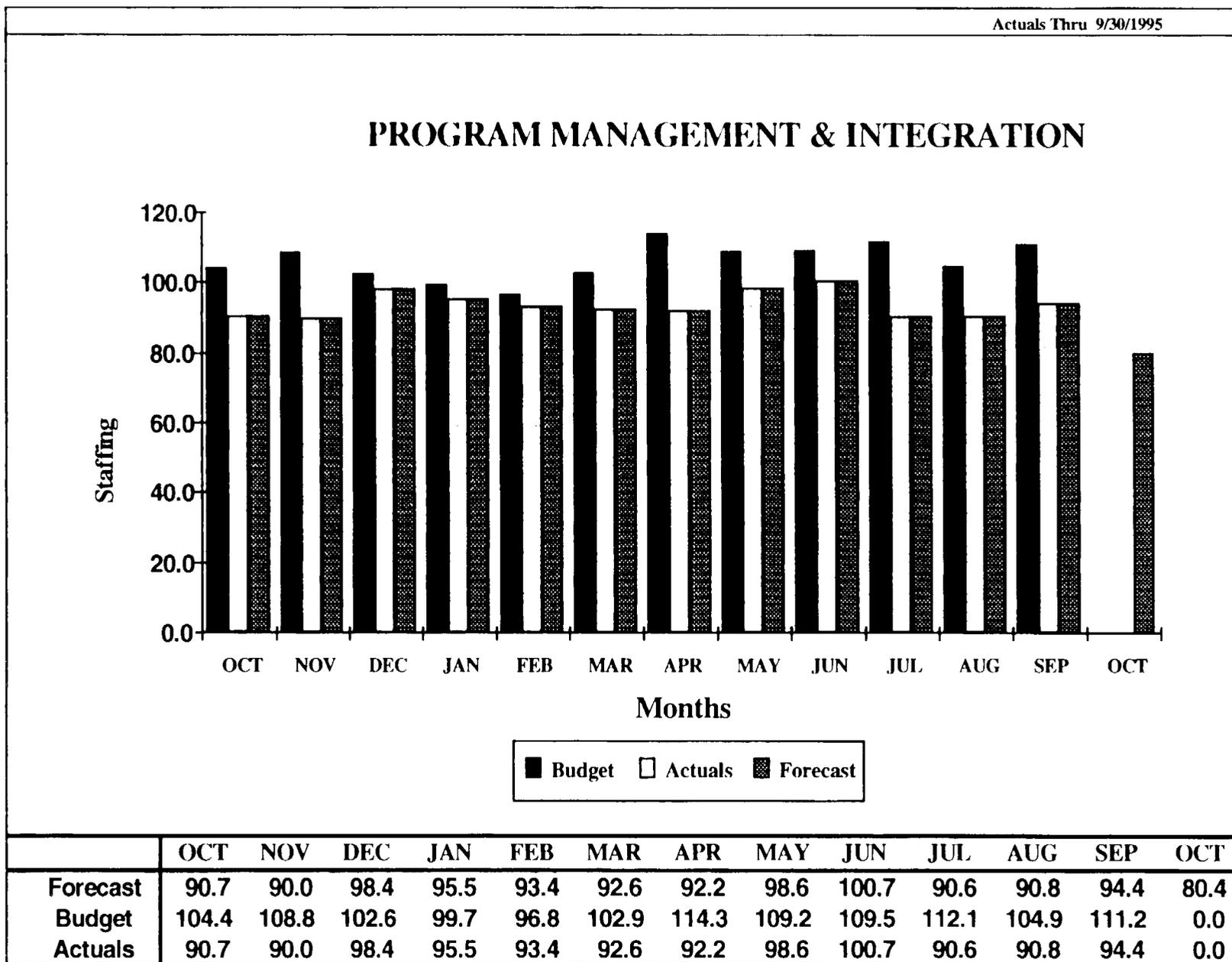
PROGRAM MANAGEMENT & INTEGRATION



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	1,076	1,133	1,233	1,214	1,170	1,452	1,602	1,683	1,775	1,841	1,803	1,804	0
FORECAST	1,091	1,005	961	1,010	1,060	1,215	775	2,202	2,216	1,312	1,784	1,396	1,140
EARNED VALUE	947	919	1,133	1,163	1,116	1,220	2,169	1,577	1,705	1,524	1,709	2,165	
MONTH ACTUAL	1,091	1,005	961	1,010	1,060	1,215	775	2,202	2,216	1,312	1,784	1,396	
VAR/SCH	(126)	(214)	(109)	(51)	(54)	(332)	557	1,119	(70)	(117)	(65)	251	
VAR/COST	(144)	(86)	272	163	66	6	1,384	(625)	(511)	212	(66)	739	
WAD	1,075	2,208	3,441	4,655	5,825	7,277	8,079	10,572	12,347	13,988	15,781	17,695	17,695
FORECAST	1,091	2,096	2,967	3,967	5,027	6,242	7,017	9,219	11,436	12,747	14,541	15,937	17,077
EARNED VALUE	947	1,866	2,999	4,182	5,278	6,498	8,657	10,234	11,939	13,443	15,171	17,326	
ACTUAL	1,091	2,096	2,967	3,967	5,027	6,242	7,017	9,219	11,435	12,747	14,541	15,937	
VAR/SCH	(126)	(342)	(442)	(493)	(547)	(779)	(222)	(335)	(406)	(525)	(620)	(369)	
VAR/COST	(144)	(239)	42	195	251	256	1,940	1,015	504	716	630	1,369	
FY'S FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 24. Program Management and Integration Financial Status

Figure 25. Program Management and Integration Staffing



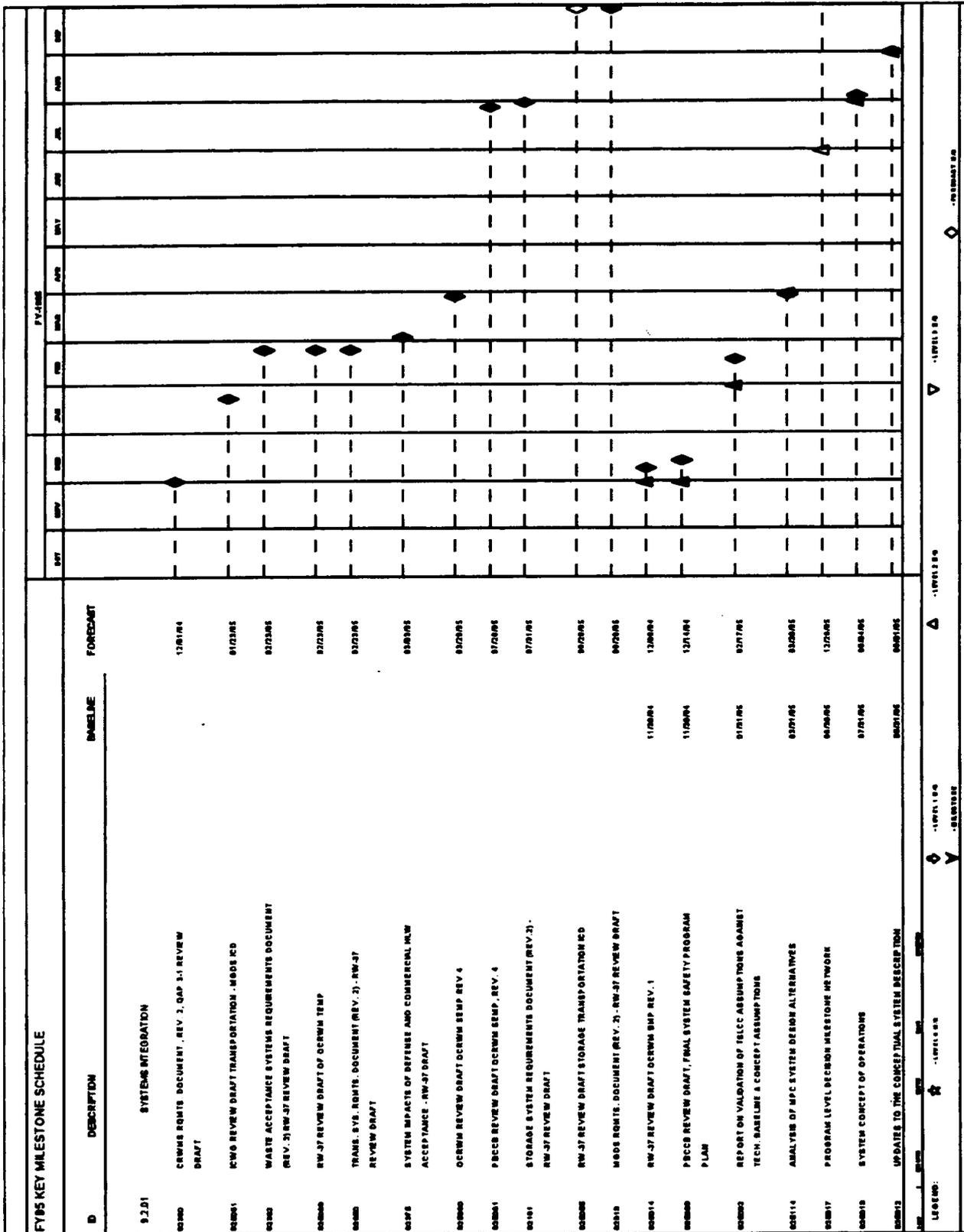


Figure 26. Systems Integration Key Milestone Schedule

FY85 KEY MILESTONE SCHEDULE												
ID	DESCRIPTION	BASELINE					FORECAST					
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
000000	EVALUATION OF ALTERNATIVE STORAGE STRATEGIES											
000000	DEVELOPMENT OF INTEGRATED DESIGN BASH FUEL DESCRIPTION											
000007	CR PHASE 3 ACCEPTANCE TEST											
000008	CR PHASE 3 OPERATIONAL (PEP 300)											
000010	PROGRAMMATIC RISK ANALYSIS											

Figure 26. Systems Integration Key Milestone Schedule (Continued)

FY95 KEY MILESTONE SCHEDULE																						
ID	DESCRIPTION	BASELINE	FORECAST	FY95																		
				SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
9302	STRATEGIC PLANNING																					
9303	ENHANCED INTERACTIONS WITH TRB (REP AM(1))		03/95																			
9304	CONTINGENCY PLANNING PROCESS		03/95																			
9305	DRAFT PROGRAM PLAN ANNUAL UPDATE FOR DCRRM REVIEW		01/96																			
9306	DRAFT PROGRAM PLAN	10/94																				
9307	FINAL PROGRAM PLAN	12/94																				

Figure 28. Strategic Planning Key Milestone Schedule

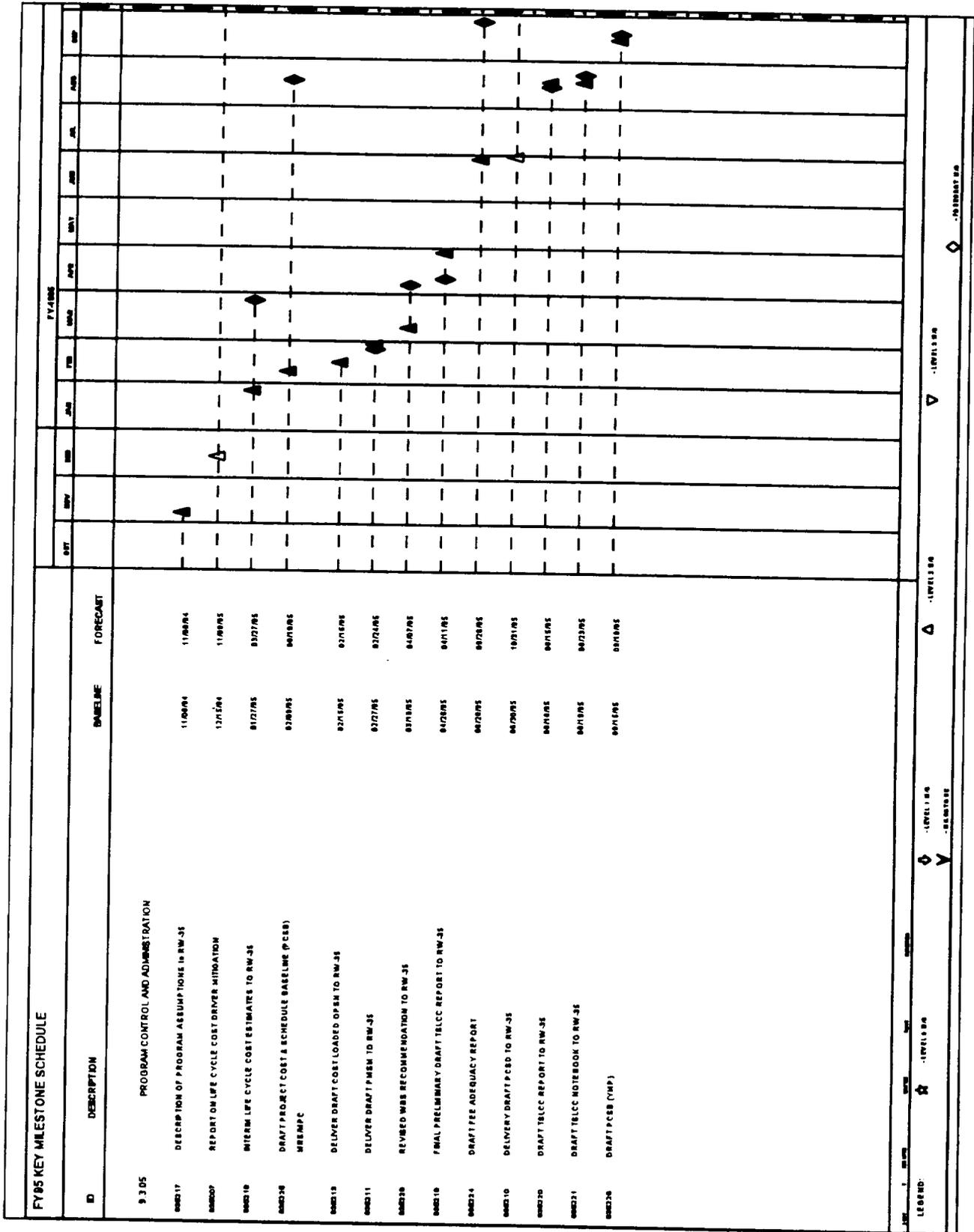


Figure 30. Program Control and Administration Key Milestone Schedule

4.3 EXTERNAL RELATIONS AND INFORMATION RESOURCE MANAGEMENT **CWBS 9.3.4, 9.3.6**

4.3.1 External Relations **CWBS 9.3.4**

MANAGER: K. H. Whitney

OBJECTIVE(S): Manage and operate the OCRWM National Information Center; develop, implement, maintain, integrate, and disseminate program-wide public, educational, and technical information materials, including publications, audiovisual resources, video productions, exhibits, presentations, briefings, INFOLINK, and OCRWM Home Page; manage the inventory of materials; and implement the program-wide integration of DOE communications policies and publications procedures.

4.3.1.1 Progress During Report Period

Communications Integration

- Delivered the Communications Integration Report covering activities during the fourth quarter of FY 1995.

Public Information

- Delivered camera-ready copy for the Fall issue of the "OCRWM Bulletin." Prepared and delivered three fact sheets: "Locations of Spent Nuclear Fuel and High-Level Radioactive Waste," "Worldwide Nuclear Power," and "What is Nuclear Waste?"
- Posted the Notice of Availability for the MPC Environmental Impact Statement (EIS) and the October Calendar of Events on the OCRWM Home Page. Information on the OCRWM Home Page was accessed 17,329 times by private citizens and people in commercial, government, and foreign domains during the month of September. There were 21,950 accesses during August.
- Provided the Digital Media Database capability to three members of the Rapid Response Team and the OCRWM Help Desk. The technical support staff is developing the capability for users to print color images locally in response to feedback from RW-34. Added 100 images contained in the January 1995 edition of the Standard Briefing and views of the August 1995 edition to the database.
- Delivered the Public Interface Activities Report covering activities during the last three quarters of FY95. The staff responded to 149 requests for different types of information and visuals during September. The requests came from 78 correspondence, 62 telephone, 4 walk-ins, 3 Home Page, and 2 exhibit activity sources.

- Prepared and delivered the INFOLINK Activity Report and Document Distribution Report covering activities during fourth quarter FY95. Dismantled INFOLINK and vacated the Oak Ridge Warehouse facility.

Education Programs

- Delivered the camera-ready copy for reprinting the second edition of the teacher's curriculum "Science, Society, and America's Nuclear Waste." Announced curriculum availability by preparing 8,200 letters to educators and placing an advertisement in the National Science Teacher's Association publication.
- Prepared and delivered the Education Programs Report covering activities during the fourth quarter of FY95.

Utility Outreach

- Prepared and delivered the Utilities Outreach Report covering activities during the fourth quarter of FY95. Plans are in place for loaning the interactive exhibit to Davis-Besse Nuclear Power Plant for 1 year.

International

- Delivered a letter describing the National Information Center's international activities during the fourth quarter of FY95.

4.3.1.2 Issues and Concerns

- None.

4.3.2 Information Management Services CWBS 9.3.6

MANAGER: C. L. Kerrigan

OBJECTIVE(S): Evaluate, develop, and implement plans, policies, procedures, and information systems to facilitate the management of OCRWM program information, data, and records. Operate, maintain, and provide enhancements to the Records Data Management System (RDMS) for the storage and retrieval of electronic images of OCRWM records. Manage and operate the OCRWM Records Management System. Operate OCRWM's Quality Records Center, Correspondence Control Unit, and Mail Room. Provide computer operations and support to the M&O Vienna and Capital Gallery facilities.

4.3.2.1 Progress During Report Period

- Added three new users to the Digital Media Database (DMD) pilot group at OCRWM HQ. Resolved a problem with printing color images with the latest version of the LeadTools (Express) Commercial Off-the-Shelf (COTS) product.
- Established a pilot for Automated Forms System (AFS) V2.1 at OCRWM HQ and YMSCO. Developed an implementation plan for providing access to AFS for users at the remote sites.
- Modified the Records Data Management System (RDMS) to ensure compatibility with the new Records Information System (RIS) II. Configured a CD Writer PC to provide records images to OCRWM participants not collocated with a Report Package Collection. Delivered the Batch Tracking System (BTS) to the Quality Records Center at OCRWM HQ.
- Completed the final Integrated Systems Development and Integration (ISDI) FY95 Work Authorization Directive (WAD) milestone deliverable by demonstrating the Unified Scanning System (USS) on our development testbed to the OCRWM HQ Records Officer, and KenRob representatives. The USS is planned for completion, field-test, and deployment to HQ in FY96.
- Delivered server-based live data update functionality to enable Integrated Tracking System (ITS) to be updated from its feeder databases automatically and continuously instead of manually once a day. Plan to go operational in early FY96 following testing.
- Completed incorporating comments and suggestions from the first pilot users of the Records Awareness Computer-Based Training (CBT). Deployed the CBT to a second pilot group to collect their comments on the Records Awareness CBT application.
- Participated in a DOE IM Strategic Alignment Initiative workshop on corporate information systems. Representatives from DOE HQ, Field Offices, and contractors participated. Identified several candidates for corporate systems and developed a high-level implementation plan for future candidate selection to be presented to DOE Community Information Office for further action.

- Installed a Videoconference Center Uninterruptible Power Supply (UPS) to eliminate power surges that have caused projection system and power supply failures during the past year.
- Began using RIS II for records indexing. Submitted a Baseline Change Proposal to delete the Records Reprocessing task from the RW-10 Milestone Schedule as directed by OCRWM.
- Submitted the FY95 Records Inventory Disposition System Update to meet a WAD deliverable requirement. Provided comments to the OCRWM HQ Records Officer on a new Records Scheduling and Disposition Guide issued by DOE.

4.3.2.2 Issues and Concerns

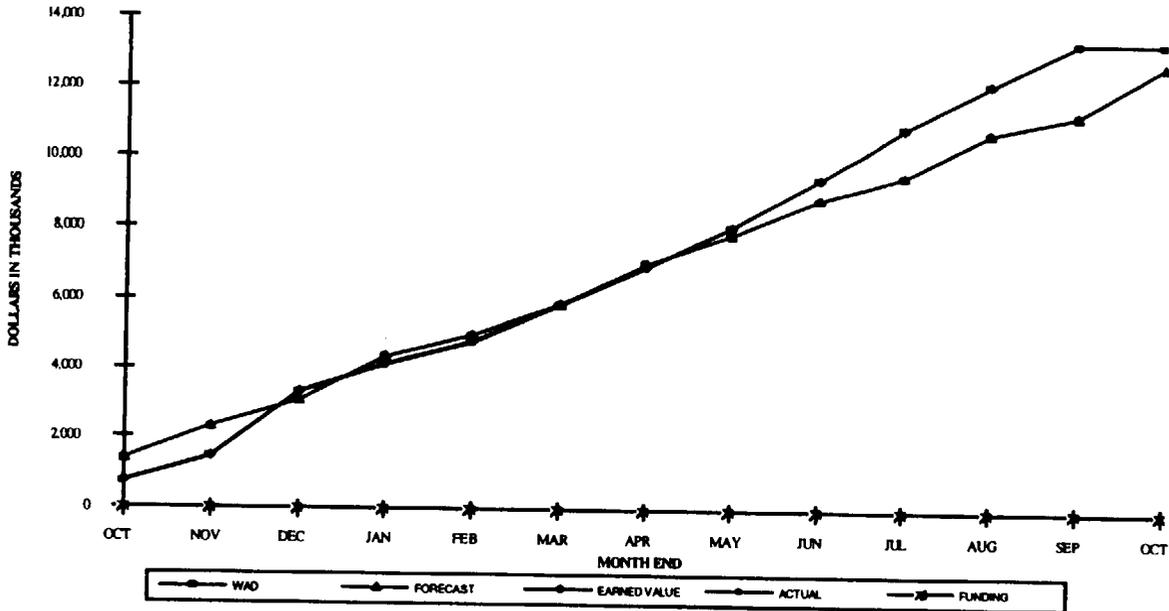
- None.

4.3.3 External Relations and Information Resource Management Variances

- Carryover commitments and FY95 deferred are not recognized in the cumulative cost position, driving a 15% cost underrun at year-end. Variance at complete is within tolerance.

Actuals Thru 8/30/1995

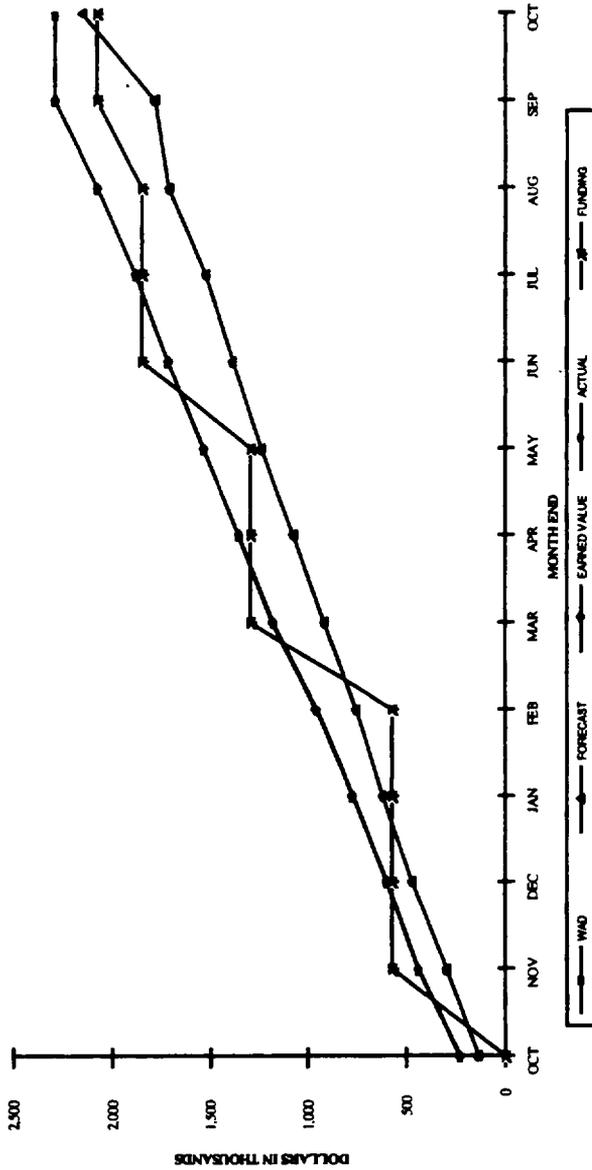
EXTERNAL RELATIONS/INFO RESOURCE MGMT



		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
MONTH	WAD	724	708	1,882	791	868	1,084	1,090	1,129	1,359	1,436	1,270	1,200	0
	FORECAST	1,366	835	785	1,285	642	887	1,159	814	994	865	1,241	521	1,446
	EARNED VALUE	730	712	1,895	797	674	1,083	1,086	1,107	1,359	1,438	1,270	1,200	
	MONTH ACTUAL	1,366	835	785	1,285	642	887	1,159	814	994	865	1,241	521	
	VAR/SCH	6	4	13	6	6	9	(24)	(22)	0	2	0	0	
	VAR/COST	(636)	(223)	1,130	(488)	32	196	(93)	283	365	773	29	679	
CUM	WAD	724	1,432	3,314	4,105	4,773	5,857	6,947	8,076	9,435	10,871	12,141	13,341	13,341
	FORECAST	1,366	2,301	3,086	4,351	4,993	5,890	7,049	7,863	8,857	9,522	10,763	11,284	12,730
	EARNED VALUE	730	1,442	3,337	4,134	4,808	5,901	6,967	8,074	9,433	10,871	12,141	13,341	
	ACTUAL	1,366	2,301	3,086	4,351	4,993	5,890	7,049	7,863	8,857	9,522	10,763	11,284	
	VAR/SCH	6	10	23	29	35	44	20	(2)	(2)	0	0	0	
	VAR/COST	(636)	(859)	271	(217)	(185)	11	(82)	211	576	1,349	1,378	2,057	
FUNDING	FY95 FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0
	PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL FUNDING	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 31. External Relations/Information Resource Management Financial Status

CWBS 9.3.4 EXTERNAL RELATIONS

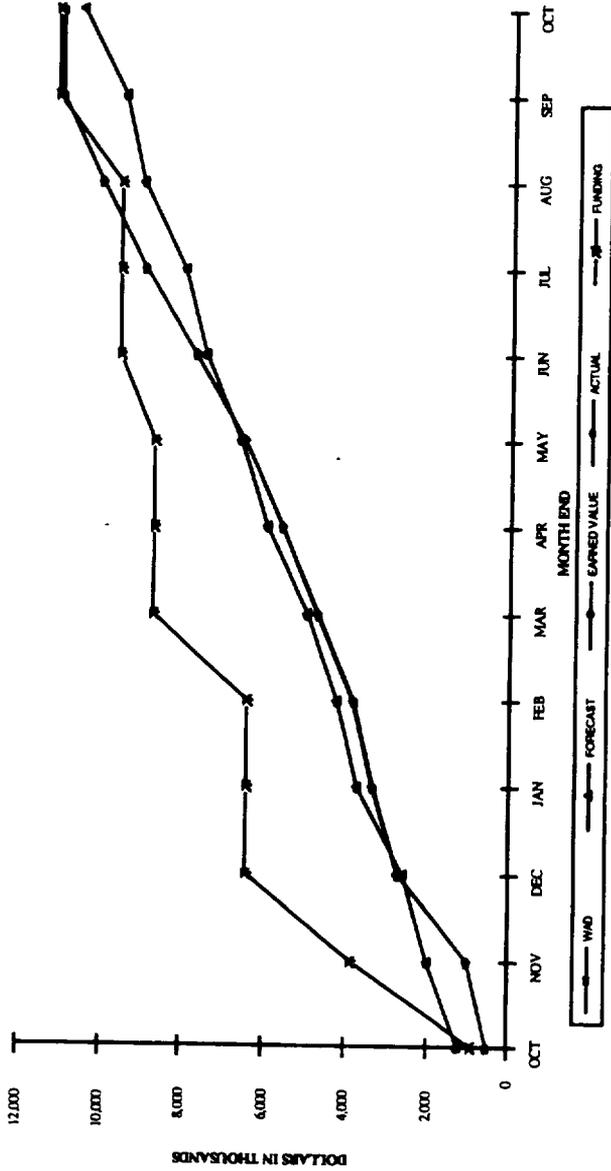


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	229	211	182	176	180	214	182	184	180	161	198	216	0
FORECAST	136	181	176	151	139	157	154	160	151	139	168	68	376
EARNED VALUE	231	211	182	176	182	216	176	179	180	183	198	216	
MONTH ACTUAL	136	181	176	151	139	157	154	160	151	139	168	68	
VAR/SCH	2	0	0	1	2	2	(4)	(5)	0	2	0	0	
VAR/COST	96	50	(14)	25	43	59	24	19	29	24	10	149	
WAD	229	440	602	777	957	1,171	1,353	1,537	1,717	1,978	2,076	2,282	2,282
FORECAST	136	287	473	624	783	920	1,074	1,234	1,385	1,524	1,712	1,780	2,156
EARNED VALUE	231	442	604	780	982	1,178	1,356	1,535	1,715	1,978	2,076	2,292	
ACTUAL	136	287	473	624	783	920	1,074	1,234	1,385	1,524	1,712	1,780	
VAR/SCH	2	2	2	3	5	7	3	(2)	(2)	0	0	0	
VAR/COST	96	145	131	156	199	256	282	301	320	354	364	512	
FY95 FUNDING	0	576	576	576	576	1,291	1,291	1,291	1,845	1,845	1,845	2,080	2,080
PREV. FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FUNDING	0	576	576	576	576	1,291	1,291	1,291	1,845	1,845	1,845	2,080	2,080

Figure 32. External Relations Financial Status

Actuals Thru 8/31/1986

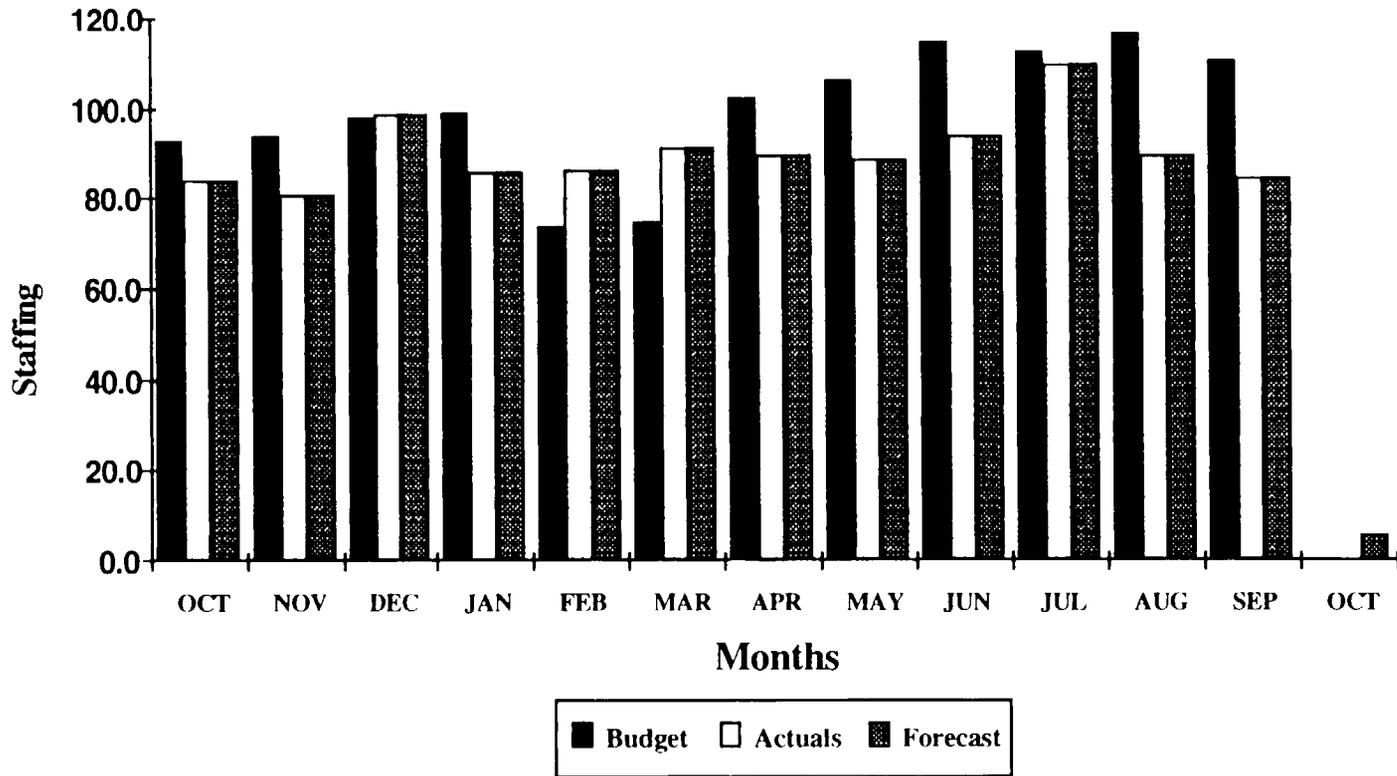
CWBS 9.3.6 INFORMATION MANAGEMENT



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	484	487	1,720	616	489	870	908	945	1,178	1,276	1,072	984	0
FORECAST	1,230	774	589	1,134	503	740	1,005	653	843	526	1,053	453	1,070
EARNED VALUE	488	501	1,733	621	482	876	888	828	1,178	1,276	1,072	984	
MONTH ACTUAL	1,230	774	589	1,134	503	740	1,005	653	843	526	1,053	453	
VAR/SCH	4	4	13	5	3	6	(20)	(17)	0	0	0	0	
VAR/COST	(732)	(273)	1,144	(513)	(11)	136	(117)	275	305	750	19	537	
WAD	484	891	2,711	3,327	3,816	4,086	5,594	6,539	7,717	8,993	10,065	11,049	11,049
FORECAST	1,230	2,004	2,593	3,727	4,230	4,970	5,975	6,828	7,471	7,897	9,050	9,503	10,573
EARNED VALUE	488	899	2,732	3,353	3,845	4,721	5,609	6,537	7,715	8,991	10,063	11,047	
ACTUAL	1,230	2,004	2,593	3,727	4,230	4,970	5,975	6,828	7,471	7,897	9,050	9,503	
VAR/SCH	4	6	21	26	29	35	15	(2)	(2)	(2)	(2)	(2)	
VAR/COST	(732)	(1,005)	139	(374)	(385)	(249)	(365)	(91)	244	964	1,013	1,544	
FY86 FUNDING	900	3,849	3,849	3,849	3,849	6,182	6,182	6,182	7,020	7,020	7,020	8,568	8,568
PREV. FUNDED	0	0	2,590	2,590	2,590	2,590	2,590	2,590	2,590	2,590	2,590	2,590	2,590
TOTAL FUNDING	900	3,849	6,429	6,429	6,429	8,732	8,732	8,732	9,600	9,600	9,600	11,148	11,148

Figure 33. Information Management Financial Status

EXTERNAL RELATIONS/INFO RESOURCE MGMT



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Forecast	84.2	80.9	98.9	86.1	86.4	91.6	89.9	88.9	94.3	109.8	89.9	84.8	5.8
Budget	93.2	94.3	98.3	99.3	73.7	74.9	102.5	106.4	114.9	112.6	116.7	110.7	0.0
Actuals	84.2	80.9	98.9	86.1	86.4	91.6	89.9	88.9	94.3	109.8	89.9	84.8	0.0

Figure 34. External Relations/Information Resource Management Staffing

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4.4 REPOSITORY IMPACTS

CWBS 1.0.10

MANAGER: S. S. Sareen

OBJECTIVE(S): In support of a Programmatic Environmental Impact Statement (PEIS) and a DOE Record of Decision (ROD), determine the potential impact of disposing spent fuel from plutonium-burning reactors and/or plutonium immobilized with high-level radioactive waste (HLW) on the existing HLW Geologic Program. Assess the regulatory and statutory impacts, develop design basis for a repository, and initiate efforts towards a repository design.

4.4.1 Progress During Report Period

PEIS

- Initiated the Borosilicate Glass Can-in-Canister and then terminated it to start the Evapo Transpiration (ET) evaluations. The change was directed by MD at the September monthly management meeting. The analysis will be restarted after completion of the ET alternative.
- Provided new Electrometallurgical Treatment data for the ET alternative at the end of September. The data are now being used to conduct the repository analysis. The PEIS input is expected to be complete by early November.
- The Can-in-Canister Ceramic evaluation will be conducted following the Can-in-Canister Glass.

Alternative Team Support

- Conducted two reviews of the Reactor Alternative Team reports and provided comments on-schedule.
- Conducted reviews of the Immobilization Alternative Team technical reports and provided comments to the team lead.

Deliverables

- Submitted the draft "Interim Report on Evaluation of Plutonium Waste Forms for Repository Disposal" on-schedule.

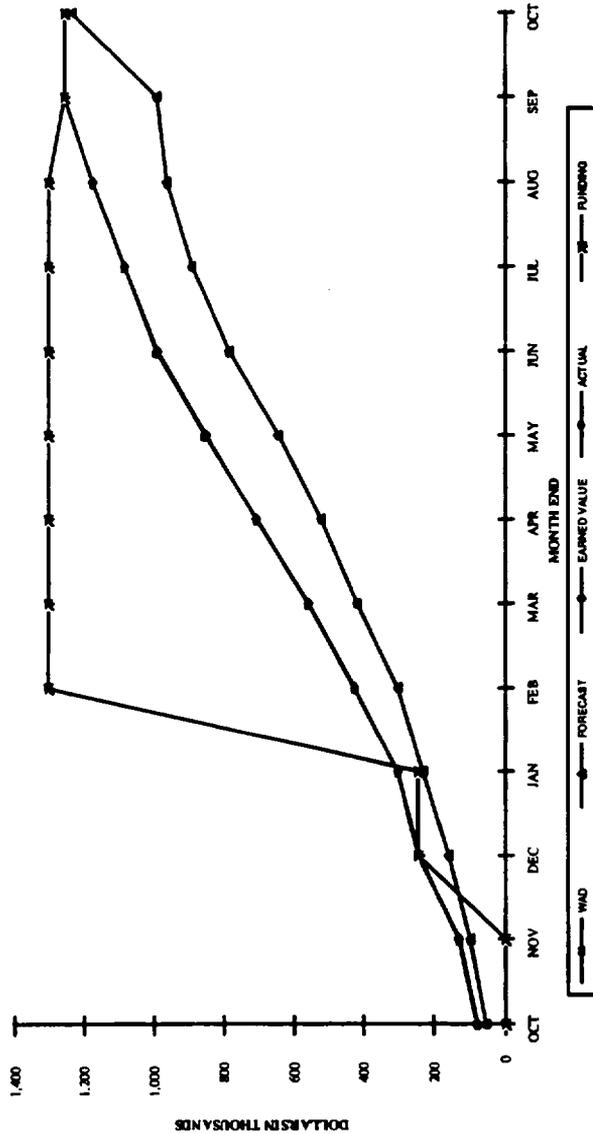
4.4.2 Issues and Concerns

- None.

4.4.3 Variances

- Carryover commitments and FY95 deferred efforts are not recognized in the cumulative cost position, driving a 21% cost underrun at year-end. Variance at complete is within tolerance.

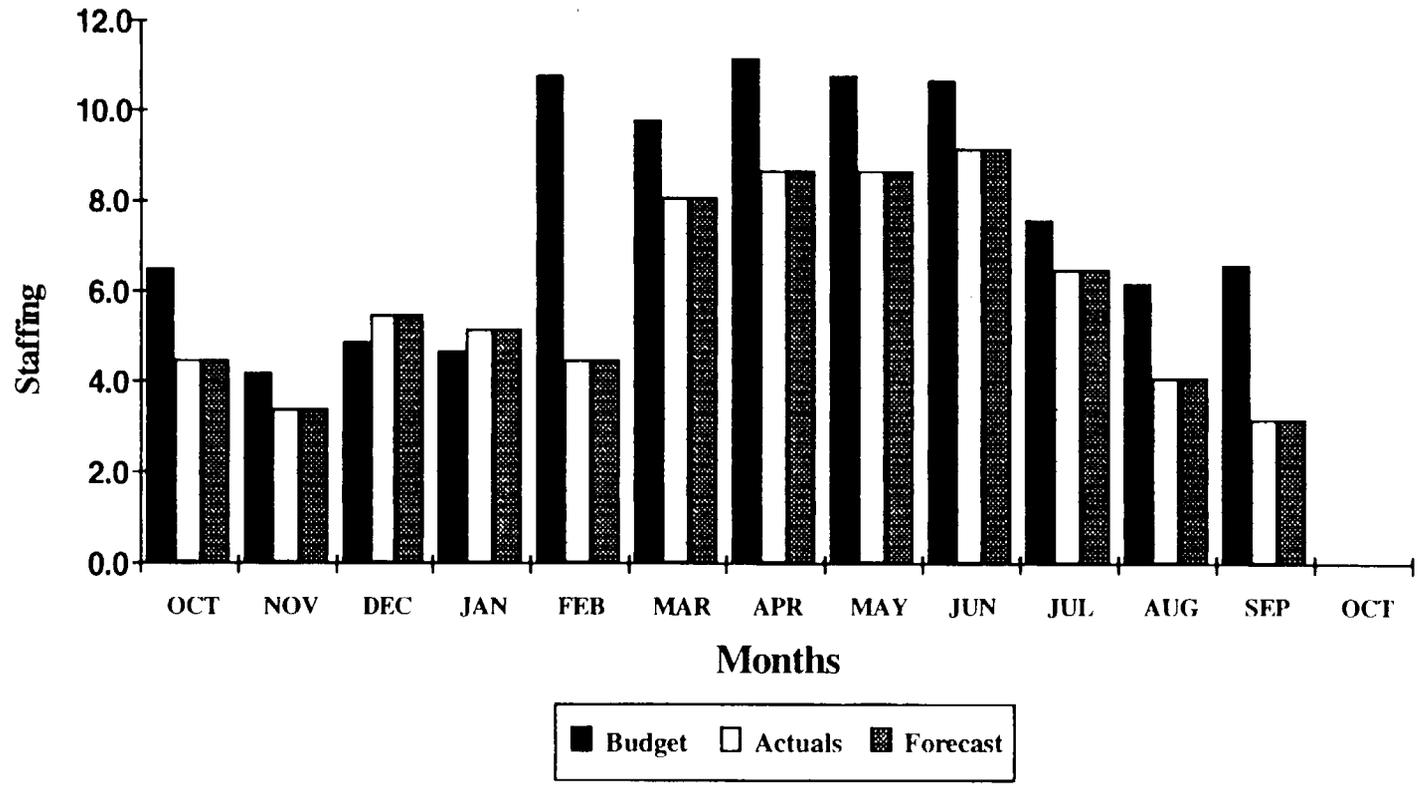
CWBS 1.0.10 REPOSITORY IMPACTS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
WAD	79	50	114	58	127	134	144	150	138	81	80	82	0
FORECAST	55	43	80	72	71	118	104	122	140	108	72	27	243
EARNED VALUE	80	50	112	58	128	134	148	144	138	84	80	82	
MONTH ACTUAL	55	43	80	72	71	118	104	122	140	108	72	27	
VARBSCH	1	0	(2)	0	(1)	0	4	(6)	0	3	0	0	
VARPCOST	25	7	52	(14)	55	16	44	22	(2)	(14)	18	55	
WAD	79	129	243	301	428	562	708	856	994	1,085	1,175	1,257	1,257
FORECAST	55	98	158	200	301	419	523	645	785	893	985	992	1,235
EARNED VALUE	80	130	242	300	428	560	708	852	990	1,084	1,174	1,256	
ACTUAL	55	98	158	200	301	419	523	645	785	893	985	992	
VARBSCH	1	1	(1)	(1)	(2)	(2)	2	(4)	(4)	(1)	(1)	(1)	
VARPCOST	25	32	84	70	125	141	185	207	205	191	208	264	
FY85 FUNDING	0	0	0	0	1,060	1,060	1,060	1,060	1,060	1,060	1,060	1,014	1,014
PREV. FUNDED	0	0	243	243	243	243	243	243	243	243	243	243	243
TOTAL FUNDING	0	0	243	243	1,303	1,303	1,303	1,303	1,303	1,303	1,303	1,257	1,257

Figure 37. Repository Impacts Financial Status

CWBS 1.0.10 REPOSITORY IMPACTS



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Forecast	4.5	3.4	5.5	5.2	4.5	8.1	8.7	8.7	9.2	6.5	4.1	3.2	0.0
Budget	6.5	4.2	4.9	4.7	10.8	9.8	11.2	10.8	10.7	7.6	6.2	6.6	0.0
Actuals	4.5	3.4	5.5	5.2	4.5	8.1	8.7	8.7	9.2	6.5	4.1	3.2	0.0

Figure 38. Repository Impacts Staffing

APPENDIX A

FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
1.2.1	REVIEW DRAFT REVISION TO THE CDA	28-Feb-95	14-Mar-95		
1.2.1	REVIEW DRAFT REVISION TO THE CDA	25-Aug-95	22-Aug-95		
1.2.1	QAP 6.2 REV DRAFT REV TO THE RDRD	28-Sep-95	- -		
1.2.1	QAP 6.2 REV DRAFT REV TO THE EBDRD	31-Mar-95	24-Apr-95		
1.2.1	QAP 6.2 REV DRAFT REV TO THE SD&TRD	30-Mar-95	28-Apr -95		
1.2.1	CONCEPT OF OPERATION REPORT	28-Feb-95	08-Mar-95		
1.2.1	NV REPOS PRELIM TRANSPOR STRATEGY I	26-Jan-95	17-Feb -95		
1.2.1	NV REPOS PREL TRANSP STRATEGY II	31-Aug-95	- -		
1.2.1	CALICO HILLS DATA NEEDS AND ACCESS STUDY	31-May-95	31-May-95		
1.2.1	FY95 THERMAL LOADING STUDY	28-Sep-95	- -		
1.2.1	MPC SYSTEMS STUDY	31-Jan-95	21-Jul-95		
1.2.1	VALUE ENGINEERING STUDY REPORT #3	28-Apr-95	10-May-95		
1.2.1	VALUE ENGINEERING STUDY REPORT #4	30-Jun-95	- -		
1.2.1	VALUE ENGINEERING STUDY AND REPORT #5	31-Jul-95	- -		
1.2.1	VALUE ENGINEERING STUDY & REPORT #6	28-Sep-95	- -		
1.2.2	WASTE PACKAGE CONCEPTUAL DESIGN RPT	29-Sep-95	- -		
1.2.2	RPT ON PREL SEL WASTE PACTK MATERIALS	14-Jun-95	13-Jun-95		
1.2.2	INPUT TO CDA DOC	12-May-95	11-May-95		
1.2.2	ISSUE ACD MPC CONTAINER RISK ANALYSIS REPORT	14-Apr-95	14-Apr-95		
1.2.2	ACD UCF RISK ANALYSIS REPORT	14-Apr-95	14-Apr-95		
1.2.2	INITIAL DRAFT OF REPOS BURNUP CREDIT	15-Sep-95	12-Sep-95		
1.2.2	TDPP FOR REPOSITOTY BURNUP CREDIT TOPICAL RPT	21-Dec-94	16-Dec-94		
1.2.2	ISSUE COST ESTIMATE STATUS REPORT	14-Mar-95	14-Mar-95		

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
1.2.3	DRAFT FINAL FISCAL YEAR 1995 TIP FOR WBS 1.2.3	30 Nov 94	30 Nov 94		
1.2.3	DRAFT FINAL FY 1996 TIP FOR WBS 1.2.3	28 Sep 95			
1.2.3	UPDATED STRATIGRAPHIC COMPLETION	29 Sep 95			
1.2.4	REP TECH IMP PLAN	13-Jan-95	09-Jan-95		
1.2.4	REPOSITORY TIP	13-Jan-95	09-Jan-95		
1.2.4	REP ENG PLAN	15-Dec-94	15-Dec-94		
1.2.4	ENGINEERING PLAN	15-Dec-94	15-Dec-94		
1.2.4	WASTE TREATMENT BLDG DESIGN FINAL REPORT	29-Sep-95	28-Apr-95		
1.2.4	WASTE HANDLING BLDG FINAL DESIGN REPORT	30-Aug-95	- -		
1.2.4	EMPLACEMENT EQUIP DEV REPORT	31-Jul-95	27-Jul-95		
1.2.4	HEATING/COOLING REPORT	07-Apr-95	05-Apr-95		
1.2.4	EMPLACEMENT MODE EVAL	29-Jun-95	26-Jun-95		
1.2.4	RECOMMENDED LAYOUT CONCEPTS REPORT	30-Jul-95	28-Jul-95		
1.2.5	QUARTERLY REGULATORY INTERACTION SUMMARY REPORT	13-Jan-95	13-Jan-95		
1.2.5	QUARTERLY REGULATORY INTERACTION SUMMARY REPORT	14-Apr-95	13-Apr-95		
1.2.5	QUARTERLY REGULATORY INTERACTION SUMMARY REPORT	14-Jul-95	12-Jul-95		
1.2.5	QUARTERLY REGULATORY INTERACTION SUMMARY REPORT	13-Oct-94	14-Oct-94		
1.2.5	COMMENT PKG NRC PROPOSED RULE ON DESIGN BASIS EVEN	31-Mar-95	23-May-95		
1.2.5	MGDS LA AO REV 5 TO YMSCO	28-Sep-95	- -		
1.2.5	SITE CHARACTERIZATION FEEDBACK REPORT LA/AO REV 4	28-Apr-95	28-Apr-95		
1.2.5	PR 11 TO DOE	23-Dec-94	23-Dec-94		

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
1.2.5	PR12 TO DOE	26-Jun-95	23-Jun-95		
1.2.5	ISSUE LA ANNOTATED OUTLINE REVISION 4 TO YMSCO	24-Mar-95	24-Mar-95		
1.2.5	RESPONSE TO SCA QUESTION # 80	31-Mar-95	20-Sep-94		
1.2.5	SEISMIC TOPICAL REPORT II TO DOE	31-Mar-95	28-Aug-95		
1.2.5	TECHNICAL DATA CATALOG	19-Oct-94	20-Oct-94		
1.2.5	TECHNICAL DATA CATALOG SUPPLEMENT	19-Jan-95	24-Jan-95		
1.2.5	TECHNICAL DATA CATALOG SUPPLEMENT	20-Apr-95	20-Apr-95		
1.2.5	TECHNICAL DATA CATALOG SUPPLEMENT	20-Jul-95	17-Jul-95		
1.2.5	DOCUMENT TSPA 1995 CONCLUSIONS & IMPLICATIONS	30-Aug-95	31-Aug-95		
1.2.5	ANLYS FAR-FIELD THERMOHYDROLOGIC RESPONSE	30-Aug-95	12-Apr-95		
1.2.6	RELEASE DESIGN PACKAGE 1D	27-Jan-95	03-Feb-95		
1.2.6	DESIGN PACKAGE 1E ACCEPTANCE	14-Jul-95	14-Jun-95		
1.2.6	ISSUE CONVEYOR FOUNDATION FOR BASELINING	21-Mar-95	21-Mar-95		
1.2.6	RELEASE DESIGN PACKAGE 2C	11-Oct-94	09-Jan-95		
1.2.6	START 8A 50% DESIGN REVIEW	03-Mar-95	- -		
1.2.6	ICDS DESIGN PACKAGE ISSUE	21-Dec-94	28-Feb-95		
1.2.13	EIS NOTICE OF INTENT (DRAFT)	15-Dec-94	04-Jan-95		
1.2.13	ANNUAL SITE ENVIRONMENTAL REPORT	02-May-95	05-May-95		
1.2.14	DEVELOP & DISTRIBUTE SPECIALTY ANNOUNCEMENT "B"	04-Apr-95	19-Jan-95		
1.2.14	DEVELOP & DISTRIBUTE SPECIALTY ANNOUNCEMENT "A"	05-Dec-94	18-Jan-95		
1.2.14	SUBMIT BULLETIN ARTICLE "A"	03-Jan-95	27-Jan-95		

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
1.2.14	SUBMIT BULLETIN ARTICLE "B"	27-Mar-95	14-Mar-95		
1.2.14	SUBMIT BULLETIN ARTICLE "C"	03-Jul-95	03-Jul-95		
1.2.14	SUBMIT BULLETIN ARTICLE "D"	25-Sep-95	- -		
1.2.14	COUNTY REP REPORTS (MONTHLY)	30-Sep-95	08-Sep-95		
1.2.14	YEAR-END VIDEO	23-Dec-94	11-Jan-95		
1.2.14	NEW WORK UPDATE VIDEO	30-Jun-95	30-May-95		
1.2.14	NEW WORK UPDATE VIDEOS (FOUR)	30-Sep-95	12-Sept-95	YMP-95-008	DELIVER 4 VIDEOS INSTEAD OF 7
3.1.1	M&O MPC ACCEPTANCE PLAN	31-Mar-95	31-Mar-95		
3.1.1	PRELIMINARY DRAFT OF REV. 2 WAST PROJECT SEMP	31-Aug-95	- -	MPC-95-017	DELETE FROM WAD
3.1.1	M&O WAST PROJECT LCCP PLAN	29-Sep-95	26-Sept-95		
3.1.1	WAST PROJECT TRACEABILITY DATABASE TOOL	29-Sep-95	18-Sept-95		
3.1.1	PRELIMINARY DRAFT OF WAST PROJECT LCC REPORT	29-Sep-95	25-Aug-95		
3.1.1	PRELIMINARY DRAFT REV OF WAST PROJECT CMP AND ATTACHMENTS	31-May-95	23-May-95		
3.1.7	MPC SYSTEM TECHNICAL/BUSINESS PROPOSALS DUE	24-Oct-94	10-Nov-94		
3.1.7	AWARD MPC (PHASE 1) SAR DESIGN SUBCONTRACTS	05-Apr-95	26-Apr-95		
3.1.9	ESAR #2 PRESENTATION PACKAGE	17-Feb-95	01-Mar-95		
3.1.9	FY 1997 IRB PACKAGE PROJECT	20-Jun-95	- -	MPC-95-015	
3.1.9	ANNUAL WORK PLAN	29-Sep-95	- -		
3.1.7	INTEGRATED MPC MASTER SCHEDULE (DRAFT)	20-Dec-94	19-Dec-94		
3.1.7	V&V REPORT ON ORIGEN 21	28-Feb-95	21-Feb-95		
3.1.7	MRS/NO-MRS EVALUATION REPORT	1-Jun-95	20-Jul-95	WST-95-003	NEW DUE DATE -06/01/95

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
3.1.7	PD REV.1 MPC DRD	29-Sep-95	29-Sept-95	MPC-95-012	NEW DATE - (9/95)
3.1.7	QUALIFICATION REPORT ON SCALE COMPUTER CODE	30-Jun-95	- -	MPC-95-020	DEFER TO FY96
3.1.7	SSA DECISION	06-Feb-95	24-May-95		
3.1.13	SUBMIT MPC RCP TO PBCCB	20-Mar-95	- -	MRS-95-002	DELETE FROM WAD
3.1.5	FINALIZED BURNUP CREDIT TOPICAL REPORT	31-May-95	26-May-95		
3.1.5	MPC CRITICALITY CONTROL DECISION REPORT	29-Sep-95	- -	MPC-95-022	DEFER TO FY96
3.1.1	DEFERRED - PRELIMINARY DRAFT OF WAST PROJECT T&EMP	29-Sep-95	15-Sept-95		
3.2.14	TRANSPORTATION COORDINATION GROUP (TCG) MTG MINUTES	20-Jun-95	29-Jun-95		
3.2.14	TRANSPORTATION EXTERNAL COORDINATION WORKING GROUP MINUTES	30-Jan-95	16-Feb-95		
3.2.14	TRANSPORTATION EXTERNAL COORDINATION WORKING GROUP (TEC/WG) MTG	20-Jul-95	31-Jul-95		
3.2.1	FINAL RTDA REPORT	29-Sep-95	25-Sept-95		WAD-95-40, Rev. 1
3.2.2	COMPLETE TRACTOR/TRAILER TESTING	20-Jun-95	26-Jun-95		
3.2.2	TRACTOR/TRAILER TEST REPORT	20-Jun-95	29-Jun-95		
3.2.2	COMMENTS ON GA ANSWERS TO 1ST ROUND NRC QUEST ON GA-4/9 SARs	31-Aug-95	28-Jul-95	TRN-95-011	NEW DATE (8/95)
3.2.2	DRAFT REPORT ON SFSX	29-Feb-95	- -	TRN-95-019	DEFER TO FY96
3.2.4	TOPICAL REPORT, REV 1, ON PWR STORAGE/TRANSPORT BURNUP CREDIT	29-Sep-95	26-May-95		
3.2.4	FINAL OPERABILITY REPORT FOR LWT TRACTOR TESTING (60 DAYS AFTER TEST REPORT)	29-Sep-95	- -	TRN-95-018	DELETE FROM WAD
3.2.13	OCRWM TRANSPORTATION RISK MGT PROGRAM STRATEGIC PLAN FINAL DRAFT	31-Mar-95	31-Mar-95		
3.2.13	OCRWM RISK MGT STRATEGY IMPLEMENTATION PLAN FINAL	29-Sep-95	- -		

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER ¹	RESULT OF APPROVED BCR
3.2.13	FINAL TSRA REPORT	29-Sep-95	29-Sept-95		WAD-95-40, Rev. 1
3.2.14	DRAFT MATERIALS FOR 180 (c) ANOPR	20-Dec-94	10-Jan-95		
3.2.14	DRAFT MATERIALS FOR 180 (c) NOPR	30-Jun-95	30-May-95		
3.2.14	ROUTING CRITERIA DEVELOPMENT	29-Sep-95	- -	WSS-95-001	DELETE FROM WAD
3.3.1	PRELIMINARY PROPOSED POSITIONS - 1ST SET ISSUES	31-Jan-95	- -	WST-95-013	DELETE FROM WAD
3.3.1	DRAFT NOPR (FORMERLY REGULATORY SUMMARY PLAN)	16-Jan-95	- -	WST-95-013	DELETE FROM WAD
3.3.1	DRAFT 1995 APR/ACR	29-Sep-95	- -		Defer to 11/30/95 by TDL
3.3.1	FINAL VERIFICATION PLAN	31-Jul-95	25-Jul-95 -	WST-95-003	NEW DATE 7/95
3.3.1	WASTE ACCEPTANCE OPERATIONAL PLAN (WA-OP)	31-Mar-95	31-Mar-95		
3.3.3	DATA ACQUISITION PLAN	31-Aug-95	- -	WST-95-017	DELETE FROM WAD
3.3.1	FINAL MANAGEMENT PLAN - WASTE ACCEPTANCE CRITERIA	30-Jun-95	30-Jun-95	WST-95-007	NEW DATE (6/30/95)
9.2.1	CIS PHASE 3 OPERATIONAL	16-Feb-96	- -	SIN-95-007	NEW DATE (2/16/96)
9.2.2	FINAL NEPA PROCEDURES MANUAL	28-Apr-95	21-Apr-95	SIN-95-001	NEW DATE (4/95)
9.2.2	TRAINING MATERIALS FOR OCRWM NEPA WORKSHOPS	29-Sep-95 ²	- -	SIN-95-008	CHANGE TO NON-SPECIFIC DATE 1 MONTH AFTER PROMULGATION OF ORDER 451
9.3.2	FINAL PROGRAM PLAN	20-Dec-94	20-Dec-94		
9.3.5	FINAL DRAFT COST AND SCHEDULE ESTIMATING GUIDELINE	03-Jan-96	- -	PMI-96-001	DEFER TO FY96
9.3.4	PUBLISH REVISED, SELECTED PROGRAM-WIDE PUBLIC INFO. MATERIAL	29-Sep-95	20-Sept-95		
9.3.4	DRAFT ANSWERS TO QUESTIONS	30-Jun-95	28-Jul-95		
9.3.3	NAGRA ANNUAL PROJECT PLAN	28-Feb-95	18-Apr-95	SPI-95-001	NEW DUE DATE - 02/95
9.3.4	DEPLOY FOR TESTING AN INTEGRATED DIGITIZED AUDIOVISUAL ELECTRONIC CAPABILITY	30-Jun-95	09-Jun-95		

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FY95 M&O MAJOR DELIVERABLE STATUS

WBS	MAJOR DELIVERABLE TITLE	DUE DATE	COMPLETE	BCR NUMBER'	RESULT OF APPROVED BCR
9.3.3	SKB ANNUAL PROJECT PLAN	31-May-95	15 -Aug -95	SPI-95-001	NEW DUE DATE - 05/95
9.3.3	AECL ANNUAL PROJECT PLAN	28-Feb-95	18-May-95	SPI-95-001	NEW DUE DATE - 02/95
9.3.6	DRAFT FY96 WORK PLANS COMPLETED	21-Aug-95	31-Jul-95		
9.3.6	FY96 SHORT RANGE PLAN DELIVERED	18-Aug-95	- -	HRA-95-001	DELETE FROM WAD
9.3.6	GENERAL USER APPLICATION DEVELOPED	29-Sep-95	28-Sept-95		
9.3.5	DELIVERY DRAFT PCSD TO RW-35	30-Jun-95	- -		
9.3.5	DELIVER DRAFT PMSM TO RW-35	27-Feb-95	24-Feb-95		
9.3.5	DELIVER DRAFT OPSN TO RW-35	15-Feb-95	16-Feb-95		
9.3.5	DESCRIPTION OF PROGRAM ASSUMPTIONS TO RW-35	08-Nov-94	08-Nov-94		
9.3.5	INTERIM LIFE-CYCLE COST ESTIMATES TO RW-35	27-Jan-95	27-Mar-95		
9.3.5	FINAL PRELIMINARY DRAFT TSLCC REPORT TO RW-35	28-apr-95	11-Apr-95		
9.3.5	FINAL TSLCC REPORT TO RW-35	15-Sep-95	01-Sept-95		
9.3.5	DRAFT FEE ADEQUACY REPORT	28-Jun-95	26-Sept-95		
9.3.5	RECEIVE PCSB APPROVED WAST PROJECT COST & SCHEDULE BASELINE CHANGES	09-Feb-95	18-Aug -95		
9.3.5	RECEIVE PBCCB-APPROVED YMP COST AND SCHEDULE BASELINE CHANGES	15-Sep-95	- -		
9.3.5	REVISED WBS RECOMMENDATION TO RW-35	10-Mar-95	07-Apr-95		

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APPENDIX B

Figure B-1. Monthly Progress/Update Summary

M&O Monthly Progress/Update Summary (\$K) as of September 30, 1995

B&R	B&R Title	0	1	2	3	2-3	4	1-3	0-3
		Total Budget FY95/Defer/ Commit	Cum to Date Budget/FY95/ Defer/Commit	Cum to Date Forecast/FY 95 Defer/Commit	Cum to Date Actuals	Variance (Fore-Act)	Total Funding- FY 95 & Previ- ously Funded	Variance (Cum Budget - Act)	Variance (Total Budget - Act)
DB0102010	YMP Systems Engineering	8,724	8,724	7,602	7,602	0	0	1,122	1,122
DB0102020	YMP Waste Package	9,716	9,716	9,283	9,283	0	0	433	433
DB0102030	YMP Site Investigations	44,935	44,935	46,992	46,992	0	0	-2,057	-2,057
DB0102040	YMP Repository	8,931	8,931	7,945	7,945	0	0	986	986
DB0102050	YMP Regulatory	22,897	22,897	20,918	20,918	0	0	1,979	1,979
DB0102060	YMP Exploratory Studies Fac.	77,204	77,204	80,614	80,614	0	0	-3,410	-3,410
DB0102070	YMP Test Facilities	9,129	9,129	16,018	16,018	0	0	-6,889	-6,889
DB0102090	YMP Project Management	11,460	11,460	11,829	11,829	0	0	-369	-369
DB0102130	YMP Environ., Safety & Health	16,882	16,882	15,987	15,987	0	0	896	896
DB0102140	YMP Institutional	4,788	4,788	4,195	4,195	0	0	593	593
DB0102150	YMP Support Services	8,939	8,939	8,722	8,722	0	0	217	217
DB0102160	YMP Quality Assurance	5,828	5,828	5,878	5,878	0	0	-50	-50
DB0102170	YMP Information Management	7,749	7,749	7,521	7,521	0	0	228	228
	Total YMP	237,182	237,182	243,504	243,504	0	249,717	-6,323	-6,323
	% of YMP			102.67%	102.67%	0.00%		-2.67%	
DB0301010	MRS Systems Engineering	934	934	690	690	0	0	244	244
DB0301030	MRS Site Investigations	34	34	21	21	0	0	13	13
DB0301040	MRS MRS Facility	0	0	0	0	0	0	0	0
DB0301060	MRS Regulatory	1,942	1,777	1,658	1,658	0	0	119	284
DB0301070	MRS Engineering Development	24,098	7,419	6,811	6,811	0	0	608	17,287
DB0301090	MRS Project Management	1,801	1,801	1,365	1,365	0	0	436	436
DB0301110	MRS Quality Assurance	190	190	149	149	0	0	41	41
DB0301120	MRS Information Management	0	0	0	0	0	0	0	0
DB0301130	MRS Environ., Safety & Health	1,460	1,460	1,102	1,102	0	0	358	358
DB0301140	MRS Institutional	814	814	332	332	0	0	482	482
DB0301150	MRS Support Services	0	0	0	0	0	0	0	0
	Total MRS	31,273	14,429	12,128	12,128	0	2,901	19,145	
	% of MRS			84.05%	84.05%	0.00%		15.95%	
DB0302010	Trans. Systems Engineering	628	579	466	466	0	0	113	162
DB0302020	Trans. Casks	3,649	3,524	3,023	3,023	0	0	501	626
DB0302040	Trans. Support Systems	2,291	2,291	1,233	1,233	0	0	1,058	1,058
DB0302060	Trans. Regulatory	166	85	31	31	0	0	64	136
DB0302090	Trans. Project Management	726	726	725	725	0	0	1	1
DB0302110	Trans. Quality Assurance	235	235	164	164	0	0	71	71
DB0302120	Trans. Info Management	48	48	5	5	0	0	43	43
DB0302130	Trans. Environ., Safety & Health	1,200	1,053	429	429	0	0	624	771
DB0302140	Trans. Institutional	1,042	1,042	975	975	0	0	67	67
DB0302150	Trans. Support Services	0	0	0	0	0	0	0	0
	Total Transportation Systems	9,985	8,589	7,051	7,051	0	2,532	2,934	
	% of TRANS. SYS.			73.58%	73.58%	0.00%		28.42%	

NOTE: FIS actuals may not agree with contractual actuals since the FIS cumulative-to-date actuals include depreciation costs. Contractual cumulative-to-date costs reflect total outlays of cash for capital and expenses only. As a result, these two methods of financial reporting may not necessarily agree. Also, the YMP total budget line is being revised to reflect the latest CSCR's, REECO capital, and EG&G adjustment.

M&O Monthly Progress/Update Summary (\$K) as of September 30, 1995

B&R	B&R Title	0	1	2	3	2-3	4	1-3	0-3
		Total Budget FY95/Defer/ Commit	Cum to Date Budget/FY95/ Defer/Commit	Cum to Date Forecast/FY 95 Defer/Commit	Cum to Date Actuals	Variance (Fore-Act)	Total Funding- FY 95 & Previ- ously Funded	Variance (Cum Budget - Act)	Variance (Total Budget - Act)
DB0303010	Waste Accept Process/Oprtns	2,927	2,825	2,571	2,571	0	0	254	356
DB0303020	Waste Acceptance Econ. Stud.	128	128	76	76	0	0	52	52
DB0303030	Waste Acceptance Data Collect.	985	814	919	919	0	0	-105	66
	Total Waste Acceptance	4,040	3,767	3,566	3,566	0	0	201	474
	% of WA			94.66%	94.66%	0.00%		5.34%	
	TOTAL 3.0 WAST PROJECT	45,298	27,779	22,745	22,745	0	45,622	5,034	22,553
DB0910030	Program Quality Assurance	3,763	3,763	3,254	3,254	0	3,574	509	509
	% of PGA			86.47%	86.47%	0.00%		13.53%	
DB0920011	Systems Engineering	6,493	6,493	5,428	5,428	0	0	1,065	1,065
DB0920012	Systems Planning & Integration	0	0	0	0	0	0	0	0
DB0920013	Configuration Management	1,208	1,208	1,141	1,141	0	0	67	67
	Total Systems Integration	7,701	7,701	6,569	6,569	0	7,138	1,132	1,132
DB0920021	Regulatory Policy & Requirements	692	692	730	730	0	0	-38	-38
DB0920022	Regulatory Integration	1,649	1,649	1,412	1,412	0	0	237	237
	Total Regulatory & Licensing	2,341	2,341	2,142	2,142	0	2,468	199	199
	% of R & L			91.50%	91.50%	0.00%		8.50%	
DB0932000	Strategic Planning	1,369	1,369	1,174	1,174	0	1,299	196	196
DB0933000	Int'l Waste Management Tech.	4,311	4,311	4,539	4,539	0	4,478	-228	-228
	Total Strategic Planning & Int'l Waste	5,680	5,680	5,713	5,713	0	5,777	-33	-33
	% of SP & IW			100.58%	100.58%	0.00%		-0.58%	
GA0101011	Repository Impacts	1,257	1,257	993	993	0	1,257	264	264
	% of RI			79.00%	79.00%	0.00%		21.00%	
DB0934000	External Relations	2,292	2,292	1,780	1,780	0	2,060	512	512
	% of ER			77.66%	77.66%	0.00%		22.34%	
DB0935000	Program Control & Admin.	1,973	1,973	1,514	1,514	0	2,739	459	459
	% of PC&A			76.74%	76.74%	0.00%		23.26%	
DB0936010	Information Mgmt Services	11,048	11,048	9,505	9,505	0	11,148	1,543	1,543
	% of IMS			86.03%	86.03%	0.00%		13.97%	
DB0937000	Contract Business Mgmt	15,924	7,425	6,333	6,333	0	19,591	1,062	6,591
	% of CBM			55.29%	0.85	0.00%		14.71%	
	M&O Totals	334,459	306,441	304,062	304,062	0	351,128	4,369	30,407
	M&O Total % of WAD			98.58%	98.58%	0.00%		1.42%	
	M&O Total % of NB&R			90.91%	90.91%	0.00%		1.31%	

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Figure B-1. Monthly Progress/Update Summary (Continued)