TO: Distribution
FROM: Jerry L. Jobe
SUBJECT: SLAC Contract Modification Number M492

Attached is a signed copy of the SLAC Contract Modification Number M492 dated March 3, 2005 for your records and files.

JLJ:rt
Enclosures

Distribution
Anne Hannigan – Mail Code 6025
K. Hodgson – SSRL – MS 69
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B. Todaro – MS 01
M. Chang – MS 03
AMENDMENT OF SORCITATION/MODIFICATION OF CONTRACT

AMENDMENT/MODIFICATION NO. M492

3. EFFECTIVE DATE See Block 16C

4. REQUISITION/PURCHASE REQ. NO. N/A

5. PROJECT NO. (If applicable)

6. ISSUED BY CODE

U.S. Department of Energy
Office of Science, Stanford Site Office
2575 Sand Hill Road, Bldg.41, Rm.118
Menlo Park, CA 94025

7. ADMINISTERED BY (If other than Item 6)

DOE Points of Contact:
Contracting Officers: Tyndal L. Lindler (650) 926-5076 or Georgia M. McClelland (650)926-8608

8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State, and ZIP Code)

The Board of Trustees for the Leland Stanford, Jr. University
Director of Sponsored Projects
651 Serra Street – Room # 260
Stanford, CA 94305-4125

Mail To:
Jerry L. Jobe, Associate Director Business Services Div.
Stanford Linear Accelerator Center
2575 Sand Hill Road, M/S 02
A&E Building, Room 203
Menlo Park, Ca 94025

CODE FACILITY CODE

10. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN CONTRACT/ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

H.006 Use of Objective Standards of Performance Self-Assessment and Performance Evaluation

D. OTHER (Specify type of modification and authority)

IMPORTANT: Contractor is not, X is required to sign this document and return 2 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible) The purpose of this modification is to incorporate the FY05 Environmental, Safety and Health Performance Measures consistent with the Corrective Action Plan for the Judgements of Need Identified in the Type A, Accident Investigation Report on October 11, 2004 Electrical Arc Injury at the Stanford Linear Accelerator Center. The parties agreed upon these measures effective February 7, 2005.

(Continue on Page 2)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore amended, are not changed and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

*R* Tyndall L. Lindler

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED 3-3-05

16A. NAME OF CONTRACTING OFFICER (Type or print)

Tyndall L. Lindler

16B. UNITED STATES DEPARTMENT OF ENERGY (Type or print)

U.S. Department of Energy

16C. DATE SIGNED 3-3-05

30-105 STANDARD FORM 30
A. The contract is revised as follows:

1. Delete Appendix B, Environment, Safety & Health pages 6 thru 28 and insert the attached pages 1 thru 12 in Appendix B under Environment Safety & Health.

B. All other terms and conditions remain unchanged and in full force and effect.

(End of Modification)
Performance Area: ENVIRONMENTAL, SAFETY and HEALTH (ES&H)

Cumulative Available Points: 120 Points

ES&H Performance Expectations

SLAC is expected to effectively and efficiently manage and operate the Laboratory through best-in-class management practices designed to enable research while assuring the protection and proper maintenance of DOE research and information assets, and protecting the health and safety of workers, the public and the environment. SLAC is expected to manage and operate the Laboratory so as to ensure compliance with all applicable federal, state, local laws, regulations, DOE directives and other requirements. SLAC is expected to effectively implement safety and environmental management systems and work processes. SLAC is also expected to conduct an ongoing self-assessment program to ensure continuous improvement in management systems and work processes and to achieve and maintain excellence in safety and environmental performance.

The performance expectations, objectives and measures are fundamentally linked to the seven Guiding Principles and five Core Functions of Integrated Safety Management System (ISMS) and the specific DOE/Stanford University contract provisions that require SLAC to integrate environment, safety and health into work planning and execution. For the purposes of the contract appendix, ES&H includes pollution prevention and waste minimization.

SC has established a goal of achieving a strong safety culture and “Best-in-Class” goals for minimizing accidents and injuries resulting from laboratory work. SC’s target rates for the laboratory’s Total Recordable Cases (TRC) and Days Away, Restricted, or Transferred (DART), including both contractor and subcontractor employee working on site. During FY-05, SLAC will need to complete the FY-05 milestones in the Corrective Action Plan for the Judgments of Need Identified in the Type A Accident Investigation Report on October 11, 2004 Electrical Arc Injury at the Stanford Linear Accelerator Center. The Corrective Action Plan includes a significant number of electrical safety actions. DOE will also conduct a re-validation of the SLAC ISM Program in August 2005.

Performance Objective 1: ISMS/EMS Implementation and Work Processes

Available Points: (80 Points)

Management System Implementation and Work Processes:

SLAC effectively implements safety and environmental management systems and work processes that protect the worker, the public and the environment and sustains and enhances excellence in Laboratory operations. SLAC fully implements management
systems and enhances processes for work planning and hazard controls to ensure that hazards and risks are analyzed and controls are in place prior to authorizing and conducting work.

**Performance Criterion 1.1:**

Accident and injury rates, days away, restricted or transferred rates are adequately controlled.

**FY2005:** both TRC and DART rates will be in the top 25th percentile of research and testing firms with 1000+ employees (Standard Industrial Code (SIC) 873); i.e., TRC ≤ 1.1 per 100 FTEs, DART ≤ 0.5 per 100 FTEs.

**FY2007:** both TRC and DART rates will be in the top 10th percentile of research and testing firms with 1000+ employees (specific rates to be calculated by the Bureau of Labor Statistics).

**Performance Measure 1.1.a:**

<table>
<thead>
<tr>
<th>Total Recordable Case Rate (TRC)</th>
<th>(24 pts)</th>
</tr>
</thead>
</table>

Work-related injury or illness, which resulted in loss of consciousness, restriction of work or motion, transfer to another job, or required medical treatment beyond first aid. The TRC rate is the number of total recordable cases per 200,000 hours worked.

The evaluation of SLAC's safety performance is based on performance of similar research and development companies and industries listed under Standard Industrial Classification code (SIC) #873 for Research, Development and Testing Facilities. The Office of Science has set quantitative safety goals for each Laboratory to meet the 25th percentile 2001 SIC #873 rate for a TRC rate of 1.10 by FY05.

**Outstanding:** SLAC TRC rate for FY05 is below the SC safety goal of 1.10.

**Excellent:** SLAC TRC rate for FY05 is 0% - 10% above the SC safety goal of 1.10.

**Good:** SLAC TRC rate for FY05 is 11% - 20% above the SC safety goal of 1.10.

**Marginal:** SLAC TRC rate for FY05 is 21% - 30% above the SC safety goal of 1.10.

**Unsatisfactory:** SLAC TRC rate of FY05 is greater than 31% above the SC safety goal of 1.10.
Performance Measure 1.1.b

Days Away, Restricted or Transferred Rate (DART)  (24 pts)

Work-related injuries or illnesses which resulted in days away from work and/or days of restricted work activity. The DART rate is the total number of lost workday cases per 200,000 hours worked.

The evaluation of SLAC's safety performance is based on performance of similar research and development companies and industries listed under Standard Industrial Classification code #873 for Research, Development and Testing Facilities. The DOE Office of Science has set quantitative safety goals for each Laboratory to meet 25th percentile of the 2001 SIC #873 rate for Days Away, Restricted, or Transferred (DART) of 0.50 by FY05.

Outstanding: SLAC DART rate for FY05 is below the SC safety goal of 0.50.

Excellent: SLAC DART rate for FY05 is 0% - 10% above the SC safety goal of 0.50.

Good: SLAC DART rate for FY05 is 11% - 22% above the SC safety goal of 0.50.

Marginal: SLAC DART rate for FY05 is 23% - 32% above the SC safety goal of 0.50.

Unsatisfactory: Increase in DART rate > 33% above the SC safety goal of 0.50.

Performance Measure 1.1.c

Occupational Safety and Health Administration (OSHA) Compliance

Audit Follow-up  (16 pts)

SLAC will report quarterly to DOE on the progress toward correcting or dispositioning the total number of safety deficiency instances identified by OSHA during the February 9-13, 2004 compliance audit at SLAC. To disposition an instance means to agree upon a plan to resolve that instance with the SLAC DOE site office. The April 6, 2004 punch list of deficiency instances identifies the specific OSHA safety deficiencies and instances that will be tracked by DOE and SLAC through the DOE Health and Safety Improvement Program managed by the SC Laboratory Infrastructure Division (SC-82).
Outstanding: >75% of the non-electrical OSHA deficiency instances and >99% of the electrical OSHA deficiency instances corrected or dispositioned as well as 100% of Electrical Safety Action Plan (ESAP) Implementation Plan milestones due in FY05 completed.

Excellent: 70-74% of the non-electrical OSHA deficiency instances and 95% - 98% of electrical OSHA deficiency instances, corrected or dispositioned as well as 95% - 99% of Electrical Safety Action Plan (ESAP) Implementation Plan milestones due in FY05 completed.

Good: 65-69% of the non-electrical OSHA deficiency instances and 90% - 94% of electrical OSHA deficiency instances, corrected or dispositioned as well as 90% - 94% of Electrical Safety Action Plan (ESAP) Implementation Plan milestones due in FY05 completed.

Marginal: 60-64% of the non-electrical OSHA deficiency instances and 85% - 89% of electrical OSHA deficiency instances, corrected or dispositioned as well as 85% - 89% of Electrical Safety Action Plan (ESAP) Implementation Plan milestones due in FY05 completed.

Unsatisfactory: <59% of the non-electrical OSHA deficiency instances and <85% of electrical OSHA deficiency instances, corrected or dispositioned as well as <85% of Electrical Safety Action Plan (ESAP) Implementation Plan milestones due in FY05 completed.

Performance Measure 1.1.d:

Type A Accident Investigation Corrective Action Plan Milestone Completion

Acceptable – all corrective actions planned for FY-05 are completed. (all 16 pts)

Unacceptable – not all of the corrective actions planned for FY-05 are completed. (0 pts)

Performance Objective 2:

SLAC implements Integrated Safety Management (ISM), best practices and validation and/or certification of safety and environmental management systems to ensure that environment, safety and health is effectively integrated into work planning and execution at all levels, so that scientific missions are accomplished.
while protecting the worker, the public and the environment. During FY-05, the SLAC ISM System will be re-validated.

Performance Measure 2.1.a:

SSO will conduct a re-validation of the SLAC ISM System in August 2005. The outcome of the review will determine the rating for this performance objective.

The SLAC ISM System is successfully validated (all 25 points)

The SLAC ISM System is not successfully validated (0 points)

For the SLAC ISM Validation, it is typical for the ISM Validation Team to identify one or more areas that require additional work. In these cases, the ISM Validation Team will declare that the SLAC ISM System is validated with outstanding issues to be resolved on a defined timescale or will validate the ISM System contingent on the correction of specific identified issues. For the two cases identified above, the SLAC ISM System will be considered successfully validated.

Performance Objective 3: (5 pts)

SLAC will perform its work so that personnel hazards are anticipated, identified, evaluated and controlled.

Performance Criterion 3.1:

Exposures of personnel to ionizing radiation will be adequately controlled.

Performance Measure 3.1.a.

6) Control of Exposure to Ionizing Radiation (3 pts)

ORPS-reportable occurrences of SLAC-based occupational external radiation doses, intakes of radioactivity, or skin contamination are managed and minimized.

Performance Assumptions:

1. For FY05, the performance period is January 1, 2004 to December 31, 2004.
2. Each ORPS-reportable occurrence of SLAC-based occupational external radiation doses, intakes of radioactivity, or skin contamination is considered to be a reportable occurrence.
3. The performance gradient scoring will be based on the highest attained gradient level of those listed below.
4. The number of non-radiological workers who exceed 100 mrem Total Effective Dose Equivalent (TEDE) may be considered in the final scoring of this performance measure.

**Performance Gradient:**

**Outstanding:** The number of reportable occurrences is equal to no more than zero (0).

**Excellent:** The number of reportable occurrences is equal to no more than one (1).

**Good:** The number of reportable occurrences is equal to no more than two (2).

**Marginal:** The number of reportable occurrences is equal to no more than four (4).

**Unsatisfactory:** The number of reportable occurrences is more than four (4).

7) **Control of Radioactive Material**

Radioactive materials, including contaminated and/or activated materials, are controlled at all times.

**Performance Assumptions:**

1. Radioactive material for the purpose of this performance measure is defined as only the radioactive material and any radioactive material shipping considerations over which SLAC has direct control.

2. For FY05, the performance period is October 1, 2004 through September 30, 2005.

3. Each Significance Level Category 2 or above for DOE Occurrence Reporting will have a weighting factor of 1.5.

**Performance Gradient:**

**Outstanding:**

The weighted number of occurrences is equal to or less than one (1.0).

**Excellent:**

The weighted number of occurrences is greater than one (1.0) and less than or equal to two (2.0).

**Good:**

The weighted number of occurrences is greater than two (2.0) and less than or equal to three (3.0).

**Marginal:**
The weighted number of occurrences is greater than three (3.0) and less than or equal to four (4.0).

**Unsatisfactory:**
The weighted number of occurrences is greater than four (4.0).

**Performance Objective 4:**

(5 pts)

SLAC will perform its work in a manner that does not present a threat of harm to the public or the environment and will identify, control, and respond to environmental hazards.

**Performance Criterion 4.1:**

Environmental releases and violations will be adequately controlled.

**Performance Measure 4.1.a**

8) **Releases to the Environment**

Environmental releases will be tracked and measured. These will include:

1. Spills that exceed established local, state, or federal reporting requirements.
2. Releases that exceed regulatory permit limits.
3. Formal violations noted by regulatory inspections, regulatory reports, or non-compliance with existing regulatory agreements.

**Performance Assumptions:**

1. For FY05, the performance period for this measure is October 1, 2004 to September 30, 2005.
2. Environmental releases that remain within compliance limits or do not require reporting will not be counted. Environmental releases resulting from natural causes (earthquake, flooding, etc.) for which no preventable action could be taken, shall not be counted.
3. A weighting factor from 0.25 to 1 will be applied to all counted incidents. SLAC and DOE subject matter experts will jointly determine weighting factors for incidents.

Weighting factors are generally defined to be:

1.00  Serious non-compliance: Incident poses serious harm to the public or environment.
0.75 Significant non-compliance: Programmatic non-compliance with regulatory requirements or a release resulting in the issuance of a NOV, or repeated moderate non-compliance ("repeated" is defined as more than two over a three-year period).

0.50 Moderate non-compliance incident that is isolated, but requires a legally reportable release of contamination (but no NOV is issued), or a repeated minor non-compliance.

0.25 Minor non-compliance: An incident that is isolated, primarily administrative, and causes no potential unrecovered release of contamination.

4. If NOVs or equivalent notices contain more than one distinct compliance violation, each separate violation will be first weighted under the above scale. Then an overall score for the incident will be determined by joint DOE/SLAC agreement after considering the individual violations. The overall score for a NOV with multiple violations will be equal to or greater than the highest scored individual violation, but will not exceed a value of 1.

5. The weighted scores of all incidents during the performance period will be added to determine the "total score" to be used in the gradients defined below.

6. Unexpected work/regulatory activity increases that may occur during the year will be brought to the attention of DOE and will be considered during the evaluation period.

Performance Gradient:

Outstanding:
A total score of less than 1, and no individual incident has a weighted score of 0.75.

Excellent:
A total score of 1 to 1.75, with no more than 1 individual incident having a weighted score of 0.75.

Good:
A total score of 2 to 2.75, with no more than 2 individual incidents having a weighted score of 0.75.

Marginal:
A total score of 3 to 3.75, with no more than 3 individual incidents having a weighted score of 0.75, or any singular incident has a weighted score of 1.

Unsatisfactory:
A total score of 4 or more, or 2 or more individual incidents have a weighted score of 1.
Performance Objective 5:

SLAC demonstrates sound stewardship of its site through safe and effective hazardous and radioactive waste minimization and management and through restoration of the site where degradation has occurred.

Performance Criterion: 5.1

SLAC has a program in place to reduce both the volume of waste generated and pollutant emissions. The program will reduce as much as practical the volume of municipal solid waste and hazardous waste generated in accordance with the SLAC Waste Minimization Plan. In addition, as long as benefits exceed cost, SLAC will plan and perform its work in a manner that prevents pollution of the environment.

Performance Measures: 5.1.a

Waste Minimization/Pollution Prevention (2 pts)

SLAC continues significant progress towards meeting the DOE pollution prevention goals for the year 2005, consistent with the DOE memorandum of November 12, 1999

"Pollution Prevention and Energy Efficiency Leadership Goals for Fiscal Year 2000 and Beyond."

Performance Assumptions:

1. For FY05, the performance period is October 1, 2004 through September 30, 2005.
2. DOE’s pollution prevention goals (Department-wide) by waste type are defined as follows:
   - Reduce by 90% the generation of hazardous wastes from routine operations by the year 2005;
   - Recycle 45% of non-hazardous waste from routine operations by the year 2005.
3. SLAC’s contribution to the DOE-wide goals above are:
   - Reduce generation of hazardous waste from routine operations by 65% by the year 2005, using 1993 as a baseline; and,
   - Recycle 50% of non-hazardous waste by the year 2005.
4. The annual performance assessment will not be based solely on the achievement or lack thereof of the numerical goals. The performance rating
will take into account the commitment and effectiveness of SLAC management toward achieving the numerical goals.

5. DOE and SLAC may negotiate mid-year adjustments to the SLAC waste reduction and recycling goals.

6. Waste quantities used to compute waste reduction or waste recycling performance exclude one-time or non-routine operations such as TSCA waste, remediation waste, waste from projects involving the upgrade of equipment, waste from significant emergency response actions, and construction and demolition waste.

7. Reduction, reuse, recycling, exchange, on-site treatment and procurement of materials with recycled content are considered to be methods of waste minimization and will be tracked by the Waste Management Department to affirm reductions in hazardous waste generated.

8. The effect of the July 13, 2000 DOE moratorium on the release of surplus and scrap metals for recycling will be factored into determining the performance rating for this measure.

<table>
<thead>
<tr>
<th>Gradient Rating</th>
<th>RHW Goals Waste Reduction (%)</th>
<th>NHW Goals Recycling (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding</td>
<td>&gt;64</td>
<td>≥ 47</td>
</tr>
<tr>
<td>Excellent</td>
<td>58 to 63</td>
<td>41 to 46</td>
</tr>
<tr>
<td>Good</td>
<td>52 to 57</td>
<td>35 to 40</td>
</tr>
<tr>
<td>Marginal</td>
<td>46 to 51</td>
<td>29 to 34</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>≤ 45</td>
<td>&lt;28</td>
</tr>
</tbody>
</table>

Performance Criterion 5.2.

Environmental Restoration Program

SLAC will maintain the scheduled rate of progress toward completion of the Remedial Investigation/Feasibility Study and source mitigation activities designed to achieve a level of restoration acceptable to cognizant regulatory agencies as specified the Project Baseline as a guide with the goal of completing work EM has committed to by the end of FY06.

Performance Measure 5.2.a:

Performance will be determined based on points earned in three categories. The successful completion of selected major tasks/milestones in the Baseline, the efficient management of the budget, and project management effectiveness will be evaluated and awarded points. There will be a maximum of 55 points possible.
Task Completion Points (40 max):

SLAC and DOE will agree on the dates and tasks to be performed in FY05 using the Baseline as guidance and the number of points to be awarded for each. As conditions change throughout the year, DOE and SLAC may agree on task substitution. SLAC will meet the agreed upon tasks and schedules unless there is written agreement to postpone them. Forty (40) points will be the maximum amount credited in this category although total task points available may be more than forty. Five points will be awarded for task completion on agreed schedule dates; an additional two points will be awarded if the task is completed before the committed/scheduled date. However, if the task is completed after the agreed schedule date, but before the end of the performance period, two points will be awarded for the task unless conditions out of Environmental Restoration Group’s control occur that effect the schedule and budget.

Budget Points (10 max):

The budget shall be managed to take advantage of the fiscal year funds available to maximize the amount of work performed in the current performance/fiscal year (that is, funds available from completing tasks under budget should be used to accelerate work planned in future years). The point increments are based on managing funds to keep the year-end carryover to 8% or less, consistent with EM HQ guidance.

<table>
<thead>
<tr>
<th>Percent of budget spent</th>
<th>Points</th>
<th>Percent of budget spent</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>92% or Greater</td>
<td>10</td>
<td>87%</td>
<td>5</td>
</tr>
<tr>
<td>91%</td>
<td>9</td>
<td>86%</td>
<td>4</td>
</tr>
<tr>
<td>90%</td>
<td>8</td>
<td>85%</td>
<td>3</td>
</tr>
<tr>
<td>89%</td>
<td>7</td>
<td>84%</td>
<td>2</td>
</tr>
<tr>
<td>88%</td>
<td>6</td>
<td>83%</td>
<td>1</td>
</tr>
</tbody>
</table>

Project Management Effectiveness Points (5 max):

Project management documents must be developed each year to enable DOE to plan and manage the SLAC restoration project, in concert with other DOE environmental management projects. The timely development of the following deliverables will be measured:

- Monthly Budget Analysis Reports – To include monthly and cumulative year-to-date tracking of expenditures, comparison of expenditures (ACWP) to planned work (BCWS) at the project level, and commitments at the WBS and project level are required to be provided by the 20th of the following month. Any significant variances of negative 10% or greater with a minimum dollar value of $20,000 between the budget and actual (or estimated) expenditures for any WBS as identified by the DOE project manager should be analyzed.
and reported within fifteen calendar days from the date of notification by the DOE project manager. (5 points)

**Performance Gradient/Basis for Rating:**

- **Outstanding:** 49 or greater points earned.
- **Excellent:** 43 to 48 points earned.
- **Good:** 39 to 42 points earned.
- **Marginal:** The budget has been overspent or 36 to 38 points earned.
- **Unsatisfactory:** The budget has been overspent and less than 36 points earned.