



Department of Energy
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544

March 21, 2005

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D. C. 20004-2901

Dear Mr. Chairman:

Please reference your January 27, 2004 letter to NNSA on the Conduct of Engineering and Implementation of DOE O 420.1A at the Los Alamos National Laboratory.

Enclosed please find two Los Alamos National Laboratory (LANL) responses concerning the Conduct of Engineering and Implementation of DOE O 420.1A, *Facility Safety*. The first enclosure provides a report on actions in progress to achieve institutional implementation of the conduct of engineering program and DOE O 420.1A at LANL. The second enclosure contains the implementation schedule for completing these actions.

At this time the Los Alamos Site Office (LASO) considers this action closed. LASO will continue to provide the local DNFSB staff with updates as LANL continues to make progress towards full implementation of DOE O 420.1A.

If you have any questions, please feel have your staff contact Gerald Schlapper, Senior Safety Advisor for LASO at (505) 665-7111.

Sincerely,

A handwritten signature in black ink, appearing to read "Edwin L. Wilmot".

Edwin L. Wilmot
Manager

OFO:1FB-011

Attachments (1)

Addressee

2

cc:

E. Beckner, NA-10, HQ/FORS
M. Whitaker, DR-1, HQ-FORS
X. Ascanio, NA-124, HQ/GTN
S. Pierpoint, NA-125.2, HQ/GTN
M. Schoenbauer, NA-12, HQ/FORS
C. Keilers, DNFSB, LASO
T. Burns, DNFSB, LASO
A. Jordan, DNFSB
G. Schlapper, OOM, LASO
F. Bell, OFO, LASO
W. Chavez, OPL, LASO
G. Nanos, DIR, LANL
P. Volza, LANL



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February 24, 2005

Mr. Edwin Wilmot, Manager
US Department of Energy/NNSA
Los Alamos Site Office, A316
Los Alamos, NM 87545

Subject: Interim Report on DNFSB Letter dated 1/27/04 on Conduct of Engineering and Implementation of DOE O 420.1A

References:

- 1. January 27, 2004 Letter from DNFSB to NNSA on Conduct of Engineering and Implementation of DOE O 420.1A at Los Alamos National Laboratory**
- 2. April 5, 2004 Letter from LANL to LASO (Reference: AD-OPS:04-029). Request for Extension for the LANL Response to the January 27, 2004 Letter from DNFSB to NNSA on Conduct of Engineering and Implementation of DOE Order 420.1A, *Facility Safety* at Los Alamos National Laboratory**
- 3. July 1, 2004 Letter from LANL to LASO (Reference: AD-OPS:04-063. Response to the January 27, 2004 Letter from DNFSB to NNSA on Conduct of Engineering and Implementation of DOE Order 420.1A, *Facility Safety* at Los Alamos National Laboratory)**
- 4. August 25, 2004 Letter from LANL to LASO (Reference: AD-OPS:04-086). Requesting Extension for Submittal of Conduct of Engineering and DOE O 420.1A Implementation Plan**
- 5. September 10, 2004, Letter from DNFSB to NNSA relating to second 90-day extension for response to January 27, 2004 letter**
- 6. December 13, 2004 Letter from LANL to LASO (Reference: ENG-DO:04-005). Status of DOE O 420.1A Implementation and the Cognizant Engineer Program**

Dear Mr. Wilmot:

During a recent Video Teleconference (VTC) with LANL, NNSA-HQ (NA-10), NNSA-LASO, LANL committed to providing the Defense Nuclear Facilities Safety Board (DNFSB) with a status of our actions and plans to address the DNFSB Letter of January 27, 2004 (Reference 1).

The purpose of this letter is to provide Laboratory input into the NNSA response to DNFSB concerning the Conduct of Engineering and Implementation of DOE O 420.1A, *Facility Safety* in response to DNFSB Letter, dated January 27, 2004 (Reference 1). This memo provides a brief historic summary and an interim report on

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actions in progress to achieve institutional implementation of conduct of engineering program and DOE O 420.1A.

Background

LANL adopted DOE O 420.1A, *Facility Safety* into Appendix G of the UC Contract in August 2003 and started incorporation of the Order design criteria into the LANL Engineering Standards Manual (ESM). This effort resulted in major revisions of several existing chapters of the manual and incorporation of the following new chapters:

- Chapter 8, Instrumentation and Controls;
- Chapter 10, Hazardous Process;
- Chapter 11, Radiation Protection; and
- Chapter 12, Nuclear.

The requirements to perform design adequacy and back-fit analysis for existing structures, systems, and components that are assigned safety function(s) are included in Chapter 1, General Requirements. Chapter 12, Nuclear, provides overall methodology of integrating nuclear safety and design, and guidance for developing nuclear project design criteria. ESM clearly delineates requirements for programmatic work and facility work.

On April 5, 2004, LANL requested an extension from April 30, 2004 to June 30, 2004 for submitting an implementation plan for the institutional Conduct of Engineering (COE) and DOE O 420.1A (Reference 2). This extension request was endorsed by LASO on April 23, 2004 and subsequently granted by NNSA-HQ.

On July 1, 2004, LANL submitted Institutional Conduct of Engineering Implementation Plan that included DOE O 420.1A implementation (Reference 3). LASO rejected this submittal due to a lack of resource-loading of the schedule.

On July 16, 2004, the Director ordered a complete stand down of Laboratory operations with a phased resumption when specific sub-elements were ready to resume operations. Activities to address DNFSB concerns were put on hold pending resumption of activities across the Laboratory.

On August 25, 2004, LANL requested another 90-day extension to October 27, 2004 for submittal of the conduct of engineering and DOE O 420.1A Implementation Plan (Reference 4). DNFSB agreed with this request for a second extension in a letter to NNSA, dated September 10, 2004 (Reference 5).

Status

Based on Management Self Assessments and Laboratory Readiness Reviews conducted during LANL suspension of operations, the Implementation Plan for DOE O 420.1A and institutional Conduct of Engineering is incorporated into the Laboratory's Operational Efficiency program. The Conduct of Engineering, which is WBS 1.5.4 of the OE Program, consists of the following two major elements:

- WBS 1.5.4.01 – Develop and Implement Cognizant System Engineer (CSE) Program, and
- WBS 1.5.4.02 – Develop and Implement Institutional Engineering Program and Practices.

A complete COE Program resource-loaded schedule with identification of key milestones and priorities will be issued as part of the upcoming Operational Efficiency program plan after approval by LASO.

WBS 1.5.4.01, Cognizant Systems Engineer Program. This element primarily focuses on implementation of Section 4.5, System Engineer Program of DOE O 420.1A which was the major revision to DOE O 420.1.

LANL provided status of DOE O 420.1A implementation and the Cognizant System Engineer Program to LASO in a letter dated December 13, 2004 (Reference 6).

WBS 1.5.4.01.01 – Perform Gap Analysis of Current Compliance with DOE O 420.1A and prepare a Corrective Action Plan

Prior to adoption of DOE O 420.1A, LANL was implementing DOE O 420.1 through LANL Engineering Standards and other Laboratory Implementation Requirements (LIRs). The primary change in DOE O 420.1A from DOE O 420.1 is to include requirements for the System Engineer Program for nuclear facilities. LANL is in the process of completing the gap analysis of institutional implementation of DOE O 420.1A and developing a Corrective Action Plan.

WBS 1.5.4.01.02 – Identify Vital Safety Systems (VSSs) and Assign Cognizant System Engineers (CSEs) and Resources

• **Vital Safety Systems and CSEs List**

The VSS list is validated. The associated Authorization Basis Manager, the Responsible Division Leader, and the Engineering Division Chief Engineer have approved the list. The CSEs are assigned to the VSS by the responsible divisions and names of the CSEs appear on the VSS list. Based on education and experience, interim qualification will be performed on the assigned CSEs in order for them to continue to discharge their CSE duties. This approved list is placed under change control and is posted on the LANL web. The Engineering Division is responsible for maintaining this list.

• **CSE Program Administration**

The CSE Program Administrator position in the Engineering Division has been established. The CSE Program Administrator is responsible for developing and maintaining an institutional CSE Program Management Plan, VSS list and CSE list, annual plan of VSS assessments, corrective action plans, CSE training plans and training records, forecasting budgets and resource needs of the CSE program, and the CSE program self-assessments.

WBS 1.5.01.03 Develop and Implement CSE Training and Qualification Program

• **Issue institutional CSE Qualification Standard and Card**

Currently, the CSE training program, qualifications standards and cards are based on the former Facility and Waste Operation Division (FWO) procedures that have facility focus and are not readily applicable to programmatic work. Existing FWO procedures (i.e. FWO-DO-202 and 203) will be combined and updated to an institutional procedure for CSE Qualification Standards and Cards.

• **Develop and Implement CSE Training**

The CSE training is categorized as core, position specific, facility/program specific, and system specific. Fifteen courses for core training have been developed and an additional four courses are to be developed. Fourteen training courses have been developed for position specific training and qualification. CSE training is process-focused rather than procedure-focused. LANL is planning to issue interim qualifications to CSES on their assigned systems. The interim qualification will involve a qualified trainer working with a CSE and assuring that the CSE fully understands safety and critical aspects of the assigned system.

WBS 1.5.4.01.05 Determine VSS Technical Baseline

A gap analysis will be performed between the technical baseline documentation available and minimum documentation needed for each VSS in order to comply with the DOE O 420.1A system engineer program. Based on this information, a Master Document List (MDL) and VSS Technical Baseline Reconstitution Plan will be developed. The technical baseline reconstitution plan will prioritize the baseline development of each VSS based on risk and will be resource loaded. The determination of the technical baseline is in progress.

WBS 1.5.4.01.06 Implement VSS Technical Baseline Reconstitution Plan

Implementing of the VSS Technical Baseline Reconstitution Plan institutionally is a multi-year program. The resource needs and schedule will be addressed in the OE program approved by LASO.

WBS 1.5.4.02, Conduct of Engineering. This element primarily focuses on the institutional engineering program and practices. Following are the major FY05 activities of the program:

WBS 1.5.4.01.01 Perform Gap Analysis of Current Compliance with DOE O 420.1A and Prepare a Corrective Action Plan

The Gap analysis of current institutional compliance with DOE O 420.1A is being performed, and a report with a corrective action plan will be issued to LASO.

WBS 1.5.4.01.01 Establish Conduct of Engineering Supporting Organizations

The Associate Director for Technical Services (ADTS) created Engineering Division in November 2004 with the responsibility for developing an institutional conduct of engineering program. An Engineering Practices Council is being formed to guide the development and implementation of DOE O 420.1A and conduct of engineering at LANL.

WBS 1.5.4.02.01 Institutional Conduct of Engineering Implementation Procedure

This Implementation Procedure (IMP) which is under development will define the scope and its applicability, and requirements and processes for practice of engineering at LANL to ensure that engineering products or services satisfy the requirements, needs, and customer expectations in a safe, secure, environmentally responsible manner.

Discussion on DNFSB Concerns

LANL recognizes that the application of good engineering practices to programmatic work to date has been inconsistent and slow compared to facility work. Absence of a single LANL organization with responsibility and authority for implementing a uniform COE Program and DOE O 420.1A has contributed to this deficiency. After LANL's management reorganization on November 2004, the Associate Director for Technical Services assigned the responsibility of developing a single institutional COE Program that meets the requirements of 10 CFR 830.120 Subpart A and DOE O 420.1A to the Engineering Division. LANL is also establishing an Engineering Practices Council (EPC) with technical representatives from divisions that primarily perform engineering. The primary role of the EPC is to facilitate implementation of an institutional COE Program for programmatic and facility work. This COE Program applies to engineering work that falls under the jurisdiction of industry codes and standards, codes of federal regulations, and DOE Orders for worker safety and protection of the public and the environment. Existing programs at LANL already address engineering associated with nuclear weapon components design and hence are excluded from this COE Program.

The Engineering Practices Council is the institutional engineering authority and primary driver for implementation of the COE Program across the institution for all programmatic work. The institutional champion of this council is the Deputy Associate Director for Weapons Engineering and Manufacturing.

The DNFSB is concerned that Laboratory documents do not clearly describe requirements for the need for conceptual designs and independent external design reviews for programmatic work. The requirements for conceptual design for Line Item and General Plant Projects are delineated in LIR 220-01-01, *Construction*

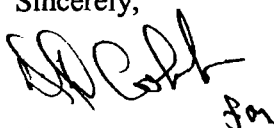
Project Management. However, the conceptual design requirements are not well defined in the current Laboratory documents for programmatic work and other facility work that is not classified as Line Item or General Plant Projects. The institutional Conduct of Engineering Implementation Procedure and the procedure for Developing and Revising a Design Change Package (AP-ENG-002) will clearly delineate appropriate requirements for conceptual design for programmatic and facility work. The requirement and criteria for independent external design reviews for programmatic and facility work will be included in the institutional Conduct of Engineering Implementation Procedure.

The DNFSB is concerned that the current LIR documents do not clearly delineate the application of the LANL Engineering Standards Manual and good engineering practices for experimental programmatic work. LANL is aware of this deficiency and plans to rectify it with an update to IMP 300-00-00, *Integrated Work Management for Work Activities*. LANL will develop and implement a screening process for engineering work that will be used for all programmatic (including experiments) and facility work. This screening process will guide LANL engineers and scientists in determining applicability of the institutional COE Program and the ESM for design of equipment for research, development, demonstration, testing, and manufacturing.

The DNFSB is concerned that appropriate design adequacy reviews of existing structures, systems, and components whose functions have been upgraded to perform safety function(s) may not be conducted properly by LANL. As noted in the Background section of this letter, requirements to perform design adequacy and back-fit analysis for existing structures, systems, and components that are assigned safety function(s) are included in Chapter 1, General Requirements. In addition, an administrative procedure AP-ENG-016, Design Adequacy Analysis, is being prepared for evaluation of existing structures, systems, and components whose function(s) are upgraded to include safety function(s).

Please do not hesitate to call Mitch Harris, Acting Engineering Division Leader, at 606-0600 if you have any questions or comments.

Sincerely,



G. Peter Nanos
Director

CY: G. Schlapper, LASO, NNSA, MS A316
F. Bell, LASO, NNSA, MS A316
C. Mangeng, ADTS, MS A104
J. Angelo, PS-DO, MS C347
M. Harris, ENG-DO, MS D406
G. Grewal, ENG-CE, MS M791
C. Keilers, NMT-DO, MS E509
T. Burns, PS-2, MS E504
P. Volza, PS-2, MS C347
IM-9, A150
DIR-05-086



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March 22, 2005

Mr. Edwin Wilmot, Manager
U.S. Department of Energy
Los Alamos Site Office
Los Alamos, NM 87544

Subject: Conduct of Engineering and DOE O 420.1A Implementation Plan

References:

1. **January 27, 2004 Letter from DNFSB to NNSA on Conduct of Engineering and Implementation of DOE O 420.1A at Los Alamos National Laboratory**
2. **February 24, 2005 Letter from LANL to LASO (Reference: DIR-05-086), "Interim Report on DNFSB Letter dated 1/27/04 on Conduct of Engineering and Implementation of DOE O 420.1A"**

Dear Mr. Wilmot:

The purpose of this letter is to provide the institutional Conduct of Engineering implementation plan to NNSA for response to DNSFB concerning the Conduct of Engineering and Implementation of DOE O 420.1A, *Facility Safety* in response to DNFSB Letter, dated January 27, 2004 (Reference 1).

Background

In a letter to LASO (Reference 2), LANL provided an interim report on the status of institutional implementation of the Conduct of Engineering and DOE O 420.1A. The letter stated that based on Management Self Assessments and LRRs conducted during LANL suspension of operations, the Implementation Plan for DOE O 420.1A and the institutional conduct of engineering is incorporated into the Operational Efficiency Program of the COMPASS Project. The Conduct of Engineering, which is WBS 1.5.4 of the OE Program, consists of the following two major elements:

- WBS 1.5.4.01 – Develop and Implement Cognizant System Engineer (CSE) Program, and
- WBS 1.5.4.02 – Develop and Implement Institutional Engineering Program and Practices.

A complete COE Program resource loaded schedule with identification of key milestones and priorities will be issued as part of the upcoming Operational Efficiency program plan after approval by LASO.

Status

The Conduct of Engineering WBS 1.5.4 implementation plan was baselined on March 4, 2005 and the attached resource loaded schedule reflects that baseline. The attached schedule also indicates the up-to-date status of activities.

Funding needs and funding sources for FY05 and FY06 are indicated on the schedule. Funding requirements and completion schedule for WBS 01.5.4.01.04, *Facilities Develop/ Implement Vital Safety System (VSS) Specific Training* and WBS 01.5.4.01.06, *Implement VSS Technical Baseline Reconstitution Plan* will be

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determined upon completion of the WBS 01.5.4.01.05, *Determine VSS Technical Baseline*. WBS 01.5.4.01.05 is scheduled for completion on September 16, 2005 with completion of the VSS Technical Reconstitution Plan. The VSS Technical Reconstitution Plan will define the scope, schedule, and resource needs for reconstitution of the VSS baseline. As the VSS specific documentation is regenerated, the system specific training materials will be developed. However, in FY05, LANL plans to qualify all Cognizant System Engineers assigned to the VSSs using an interim qualification process. The interim qualification process will consist of "one-on-one" interviews between the instructor and Cognizant System Engineers to ensure that the Cognizant System Engineer has full understanding of the assigned system safety features.

Other DNFSB concerns relating to the lack of institutional processes for design adequacy/ back-fit analysis and external design reviews are being addressed in FY05 by procedures AP-ENG-011, Planning and Managing External Design Reviews and AP-ENG-016, Design Adequacy/ Back-fit Analysis. The issuance of these procedures is shown on the attached Conduct of Engineering implementation schedule.

Please do not hesitate to call Mitch Harris, Acting Engineering Division Leader at 606-0600 if you have any questions or comments.

Sincerely,



Donald D. Cobb
Deputy Director (Acting)

MH:DDC:JB

Attachment: Conduct of Engineering Schedule, Baseline Date: 04 March 2005

CY: G. Schlapper, LASO, NNSA, A316
F. Bell, LASO, NNSA, A316
C. Keilers, NMT-DO, E509
T. Burns, PS-2, E504
R. Vann Bynum, ADWEM, A07
Carolyn Mangeng, ADTS, A104
Barbara Stine, ADTS, A104
Mitch Harris, ENG-DO, D406
Gurinder Grewal, ENG-CE, D406
Jim Angelo, PS-DO, C347
IM-9, A150
DIR-05-118

Conduct of Engineering

Baseline Date: 04 March 2005

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008			
								F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04
01.5.4.01 Develop and Implement Cognizant System Engineer (CSE) Program																							
01.5.4.01.01 Perform Gap Analysis of Current Compliance with DOE O 420.1A and Prepare Cor...																							
01.5.4.01.01.1000	Perform Gap Analysis	132.0d	02-03-03	18-Jun-05	100%	\$523,923.51																	
01.5.4.01.01.1010	Gap Analysis Complete	0.0d	04-Mar-05	04-Mar-05	100%	\$19,833.74	Gunder Grewal																
01.5.4.01.01.1020	Gap Analysis Draft Report Complete	0.0d	15-Jun-04	15-Jun-04	100%	\$0.00	Gunder Grewal																
01.5.4.01.01.1025	Gap Analysis Submitted to WISMS	30.0d	18-Jan-05	04-Mar-05	0%	\$19,833.44	Gunder Grewal																
01.5.4.01.02 Identify VSS and Assign Cognizant System Engineers (CSEs) and Resources																							
01.5.4.01.02.1000	Prepare VSS and CSE List	154.0d	10-Jan-05	17-Aug-05	100%	\$69,330.98																	
01.5.4.01.02.1010	VSS and CSE List Complete and Approved	5.0d	10-Jan-05	14-Jan-05	100%	\$0.00	Gunder Grewal																
01.5.4.01.02.1020	Post VSS and CSE List on LANL Web	0.0d	14-Jan-05	14-Jan-05	100%	\$0.00	Gunder Grewal																
01.5.4.01.02.1030	Recruit and Hire a System Engineer (SE) Program Administrator	5.0d	10-Jan-05	28-Jan-05	100%	\$0.00	Gunder Grewal																
01.5.4.01.02.1040	SE Program Administrator Hired	24.0d	10-Jan-05	11-Feb-05	100%	\$0.00	Mich Harris																
01.5.4.01.02.2000	Prepare Initial CSE Program Management Plan (PMS)	0.0d	11-Feb-05	11-Feb-05	100%	\$0.00	Mich Harris																
01.5.4.01.02.2005	Prepare Initial CSE Program Management Plan (PMS)	111.0d	25-Jan-05	17-Aug-05	0%	\$39,330.72	Lyle Kenlens																
01.5.4.01.02.2005	Hire a CSE Training Coordinator	83.0d	01-Mar-05	24-Jun-05	0%	\$50,000.26	Lyle Kenlens																
01.5.4.01.03 Develop & Implement the Cognizant System Engineer Core & Facility Specific Trai...																							
01.5.4.01.03.1000	Complete CSE Program Management Plan	0.0d	17-Aug-05	17-Aug-05	0%	\$0.00	Lyle Kenlens																
01.5.4.01.03.0000	Develop the CSE Appendix F Performance Matrix	54.0d	14-Feb-05	28-Mar-07	0%	\$15,000.00	Lyle Kenlens																
01.5.4.01.03.1000	Develop the CSE Core Position-Specific & Intern System Specific Training Standard and Qual. Card	34.0d	01-Mar-05	15-Apr-05	0%	\$25,000.00	Lyle Kenlens																
01.5.4.01.03.1050	CSE Core Position-Specific & Intern System Specific Training and Qual. Cards Complete	0.0d	15-Apr-05	15-Apr-05	0%	\$0.00	Lyle Kenlens																
01.5.4.01.03.1200	Develop Procedure CSE Core and Position-Specific Training Material	87.0d	01-Mar-05	30-Jun-05	0%	\$140,000.00	Lyle Kenlens																
01.5.4.01.03.1250	CSE Core and Position-Specific Training Material Developed	0.0d	30-Jun-05	30-Jun-05	0%	\$0.00	Lyle Kenlens																
01.5.4.01.03.1300	Deliver CSE Core and Position Specific Training	48.0d	02-May-05	08-Jul-05	0%	\$25,000.13	Lyle Kenlens																
01.5.4.01.03.1350	CSE Core and Position Specific Training Delivered	0.0d	08-Jul-05	08-Jul-05	0%	\$0.00	Lyle Kenlens																

Conduct of Engineering

Table with columns: Activity ID, Activity Name, Original Duration, Start, Finish, Activity % Complete, Budgeted Total Cost, Responsible Person, OE Work, and fiscal year columns (FY2004-2005, FY2005-2006, FY2006-2007, FY2007-2008, 2009) for various engineering tasks.

TASK filter: All Activities

Legend for activity types: Actual Work, Critical Remaining Work, Summary, Remaining Work, Milestone

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Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008				2009
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
01.5.4.01.05.0015	IAB Secures Reconstitution Plan Funding	0.0d	26-Sep-05		0%	\$0.00	IAB	Yes																	
01.5.4.01.05.0020	VSS Technical Baseline Reconstitution Plan (BRP) ready to Implement	0.0d	26-Sep-05		0%	\$0.00	EPC	Yes																	
01.5.4.01.05.2000	VSS Technical Baseline Reconstitution Plan Implemented	0.0d	06-Oct-08		0%	\$0.00	EPC	Yes																	
01.5.4.01.06.1 CMR Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.1.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for CMR	742.0d	03-Oct-05	06-Oct-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.1.1010	BRP Documentation/supporting analysis development/revision for CMR Complete	0.0d	06-Oct-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.2 LANSCE Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.2.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for LANSCE	740.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.2.1010	BRP Documentation/supporting analysis development/revision for LANSCE Complete	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.3 TWISP Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.3.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TWISP	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.3.1010	BRP Documentation/supporting analysis development/revision for TWISP Completed	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.4 WCCRF Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.4.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for WCCRF	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.4.1010	BRP Documentation/supporting analysis development/revision for WCCRF Complete	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.5 TA-18 Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.5.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TA-18	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.5.1010	BRP Documentation/supporting analysis development/revision for TA-18 Complete	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.6 TA-55 Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.6.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TA-55	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.6.1010	BRP Documentation/supporting analysis development/revision for TA-55 Complete	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.7 TSFF Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.7.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TSFF	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.7.1010	BRP Documentation/supporting analysis development/revision for TSFF Completed	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.8 WETF Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.8.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for WETF	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.8.1010	BRP Documentation/supporting analysis development/revision for WETF Completed	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.06.9 TA-8-23 Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.9.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TA-8-23	742.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.9.1010	BRP Documentation/supporting analysis development/revision for TA-8-23 Completed	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.01.05.10 TA-54-412 Technical Baseline Reconstitution Plan Development & Implementation																									
01.5.4.01.05.10.1000	Develop/revise baseline documentation/supporting analysis in accordance with BRP for TA-54-412	740.0d	26-Sep-05	30-Sep-08	0%	\$0.00	RDL	Yes																	
01.5.4.01.05.10.1010	BRP Documentation/supporting analysis development/revision for TA-54-412 Complete	0.0d	30-Sep-08		0%	\$0.00	RDL	Yes																	
01.5.4.02 Develop and Implement Institutional Program Practices																									
01.5.4.02.01 Establish Conduct of Engineering Supporting Organizations																									
01.5.4.02.01.1000 Conduct of Engineering IPT Develops a Draft Engineering Practices Council (EPC) Charter																									
01.5.4.02.01.1000	Conduct of Engineering IPT Develops a Draft Engineering Practices Council (EPC) Charter	22.0d	10-Jan-05 A	09-Feb-05 A	100%	\$0.00	Gunder Grewal	Yes																	
01.5.4.02.01.1010	IPT Team Presents Draft EPC Charter to IAB Champion	1.0d	10-Feb-05 A	10-Feb-05 A	100%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.01.1020	IAB Champion Presents Draft EPC Charter to LANL Institutional Assurance Board (IAB)	1.0d	01-Mar-05	01-Mar-05	0%	\$0.00	Vann Bynum	Yes																	
01.5.4.02.01.2000	Draft Charter Approved by IAB	0.0d	08-Mar-05		0%	\$0.00	Vann Bynum	Yes																	
01.5.4.02.01.2010	IAB Directs each LANL Division to Appoint an EPC Representative	9.0d	08-Mar-05	18-Mar-05	0%	\$0.00	Vann Bynum	Yes																	
01.5.4.02.01.2030	Engineering Practices Council (EPC) Chartered and Staffed	0.0d	21-Mar-05		0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.01.2035	Conduct of Engineering IPT Dissolved	0.0d	21-Mar-05		0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.01.2040	Engineering Practices Council (EPC) Operational	381.0d	22-Mar-05	29-Sep-06	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02 Develop Institutional Conduct of Engineering (COE) IMP																									
01.5.4.02.02.1000 Institutional Conduct of Engineering (COE) IMP Developed (Sub Contract)																									
01.5.4.02.02.1000	Institutional Conduct of Engineering (COE) IMP Developed (Sub Contract)	10.0d	11-Jul-05	22-Jul-05	0%	\$50,000.44	Gunder Grewal	Yes																	
01.5.4.02.02.1010	Present Institutional Conduct of Engineering (COE) IMP to EPC	5.0d	25-Jul-05	29-Jul-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02.1020	incorporate and Resolve EPC Review Comments	5.0d	01-Aug-05	05-Aug-05	0%	\$0.00	Gunder Grewal	Yes																	
01.5.4.02.02.1030	Submit Institutional Conduct of Engineering (COE) IMP to Policy Office	0.0d	08-Aug-05		0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02.1040	Policy Office Reviews IMP	5.0d	08-Aug-05	12-Aug-05	0%	\$0.00	Policy Office	Yes																	

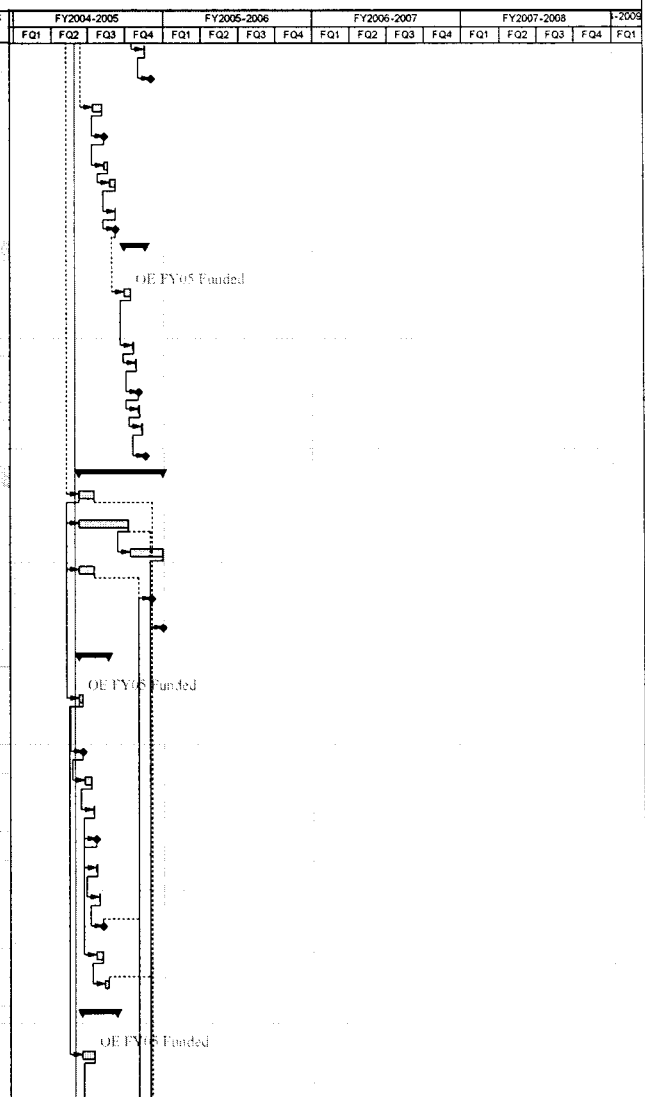
TASK filter: All Activities

Actual Work
 Critical Remaining Work
 Summary
 Remaining Work
 ● Milestone

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Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008				1-2009
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
01.5.4.02.02.1060	Incorporate and Resolve Policy Office Review Comments	5.0d	15-Aug-05	19-Aug-05	0%	\$0.00	Gurinder Grewal	Yes																	
01.5.4.02.02.1070	Institutional Conduct of Engineering (COE) IMP Issued	0.0d		02-Sep-05	0%	\$0.00	Carolyn A. Mengeng	Yes																	
01.5.4.02.02.2000	The Engineering Practices Council (EPC) Develops an Institutional Conduct of Engineering Implementation Strategy	20.0d	11-Apr-05*	06-May-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02.2010	Conduct of Engineering Implementation Strategy Submitted to IAB Champion for Review and Approval	0.0d	06-May-05*		0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02.2020	IAB Champion Reviews Conduct of Engineering Implementation Strategy document	10.0d	09-May-05*	20-May-05	0%	\$0.00	Vann Bynum	Yes																	
01.5.4.02.02.2030	IAB Champion Review Comments Incorporated into Conduct of Engineering Strategy Document	10.0d	23-May-05*	06-Jun-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.02.2040	Conduct of Engineering Strategy Document presented to RDLs	1.0d	07-Jun-05	07-Jun-05	0%	\$0.00	Vann Bynum	Yes																	
01.5.4.02.02.2050	Conduct of Engineering Implementation Strategic Plan complete	0.0d		07-Jun-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.03	Develop, Approve and Issue Engineering Program Manual	39.0d	27-Jun-05	19-Aug-05		\$50,000.44																			
01.5.4.02.03.3020	Engineering C.O.E. Program Manual Reviewed and an Institutional Engineering Program Manual Developed (Sub Contract)	14.0d	27-Jun-05*	15-Jul-05	0%	\$50,000.44	Gurinder Grewal	Yes																	
01.5.4.02.03.3040	EPC Reviews Draft Institutional Engineering Program Manual	5.0d	18-Jul-05	22-Jul-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.03.3050	Incorporate and Resolve EPC Review Comments	5.0d	25-Jul-05	29-Jul-05	0%	\$0.00	Gurinder Grewal	Yes																	
01.5.4.02.03.3060	Submit Draft Institutional Engineering Program Manual to Policy Office for Review	0.0d	01-Aug-05		0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.03.3070	Policy Office reviews Draft Institutional Engineering Program Manual	5.0d	01-Aug-05	05-Aug-05	0%	\$0.00	Policy Office	Yes																	
01.5.4.02.03.3080	Incorporate Policy Office review comments	5.0d	08-Aug-05	12-Aug-05	0%	\$0.00	Gurinder Grewal	Yes																	
01.5.4.02.03.3900	The Institutional Engineering Program Manual Complete	0.0d		19-Aug-05	0%	\$0.00	Mitch Harris	Yes																	
01.5.4.02.04	Develop/Issue/Implement FY05 Conduct of Engineering (CoE) Administrative Proc...	147.0d	07-Mar-05	30-Sep-05		\$54,998.47																			
02.04.1000	Develop the CoE Appendix F Performance Matrix	30.0d	07-Mar-05*	15-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.1100	Issue FY05 CoE Procedures (Appendix F Measures)	88.0d	07-Mar-05	08-Jul-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.1200	Initiate Implementation of FY05 CoE Procedures at Nuc CAT 2/3 SIGMA, BTF and BSL-3	59.0d	11-Jul-05	30-Sep-05	0%	\$0.00	EPC	Yes																	
02.04.7000	Develop/Design Engineer Training Standards and Qualification Cards	30.0d	07-Mar-05	15-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.8000	Development, Issuance, & Training of FY05 APs Complete	0.0d		02-Sep-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.9000	LAN/LASO Assessment of Appendix F APs Complete	0.0d		30-Sep-05	0%	\$0.00	Gurinder Grewal	Yes																	
01.5.4.02.04.01	AP-ENG-001 - Screening Proposed Design Changes	55.0d	07-Mar-05	20-May-05		\$6,111.05																			
02.04.01.1000	Develop Administrative Procedures for AP-ENG-001. Screening for Engineering Work	10.0d	07-Mar-05*	18-Mar-05	0%	\$6,111.05	Gurinder Grewal	Yes																	
02.04.01.1010	Submit AP-ENG-001 to EPC	0.0d		18-Mar-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1020	EPC Reviews AP-ENG-001	15.0d	21-Mar-05	08-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1030	Incorporate and Resolve EPC Review Comments	5.0d	11-Apr-05	15-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1070	AP-ENG-001 Submitted to Policy Office for Review	0.0d	18-Apr-05		0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1080	Policy Office reviews AP-ENG-001	5.0d	18-Apr-05	22-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1090	Incorporate AP-ENG-001 Policy Office review comments	5.0d	25-Apr-05	29-Apr-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1100	EPC Issues AP-ENG-001 to Institution for Implementation	0.0d		06-May-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1200	Develop Training Material	15.0d	18-Apr-05	06-May-05	0%	\$0.00	Gurinder Grewal	Yes																	
02.04.01.1300	Deliver Training	10.0d	09-May-05	20-May-05	0%	\$0.00	Gurinder Grewal	Yes																	
01.5.4.02.04.02	AP-ENG-002 - Developing and Revising a Design Change Package	64.0d	14-Mar-05	10-Jun-05		\$6,111.05																			
02.04.02.1000	Develop Administrative Procedures for AP-ENG-002. Design Change Package	25.0d	14-Mar-05*	15-Apr-05	0%	\$6,111.05	Gurinder Grewal	Yes																	



TASK filter: All Activities
 ■ Actual Work ■ Critical Remaining Work ▼ Summary
 □ Remaining Work ● Milestone

Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008			
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4
02.04.02.1010	Submit AP-ENG-002 to EPC	0.0d		18-Apr-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1020	EPC Reviews AP-ENG-002	5.0d	18-Apr-05	22-Apr-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1030	Incorporate and Resolve EPC Review Comments	10.0d	25-Apr-05	06-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1070	AP-ENG-002 Submitted to Policy Office for Review	0.0d	09-May-05		0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1080	Policy Office reviews AP-ENG-002	5.0d	09-May-05	13-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1090	Incorporate AP-ENG-002 Policy Office review comments	5.0d	16-May-05	20-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1100	EPC Issues AP-ENG-002 to Institution for Implementation	0.0d		27-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1200	Develop Training Material	15.0d	09-May-05	27-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.02.1300	Deliver Training	9.0d	31-May-05	10-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.04.03	AP-ENG-016 - Design Adequacy and Backfit Analysis	44.0d	18-Jul-05	16-Sep-05		\$6,111.05																		
02.04.03.1000	Develop Administrative Procedures for AP-ENG-016. Design Adequacy and Backfit Analysis	10.0d	18-Jul-05	29-Jul-05	0%	\$6,111.05	Gunnder Grewal	Yes																
02.04.03.1010	Submit AP-ENG-016 to EPC	0.0d		01-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1020	EPC Reviews AP-ENG-016	5.0d	01-Aug-05	05-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1030	Incorporate and Resolve EPC Review Comments	5.0d	08-Aug-05	12-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1070	Submit AP-ENG-016 to Policy Office for review	0.0d	15-Aug-05		0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1080	Policy Office reviews AP-ENG-016	5.0d	15-Aug-05	19-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1090	Incorporate AP-ENG-016 Policy Office review comments	5.0d	22-Aug-05	26-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1100	EPC Issues AP-ENG-016 to Institution for Implementation	0.0d		02-Sep-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1200	Develop Training Material	15.0d	15-Aug-05	02-Sep-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.03.1300	Deliver Training	9.0d	06-Sep-05	16-Sep-05	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.04.04	AP-ENG-004 - Engineering Equivalent Determination	44.0d	11-Apr-05	10-Jun-05		\$6,111.05																		
02.04.04.1000	Develop Administrative Procedures for AP-ENG-004, Engineered Equivalent Determination	10.0d	11-Apr-05	22-Apr-05	0%	\$6,111.05	Gunnder Grewal	Yes																
02.04.04.1010	Submit AP-ENG-004 to EPC	0.0d		25-Apr-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1020	EPC Reviews AP-ENG-004	5.0d	25-Apr-05	29-Apr-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1030	Incorporate and Resolve EPC Review Comments	5.0d	02-May-05	06-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1070	Submit AP-ENG-004 to Policy Office for review	0.0d	09-May-05		0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1080	Policy Office reviews AP-ENG-004	5.0d	09-May-05	13-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1090	Incorporate AP-ENG-004 Policy Office review comments	5.0d	16-May-05	20-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1100	EPC Issues AP-ENG-004 to Institution for Implementation	0.0d		27-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1200	Develop Training Material	15.0d	09-May-05	27-May-05	0%	\$0.00	Gunnder Grewal	Yes																
02.04.04.1300	Deliver Training	9.0d	31-May-05	10-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.04.05	AP-ENG-005 - Management Level Determination of Structures, Systems, and Components	44.0d	18-Apr-05	17-Jun-05		\$6,111.05																		
02.04.05.1000	Develop Administrative Procedures for AP-ENG-005, Design Change Package	10.0d	18-Apr-05	29-Apr-05	0%	\$6,111.05	Gunnder Grewal	Yes																

Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008				2008
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1
02.04.05.1010	Submt AP-ENG-005 to EPC	0.0d		02-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1020	EPC Reviews AP-ENG-005	5.0d	02-May-05	06-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1030	Incorporate and Resolve EPC Review Comments	5.0d	09-May-05	13-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1070	Submt AP-ENG-005 to Policy Office for Review	0.0d	16-May-05		0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1080	Policy Office reviews AP-ENG-005	5.0d	16-May-05	20-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1090	Incorporate AP-ENG-005 Policy Office review comments	5.0d	23-May-05	27-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1100	EPC Issues AP-ENG-005 to Institution for Implementation	0.0d		03-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1200	Develop Training Material	14.0d	16-May-05	03-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.05.1300	Deliver Training	10.0d	06-Jun-05	17-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
01.5.4.02.04.06	AP-ENG-006 - Design Information	44.0d	25-Apr-05	24-Jun-05		\$6,111.05																			
02.04.06.1000	Develop Administrative Procedures for AP-ENG-006, Design Information	10.0d	25-Apr-05	06-May-05	0%	\$6,111.05	Gunnder Grewal	Yes																	
02.04.06.1010	Submt AP-ENG-006 to EPC	0.0d		09-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1020	EPC Reviews AP-ENG-006	5.0d	09-May-05	13-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1030	Incorporate and Resolve EPC Review Comments	5.0d	16-May-05	20-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1070	Submt AP-ENG-006 to Policy Office for Review	0.0d	23-May-05		0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1080	Policy Office reviews AP-ENG-006	5.0d	23-May-05	27-May-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1090	Incorporate AP-ENG-006 Policy Office review comments	4.0d	31-May-05	03-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1100	EPC Issues AP-ENG-006 to Institution for Implementation	0.0d		10-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1200	Develop Training Material	14.0d	23-May-05	10-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.06.1300	Deliver Training	10.0d	13-Jun-05	24-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
01.5.4.02.04.07	AP-ENG-011 - Planning and Managing External Design Reviews	44.0d	06-Jun-05	06-Aug-05		\$6,111.05																			
02.04.07.1000	Develop Administrative Procedures for AP-ENG-011 Planning and Managing External Design Reviews	10.0d	06-Jun-05	17-Jun-05	0%	\$6,111.05	Gunnder Grewal	Yes																	
02.04.07.1010	Submt AP-ENG-011 to EPC	0.0d		20-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1020	EPC Reviews AP-ENG-011	5.0d	20-Jun-05	24-Jun-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1030	Incorporate and Resolve EPC Review Comments	5.0d	27-Jun-05	01-Jul-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1070	AP-ENG-011 Submitted to Policy Office for Review	0.0d	05-Jul-05		0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1080	Policy Office reviews AP-ENG-011	4.0d	05-Jul-05	08-Jul-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1090	Incorporate AP-ENG-011 Policy Office review comments	5.0d	11-Jul-05	15-Jul-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1100	EPC Issues AP-ENG-011 to Institution for Implementation	0.0d		22-Jul-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1200	Develop Training Material	14.0d	05-Jul-05	22-Jul-05	0%	\$0.00	Gunnder Grewal	Yes																	
02.04.07.1300	Deliver Training	10.0d	25-Jul-05	05-Aug-05	0%	\$0.00	Gunnder Grewal	Yes																	
01.5.4.02.04.08	AP-ENG-012 - Developing and Reviewing Post-Modification/Post-Maintenance Testing	44.0d	02-May-05	31-Jul-05		\$6,111.05																			
02.04.08.1000	Develop Administrative Procedures for AP-ENG-012, Post Modification/Maintenance Testing	10.0d	02-May-05	13-May-05	0%	\$6,111.05	Gunnder Grewal	Yes																	

TASK filter: All Activities

Actual Work
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 Summary
 Remaining Work
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Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	Funding Allocation											
									FY2004-2005	FY2005-2006	FY2006-2007	FY2007-2008	F01		F02		F03		F04	
02.04.08.1010	Submit AP-ENG-012 to EPC	0.0d	16-May-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1020	EPC Reviews AP-ENG-012	5.0d	16-May-05	20-May-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1030	Incorporate and Reslove EPC Review Comments	5.0d	23-May-05	27-May-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1070	Submit AP-ENG-012 to Policy Office for Review	0.0d	31-May-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1080	Policy Office reviews AP-ENG-012	4.0d	31-May-05	03-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1090	Incorporate AP-ENG-012 Policy Office review comments	5.0d	06-Jun-05	10-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1100	EPC Issues AP-ENG-012 to Institution for Implementation	0.0d	17-Jun-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1200	Develop Training Material	14.0d	31-May-05	17-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.08.1300	Deliver Training	10.0d	20-Jun-05	01-Jul-05	0%	\$0.00	Guinder Grewal	Yes												
01.5.4.02.04.09	AP-ENG-023 - Performing System Walkdowns and Data Gathering	43.0d	06-May-05	26-Jul-05		\$6,111.05														
02.04.08.1000	Develop Administrative Procedures for AP-ENG-023, Walkdown and Data Gathering	10.0d	06-May-05	20-May-05	0%	\$6,111.05	Guinder Grewal	Yes												
02.04.09.1010	Submit AP-ENG-023 to EPC	0.0d	23-May-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1020	EPC Reviews AP-ENG-023	5.0d	23-May-05	27-May-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1030	Incorporate and Reslove EPC Review Comments	4.0d	31-May-05	03-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1070	Submit AP-ENG-023 to Policy Office for review	0.0d	06-Jun-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1080	Policy Office reviews AP-ENG-023	5.0d	06-Jun-05	10-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1090	Incorporate AP-ENG-023 Policy Office review comments	5.0d	13-Jun-05	17-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1100	EPC Issues AP-ENG-023 to Institution for Implementation	0.0d	24-Jun-05		0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1200	Develop Training Material	15.0d	06-Jun-05	24-Jun-05	0%	\$0.00	Guinder Grewal	Yes												
02.04.09.1300	Deliver Training	9.0d	27-Jun-05	06-Jul-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.6000	01.5.4.02.05 Develop/Implement FV06 Conduct of Engineering (CoE) Administrative Proc...	202.0d	03-Oct-05	28-Jul-06		\$125,183.84														
02.05.6000	EPC Issues the FV06 CoE Procedures	0.0d	03-Oct-05		0%	\$0.00	Guinder Grewal	Yes												
02.05.8010	FV06 Implementation of CoE Procedures at LANL	5.0d	24-Jul-05	28-Jul-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.8020	Implementation of CoE at LANL Complete	0.0d	28-Jul-05		0%	\$0.00	Guinder Grewal	Yes												
01.5.4.02.05.01	AP-ENG-017 - Engineering Calculations	46.0d	03-Oct-05	09-Dec-05		\$15,647.88														
02.05.01.1000	Develop Administrative Procedures for AP-ENG-017, Engineering Calculations	9.0d	03-Oct-05	14-Oct-05	0%	\$15,647.88	Guinder Grewal	Yes												
02.05.01.1010	Submit AP-ENG-007 to EPC	0.0d	14-Oct-05		0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1020	EPC Reviews AP-ENG-007	5.0d	17-Oct-05	21-Oct-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1030	Incorporate and Reslove EPC Review Comments	5.0d	24-Oct-05	28-Oct-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1070	AP-ENG-007 Submitted to Policy Office for Review	0.0d	31-Oct-05		0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1080	Policy Office reviews AP-ENG-007	5.0d	31-Oct-05	04-Nov-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1090	Incorporate AP-ENG-007 Policy Office review comments	5.0d	07-Nov-05	14-Nov-05	0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1100	EPC Issues AP-ENG-007 to Institution for Implementation	0.0d	15-Nov-05		0%	\$0.00	Guinder Grewal	Yes												
02.05.01.1200	Develop Training Material	14.0d	31-Oct-05	18-Nov-05	0%	\$0.00	Guinder Grewal	Yes												

Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	DE Work	FY2004-2005	FY2005-2006	FY2006-2007	FY2007-2008									
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	
02.05.01.1300	Deliver Training	13.0d	21-Nov-05	09-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
01.5.4.02.05.02 AP-ENG-018 - Developing Process Changes	Develop Administrative Procedures for AP-ENG-018. Developing Process Changes	44.0d	11-Oct-05	14-Dec-05		\$15,647.98															
02.05.02.1000		9.0d	11-Oct-05	21-Oct-05	0%	\$15,647.98	Gunder Grewal	Yes													
02.05.02.1010	Submit AP-ENG-018 to EPC	0.0d		21-Oct-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1020	EPC Reviews AP-ENG-018	5.0d	24-Oct-05	28-Oct-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1030	Incorporate and Resolve EPC Review Comments	5.0d	31-Oct-05	04-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1070	Submit AP-ENG-018 to Policy Office for Review	0.0d	07-Nov-05		0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1080	Policy Office reviews AP-ENG-018	4.0d	07-Nov-05	10-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1090	Incorporate AP-ENG-018 Policy Office review comments	5.0d	14-Nov-05	18-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1100	EPC Issues AP-ENG-018 to Institution for Implementation	0.0d		21-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1200	Develop Training Material	15.0d	07-Nov-05	30-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.02.1300	Deliver Training	10.0d	01-Dec-05	14-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
01.5.4.02.05.03 AP-ENG-020 - Monitoring and Evaluating SSC Performance	Develop Administrative Procedures for AP-ENG-020. Monitoring and Evaluating SSC Performance	46.0d	21-Oct-05	13-Jan-06		\$15,647.98															
02.05.03.1000		10.0d	31-Oct-05	14-Nov-05	0%	\$15,647.98	Gunder Grewal	Yes													
02.05.03.1010	Submit AP-ENG-020 to EPC	0.0d		14-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1020	EPC Reviews AP-ENG-020	4.0d	15-Nov-05	18-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1030	Incorporate and Resolve EPC Review Comments	5.0d	21-Nov-05	25-Nov-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1070	Submit AP-ENG-020 to Policy Office for Review	0.0d	30-Nov-05		0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1080	Policy Office reviews AP-ENG-020	5.0d	30-Nov-05	05-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1090	Incorporate AP-ENG-020 Policy Office review comments	5.0d	07-Dec-05	13-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1100	EPC Issues AP-ENG-020 to Institution for Implementation	0.0d		14-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1200	Develop Training Material	15.0d	30-Nov-05	20-Dec-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.03.1300	Deliver Training	9.0d	03-Jan-06	13-Jan-06	0%	\$0.00	Gunder Grewal	Yes													
01.5.4.02.05.04 AP-ENG-021 - Commercial Grade Dedication	Develop Administrative Procedures for AP-ENG-021. Commercial Grade Dedication	43.0d	17-Jan-05	17-Mar-05		\$15,647.98															
02.05.04.1000		9.0d	17-Jan-05	27-Jan-05	0%	\$15,647.98	Gunder Grewal	Yes													
02.05.04.1010	Submit AP-ENG-021 to EPC	0.0d		27-Jan-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1020	EPC Reviews AP-ENG-021	5.0d	30-Jan-05	03-Feb-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1030	Incorporate and Resolve EPC Review Comments	5.0d	06-Feb-05	10-Feb-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1070	AP-ENG-021 Submitted to Policy Office for Review	0.0d	13-Feb-05		0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1080	Policy Office reviews AP-ENG-021	5.0d	13-Feb-05	17-Feb-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1090	Incorporate AP-ENG-021 Policy Office review comments	4.0d	21-Feb-05	24-Feb-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1100	EPC Issues AP-ENG-021 to Institution for Implementation	0.0d		27-Feb-05	0%	\$0.00	Gunder Grewal	Yes													
02.05.04.1200	Develop Training Material	14.0d	13-Feb-05	03-Mar-05	0%	\$0.00	Gunder Grewal	Yes													

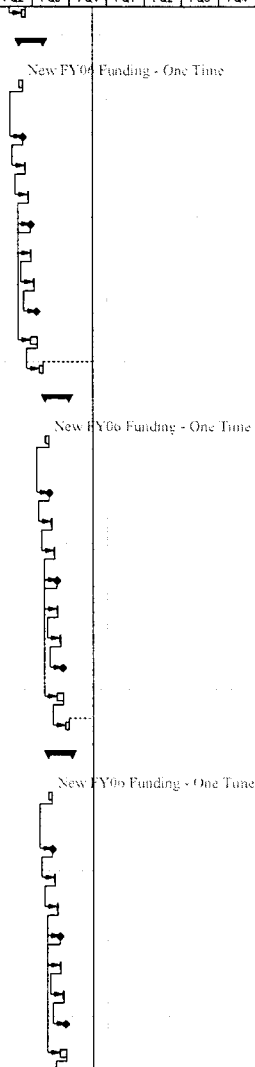
TASK filter: All Activities

Primavera Systems, Inc.

Actual Work
Remaining Work
Critical Remaining Work
Milestones

Conduct of Engineering

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008			
									FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4
02.05.04.1300	Deliver Training	10.0d	06-Mar-06	17-Mar-06	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.05.05	AP-ENG-022 - Natural Phenomenon Hazard Evaluations	45.0d	27-Feb-06	28-Apr-06		\$15,647.98																		
02.05.05.1000	Develop Administrative Procedures for AP-ENG-022, Natural Phenomenon Hazard Evaluations	10.0d	27-Feb-06*	10-Mar-06	0%	\$15,647.98	Gunnder Grewal	Yes																
02.05.05.1010	Submit AP-ENG-022 to EPC	0.0d		10-Mar-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1020	EPC Reviews AP-ENG-022	5.0d	13-Mar-06	17-Mar-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1030	Incorporate and Resolve EPC Review Comments	5.0d	20-Mar-06	24-Mar-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1070	Submit AP-ENG-022 to Policy Office for Review	0.0d	27-Mar-06		0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1080	Policy Office reviews AP-ENG-022, R1	5.0d	27-Mar-06	31-Mar-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1090	Incorporate AP-ENG-022 Policy Office review comments	5.0d	03-Apr-06	07-Apr-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1100	EPC Issues AP-ENG-022 to Institution for Implementation	0.0d		10-Apr-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1200	Develop Training Material	15.0d	27-Mar-06	14-Apr-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.05.1300	Deliver Training	10.0d	17-Apr-06	28-Apr-06	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.05.06	AP-ENG-024 - Establishing Configuration Management Sets	44.0d	01-May-06	30-Jun-06		\$15,647.98																		
02.05.06.1000	Develop Administrative Procedures for AP-ENG-024, Establishing Configuration Management Sets	10.0d	01-May-06*	12-May-06	0%	\$15,647.98	Gunnder Grewal	Yes																
02.05.06.1010	Submit AP-ENG-024 to EPC	0.0d		12-May-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1020	EPC Reviews AP-ENG-024	5.0d	15-May-06	19-May-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1030	Incorporate and Resolve EPC Review Comments	5.0d	22-May-06	26-May-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1070	AP-ENG-024 Submitted to Policy Office for Review	0.0d	30-May-06		0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1080	Policy Office reviews AP-ENG-024	4.0d	30-May-06	02-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1090	Incorporate AP-ENG-024 Policy Office review comments	5.0d	05-Jun-06	09-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1100	EPC Issues AP-ENG-024 to Institution for Implementation	0.0d		12-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1200	Develop Training Material	14.0d	30-May-06	16-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.06.1300	Deliver Training	10.0d	19-Jun-06	30-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
01.5.4.02.05.07	AP-ENG-027 - Engineering Studies	43.0d	08-May-06	07-Jul-06		\$15,647.98																		
02.05.07.1000	Develop Administrative Procedures for AP-ENG-027, Engineering Studies	10.0d	08-May-06*	19-May-06	0%	\$15,647.98	Gunnder Grewal	Yes																
02.05.07.1010	Submit AP-ENG-027 to EPC	0.0d		19-May-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1020	EPC Reviews AP-ENG-027	5.0d	22-May-06	26-May-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1030	Incorporate and Resolve EPC Review Comments	4.0d	30-May-06	02-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1070	AP-ENG-027 Submitted to Policy Office for Review	0.0d	05-Jun-06		0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1080	Policy Office reviews AP-ENG-027	5.0d	05-Jun-06	09-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1090	Incorporate AP-ENG-027 Policy Office review comments	5.0d	12-Jun-06	16-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1100	EPC Issues AP-ENG-027 to Institution for Implementation	0.0d		19-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																
02.05.07.1200	Develop Training Material	15.0d	05-Jun-06	23-Jun-06	0%	\$0.00	Gunnder Grewal	Yes																



Conduct of Engineering

Baseline Date: 04 March 2005

Activity ID	Activity Name	Original Duration	Start	Finish	Activity % Complete	Budgeted Total Cost	Responsible Person	OE Work	FY2004-2005				FY2005-2006				FY2006-2007				FY2007-2008											
									F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04	F01	F02	F03	F04				
02.05.07.1300	Deliver Training	9.0d	25-Jun-06	07-Jul-06	0%	\$0.00	Gumder, Grewal	Yes																								
01.5.4.02.05.08	AP-ENG-029 - System Control Software	43.0d	30-May-06	28-Jul-06		\$15,647.98																										
02.05.08.1000	Develop Administrative Procedures for AP-ENG-029 System Control Software	9.0d	30-May-06	09-Jun-06	0%	\$15,647.98	Gumder, Grewal	Yes																								
02.05.08.1010	Submit AP-ENG-029 to EPC	0.0d		09-Jun-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1020	EPC Reviews AP-ENG-029	5.0d	12-Jun-06	15-Jun-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1030	Incorporate and Resolve EPC Review Comments	5.0d	19-Jun-06	23-Jun-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1070	Submit AP-ENG-029 to Policy Office for review	0.0d	26-Jun-06	30-Jun-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1080	Policy Office returns AP-ENG-029	5.0d	26-Jun-06	30-Jun-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1090	Incorporate AP-ENG-029 Policy Office review comments	4.0d	03-Jul-06	07-Jul-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1100	EPC Issues AP-ENG-029 to Institution for implementation	0.0d		10-Jul-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1200	Develop Training Material	14.0d	26-Jun-06	14-Jul-06	0%	\$0.00	Gumder, Grewal	Yes																								
02.05.08.1300	Deliver Training	10.0d	17-Jul-06	28-Jul-06	0%	\$0.00	Gumder, Grewal	Yes																								
01.5.4.02.PARK "PARKED APs"						118.0d	91-0d-07	31-Mar-06		\$68,800.16																						

