

Exhibit A Scope of Work

Prepared by the Lawrence Livermore National Laboratory
February 28, 2009

- I. Title of project**
Facilitating Adoption of CCS in California: the AB 1925 Report in 2010
- II. Energy Commission RFP identification**
NOT APPLICABLE
- III. Background**

The U.S. Department of Energy (DOE) has directed Lawrence Livermore National Security, LLC (LLNS) of Lawrence Livermore National Laboratory to perform the work stated in this Appendix A for the Energy Commission. Lawrence Livermore National Laboratory (LLNL), a laboratory owned by the DOE, is located at 7000 East Ave, Livermore, CA. LLNS, a not-for-profit corporation organized under the laws of the State of California, with its principal place of business at 7000 East Ave., Livermore, CA, manages and operates Lawrence Livermore National Laboratory under DOE Contract No. DE-AC52-07NA27344.

The California Energy Resources Conservation and Development Commission (Energy Commission) is an agency organized under the laws of the State of California with a principal place of business at 1516 Ninth Street, Sacramento, California 95814.

IV. Project Goals and Objectives

Problem Statement

The California Energy Commission (Energy Commission), in coordination with the Department of Conservation, has been tasked by Assembly Bill (AB) 1925 with writing a report for the California Legislature "containing recommendations for how the state can develop parameters to accelerate the adoption of cost-effective geologic sequestration strategies for long-term management of industrial carbon dioxide." To meet this goal, a preliminary report was submitted to the legislature to be followed by a second report on or before November 1, 2010. The second report will include general updating of the material in the first report and the results of research and studies in areas laid out in the recommendations contained in the first AB 1925 report. These include the results of the West Coast Regional Carbon Sequestration Partnership (WESTCARB) Phase II pilot in California, other early industrial projects in the state and elsewhere, the potential role of sequestration in a regional (e.g., Western Electricity Coordinating Council (WECC) region) energy supply/demand context, and interagency efforts and in-depth analysis of regulatory

and statutory frameworks.

The overarching objective of this Agreement is to produce, by November 1, 2010, a high quality report that addresses the goals of the AB 1925 legislation.

The supporting objectives of this Agreement are to assure that the process used to produce the report:

- a) includes input from experts, regulators and other stakeholders in geologic sequestration that will be needed to accelerate geologic sequestration of carbon dioxide from industrial sources in the state;
- b) closes relevant gaps in geologic sequestration knowledge and areas as identified in the preliminary AB 1925 report;
- c) is inclusive of all stakeholders and the public.

V. Technical and economic/cost performance objectives

This project does not have any technical and economic/cost performance objectives.

VI. Preliminary Activities

1.1 Attend Kick Off Meeting

The Facility Operator's Project Manager (Principal Investigator) shall attend a "kick off" meeting with the Commission Contract Manager to review the Energy Commission's expectations for: accomplishing tasks described in the work statement; administrative requirements in the terms and conditions of the contract (e.g., invoicing, statements vesting title, prior approvals, data disclosure limitations, monthly progress reporting format and content, etc.); and the Energy Commission's roles and responsibilities. The location of this meeting shall be designated by the Commission Contract Manager.

1.2 Describe Synergistic Projects

No synergistic projects are identified to conduct this project.

1.3 Identify Required Permits

No permits are required to conduct this project.

1.4 Obtain Required Permits

No permits are required to conduct this project.

1.5 Prepare Production Readiness Plan

This project does not involve the design, development, or demonstration of energy-related technology.

VII. Description of tasks to be performed

TECHNICAL TASKS

GLOSSARY

Specific terms and acronyms used throughout this work statement are defined as follows:

AB	Assembly Bill
CARB	California Air Resources Board
CCS	Carbon Capture and Sequestration
CGS	California Geological Survey
CO ₂	Carbon Dioxide
CPR	Critical Project Review
DOE	Department of Energy
DOGGR	Division of Oil, Gas and Geothermal Resources
Energy Commission	California Energy Commission
EOR	Enhanced Oil Recovery
GHG	Greenhouse Gas
LLNL	Lawrence Livermore National Laboratory
LLNS	Lawrence Livermore National Security, LLC
PIER	Public Interest Energy Research
WECC	Western Electricity Coordinating Council
WESTCARB	West Coast Regional Carbon Sequestration Partnership

SCOPE OF WORK

This agreement includes a set of administrative tasks and a set of Technical Tasks. The remainder of this work statement defines these Technical Tasks. Task descriptions include goals, Contractor activities, and deliverables. The deliverables, such as test plans, technical reports and other interim deliverables, for each task are defined to the extent possible, but are subject to change based on

recommendations from the Project Manager and the approval of the Commission Contract Manager. The Contractor shall submit a draft of each deliverable, unless described differently in the Technical Tasks, to the Commission Contract Manager for review and comment in accordance with the approved Schedule of Deliverables. Deliverables not requiring a draft version are indicated by marking "(no draft)" after the deliverable name.

The Commission Contract Manager will provide written comments back to the Contractor on the draft deliverable within 10 working days of receipt. Once agreement has been reached on the draft, the Contractor shall submit the final deliverable to the Commission Contract Manager. The Commission Contract Manager shall provide written approval of the final deliverable within 5 working days of receipt. Key elements from this deliverable shall be included in the Final Report for this project.

When creating technical deliverables, the Facility Operator shall use and follow, unless otherwise instructed in writing by the Commission Contract Manager, the latest version of the PIER Style Manual published on the Energy Commission's web site:

<http://www.energy.ca.gov/contracts/pier/contractors/index.html>

Technical Task List

Task 2.1	Research and assess recent technologic developments and geologic sequestration activities relevant to AB 1925.
Task 2.2	Evaluate constraints on CCS technology and its applications in California, in coordination with relevant state agencies (DOGGR, CGS, California Energy Commission, CARB, Office of the State Fire Marshal), and including consideration of the impact of CCS as a GHG emissions reductions strategy on the California electricity market.
Task 2.3	Evaluate the potential in the state for using CCS in applications identified as early opportunities based on potentially close-to-favorable business cases.
Task 2.4	Assess the potential impact of lessons learned from DOE partnership pilot CCS demonstrations, including WESTCARB, and other projects worldwide (e.g., Norway case) to the California case.
Task 2.5	Investigate CCS in the context of electricity imports and exports within the WECC region and research, synthesize and analyze relevant information and policy on CCS in other WECC states, including consideration of the impact of carbon emissions credit scenarios in a regional context.
Task 2.6	Investigate the existing statutes and regulations relevant to CCS in California as well as the need for and approaches to

	developing protocols for CCS, including technical issues such as site characterization, monitoring and verification, remediation and mitigation, and propose, as appropriate, draft protocols.
Task 2.7	Produce draft conclusions and recommendations in accordance with goals of AB 1925 to assess how to accelerate geologic sequestration in the state.
Task 2.8	Publish and distribute the final report document.

Task 2.1 Research and assess recent technologic developments and geologic sequestration activities relevant to AB 1925

The goal of this task is to provide updates to the material in the first AB 1925 report. This section will summarize recent activities that are providing the science, technology and experience relevant to geologic sequestration in California. These activities include “dual-purpose” projects, in which Carbon Dioxide (CO₂) is injected for enhanced oil or gas recovery. The progress in policy since the first AB 1925 report will be discussed, including the potential for geologic sequestration as a strategy for achieving the Greenhouse Gas (GHG) reduction goals established for California.

The Contractor shall:

- Research and assess recent technologic developments and geologic sequestration activities
- Submit an outline noting sections for revision of existing AB 1925 report;
- Respond, if requested, to issues raised in review of the submitted revised report.

Deliverables:

- Outline of 2010 report
- Revised sections of existing report
- Final draft of 2010 report with revised sections incorporated

Task 2.2 Evaluate constraints on Carbon Capture and Sequestration (CCS) technology and its applications in California, in coordination with relevant state agencies (Division of Oil, Gas and Geothermal Resources (DOGGR), California Geological Survey (CGS), California Air Resource Board (CARB), Office of the State Fire Marshal), and including consideration of the impact of CCS as a GHG emissions reductions strategy on the California electricity market

The goal of this task is to establish better power sector cost estimates, including integration of CCS with electricity cost-of-generation models and to perform research, coordinated across state agencies, to establish and evaluate regulatory, economic, carbon or other tax constraints and/or other factors relevant to CCS and its applications.

The Contractor shall:

- Produce a report evaluating CCS technology constraints and applications in California, in a form suitable for integration into the second AB 1925 Report;
- Respond, if requested, to issues raised in review of the submitted revised report.
- Organize and participate in Stakeholder Workshops
- Submit revised written report for inclusion in final AB 1925 report

Deliverables:

- CCS Technology Constraints Report
- Workshop Summary

Task 2.3 Evaluate the potential in the state for using CCS in applications identified as early opportunities based on potentially close-to-favorable business cases.

The goal of this task is to research the potential of CCS in combination with enhanced oil and gas recovery options, including engaging stakeholders to identify business barriers and point-of-entry factors for adoption of CO₂-Enhanced Oil Recovery (EOR), and the potential, over the next 30 years, to employ CCS on pure CO₂ streams produced by state industries such as ethanol plants, cement plants, and refineries. In each case, the investigation will include identification of potential constraints and evaluation of the business case for these industries to adopt CCS, research on market conditions, growth forecasts (including contributions to future GHG emissions), and the potential impact of CCS on these industries within the state.

The Contractor shall:

- Produce a report on the state's potential to use CCS for early opportunity applications, in a form suitable for integration into the second AB 1925 Report;
- Respond, if requested, to issues raised in review of the submitted draft report
- Submit revised written report for inclusion in final AB 1925 report

Deliverables:

- CCS Early Opportunities Report

Task 2.4 Assess the potential impact of lessons learned from DOE partnership pilot CCS demonstrations, including WESTCARB, and other projects worldwide (e.g., Norway case) to the California case.

The goal of this task is to integrate into the second report the lessons learned, technical and scientific information, and legal and regulatory experiences gained by

the DOE regional partnerships, particularly WESTCARB's experience in California, and the relevant experiences of other projects in California and worldwide.

The Contractor shall:

- Produce a report on the impact of lessons learned from partnership and other pilot projects, in a form suitable for integration into the second AB 1925 Report;
- Respond, if requested, to issues raised in review of the submitted written report.
- Submit a revised written report for inclusion in the final AB 1925 report

Deliverables:

- Lessons-Learned Report

Task 2.5 Investigate CCS in the context of electricity imports and exports within the WECC region and research, synthesize and analyze relevant information and policy on CCS in other WECC states, including consideration of the impact of carbon emissions credit scenarios in a regional context.

The goal of this task is to understand the potential impact of CCS technology adoption on the dynamics of the electricity market in the western region. This requires understanding how other states in the WECC region are developing policies toward CCS and creates a framework for future coordinated efforts.

The Contractor shall:

- Produce a report on CCS in the context of electricity imports and exports in the WECC region, in a form suitable for integration into the second AB 1925 Report;
- Respond, if requested, to issues raised in review of the submitted written report.
- Submit revised written final report for inclusion in final AB 1925 report

Deliverables:

- CCS in WECC Region Report

Task 2.6 Investigate the existing statutes and regulations relevant to CCS in California as well as the need for and approaches to developing protocols for CCS, including technical issues such as site characterization, monitoring and verification, remediation and mitigation, and propose, as appropriate, draft protocols.

The goal of this task is to research on protocols for CCS operations and includes assessing approaches for developing protocols for CCS projects to receive credit for GHG reductions from CARB. It also includes incorporating results of legal

analyses of existing statutes and regulations in California that have potential application to CCS.

The Contractor shall:

- Produce a report documenting investigations in statutes and regulations and protocol development, in a form suitable for integration into the second AB 1925 Report;
- Respond, if requested, to issues raised in review of the submitted written report.
- Submit revised written final report for inclusion in final AB 1925 report

Deliverables:

- Statutes and Regulations Report

Task 2.7 Draft conclusions and recommendations in accordance with the goal of AB 1925 to assess how to accelerate geologic sequestration in the state.

The goal of this task is to summarize the important conclusions of the entire AB 1925 2010 report and make recommendations relevant to the overarching goals of AB 1925.

The Contractor shall:

- Produce a report of conclusions and recommendations, in a form suitable for integration into the second AB 1925 Report;
- Prepare the Draft Report. This document shall be submitted to the Commission Contract Manager in accordance with the procedure for Critical Project Reviews.
- Respond, if requested, to issues raised in review of the submitted written report.
- Conduct Public Workshop to present conclusions of the draft report
- Account for public input and incorporate policy committee comments
- Submit a final report section on draft and conclusions
- Conduct a CPR

Deliverables:

- Conclusions and Recommendations Report
- CPR Report
- Summary of public and committee comments

Task 2.8 Publish and distribute the final report document.

The goal of this task is to produce a bound hardcopy publication and/or electronic copies of the completed report that is of appropriate format and print/graphics quality for distribution to the California legislature and its staff and for limited distribution to other stakeholders, including state agencies, industry,

nongovernmental organizations and members of the public. The final report will also be appropriately formatted for posting on the Commission's website.

The Contractor shall:

- Assure that the final AB 1925 Report document is of appropriate format and print/graphics quality to be distributed to the California legislature;
- Assure that the final AB 1925 Report is of appropriate format for posting on the Commission website;
- Produce a sufficient number of copies, not to exceed 200 copies, to distribute to the California legislature and its staff, and to other stakeholders.

Deliverables:

- Hard copies of final AB 1925 Report (no draft)

Task 3.0 Reporting Tasks

All reports shall be delivered to:

Accounting Office, MS-2
California Energy Commission
1516 9th Street, 1st Floor
Sacramento, CA 95814

Task 3.1 Quarterly Progress Reports

The Contractor shall prepare *written Quarterly Progress Reports* to the Commission Contract Manager by the 30th of the following month, starting after the Department of General Service's contract approval date and shall continue each ~~month~~ until the Final Report has been accepted by the Commission Contract Manager. Attachment A-1 provides a recommended format and content requirements for the Quarterly Progress Report.

quarter 

Task 3.2 Final Report

The Final Report shall be a public document. If the Contractor will be preparing a confidential version of the final report as well, the Contractor shall perform the following tasks for both the public and confidential versions of the Final Report. When creating the Final Report, the Facility Operator shall use and follow, unless otherwise instructed in writing by the Commission Contract Manager, the latest version of the PIER Style Manual published on the Energy Commission's web site:

<http://www.energy.ca.gov/contracts/pier/contractors/index.html>

Subtask 3.2.1 Final Report Outline

- Contractor shall prepare and submit to the Commission Contract Manager for review an outline of the Final Report describing the original purpose, approach and results of the project.
- The outline shall be submitted to the Commission Contract Manager for review. The Commission Contract Manager shall determine if the outline is satisfactory. If the Commission Contract Manager determines that the outline is unsatisfactory, he or she will, in a timely manner, provide to the Contractor written comments, which indicate how the outline can be improved. The Contractor shall revise the outline to meet the Commission Contract Manager's requirements. Upon finding the final report outline satisfactory, the Commission Contract Manager shall provide to the Contractor written approval of it.

Subtask 3.2.2 Draft Final Report for Comment

- The Contractor shall prepare and submit to the Commission Contract Manager a draft Final Report on the project. The format of the report shall follow the approved outline.
- The draft final report shall be submitted to the Commission Contract Manager for review and to determine, in a timely manner, if it is satisfactory. If the Commission Contract Manager determines that it is unsatisfactory, he or she will, provide to the Contractor written comments, which indicate how it can be improved. The Contractor shall revise the draft final report incorporating the Commission Contract Manager's corrections and required changes. Upon finding the revised draft to be satisfactory, the Commission Contract Manager shall provide to the Contractor written approval of it.

Subtask 3.2.3 Final Report

- The Contractor shall prepare Final Report and submit it to the Commission Contract Manager after receiving the Commission Contract Manager's written approval of the draft Final Report. This task shall be deemed complete and accepted by the Commission only when the Commission Contract Manager approves the Final Report in writing. Upon approval, the Contractor shall submit two unbound copies of the Final Report to the Commission Contract Manager.

Task 3.3 Final Meeting

Contractor shall meet with the Commission Contract Manager to present findings, conclusions, and recommended next steps (if any) for the project.

Contractor will also discuss with the Commission Contract Manager the following

contract close-out items:

- What to do with any state-owned equipment (Options), if applicable
- Commission's request for specific "generated" data (not already provided in contract deliverables)
- Need to document Contractor's disclosure of "subject inventions" developed under the contract
- Need to file UCC-1 form re: Commission's interest in patented technology
- Other "surviving" contracts provisions.

VIII. Critical Project Reviews

The Energy Commission will conduct critical project reviews at the conclusion of the following tasks:

- 2.7 Production draft conclusions and recommendations in accordance with the goals of AB 1925 to assess how to accelerate geologic sequestration in the state.

IX. Sponsor's Key personnel and Agreement Management

- A. The name and area code/phone number of the California Energy Commission's Contract Manager is listed on Exhibit D and is the official technical contact for the Energy Commission.

The Sponsor's Contract Manager is responsible for the day to day project status, decisions and communications with the Facility Operator Project Manager (Principal Investigator). The Commission Contract Manager will review and approve all project deliverables, reports, and invoices.

The Sponsor may change the Contract Manager by notice given to the Facility Operator at any time signed by the Contract Officer of the Energy Commission.

- B. The name and area code/phone number of the California Energy Commission's Contract Officer is listed on Exhibit D and will be the Contract Officer for the Agreement and is the official administrative contact for the Energy Commission.

X. Facility Operator's Key Personnel and Agreement Administration

The Facility Operator is obligated to comply with the terms and conditions of its Management and Operating (M&O) Contract with the DOE when performing work under this agreement. The DOE may require substitution of the named "key personnel" under this agreement should the DOE determine that the services of the

Project Manager (Principal Investigator) or other named key personnel are necessary to meet the Facility Operator's M&O Contract obligations to the DOE. Should the DOE direct the Facility Operator to substitute the named key personnel under this agreement, the Facility Operator shall inform the Energy Commission of the directed substitution in accordance with paragraphs A and B below. In the event that the Energy Commission does not concur with the substitution of named key personnel as directed by the DOE, this agreement shall be terminated under Article XX, Termination, of the modified terms and conditions.

- A. The name and area code/phone number of the National Laboratory's Project Manager (Principal Investigator) is on Exhibit D and will be the Project Manager (Principal Investigator) for this project and is the official technical contact for Lawrence Livermore National Laboratory.

The Facility Operator's Project Manager (Principal Investigator) is responsible for the day to day project status, decisions, and communications with the Sponsor's Contract Manager. The Facility Operator's Project Manager (Principal Investigator) will review and approve all project deliverables and reports.

The Facility Operator's Project Manager (Principal Investigator) is designated as "key personnel" under the Agreement. The Energy Commission reserves the right to prior written concurrence of any substitution of the Project Manager (Principal Investigator).

- B. The key personnel are listed on Exhibit D in this agreement.

Facility Operator's key personnel may not be substituted without the Commission Contract Manager's prior written concurrence. Such concurrence shall not be unreasonably withheld. All other personnel may be substituted by Facility Operator, with written notification made to the Commission Contract Manager.

- C. The name and area code/phone number of National Laboratory Agreement Administrator is on Exhibit D and will be the Agreement Administrator for this Agreement and is the official administrative contact for Lawrence Livermore National Laboratory.

XI. Facility Operator's key subcontractors

The Facility Operator's key subcontractors are listed on Exhibit D in this agreement.

Facility Operator's key subcontractors may not be substituted without the Commission Contract Manager's prior written concurrence. Such concurrence shall be timely provided and not unreasonably withheld. Delay in written concurrence may result in a work stoppage of subcontract work. All other subcontractors may be

substituted by Facility Operator, with written notification made to the Commission Contract Manager.

XII. Report standards

- A. The report outline and format will be provided by the Sponsor's Contract Manager to the Facility Operator's Project Manager (Principal Investigator).
- B. All reports shall be delivered to the Accounting address shown on Exhibit D.
- C. Progress Reports. The Facility Operator shall prepare a Progress Report that summarizes all Agreement activities conducted by the Facility Operator to date, with an assessment of ability to complete the project within the current budget and any anticipated cost overruns. Each Progress Report is due to the Commission Contract Manager within 30 days after the end of the reporting period. The Commission Contract Manager will specify the report format and contents and the number of copies to be submitted.
- D. Final Report and Final Meeting. At the conclusion of the Agreement's technical work as provided for this Appendix A Statement and revised project plan, Facility Operator shall prepare a comprehensive written Final Report, including an Executive Summary. The Commission Contract Manager will review and approve the Final Report.

XIII. Schedule

The program will continue for 24 months after advance funding is received by Lawrence Livermore National Laboratory. This Agreement is effective the later date of (1) the date on which it is signed by the last of the parties thereto, or (2) the date on which it is approved by the California Department of General Services as noted on the Standard Agreement, or (3) the date on which the Facility Operator receives advance funding from the Sponsor.

XIV. Budget

Exhibit B, Attachment B-1 shows Energy Commission's Reimbursable Budget.

Exhibit B, Attachment B-3 shows the assessed value of the Federal Administrative Charge not charged to this project.

Exhibit B, Attachment B-3 shows assessed value of synergistic projects. The assessed value of such synergistic projects does not constitute a funding contribution or obligation (either cash or in-kind) on the part of the DOE or the Facility Operator.



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CONTRACT REQUESTS FORM (CRF)

CEC-94 (Revised 5/11)

CALIFORNIA ENERGY COMMISSION



New Contract _____ Amendment to Existing Contract: 500-09-005 Amendment Number: 2

Division	Contract Manager:	MS-	Phone	CM Training Date
Energy Research and Development	Mike Gravely	43	916-327-1370	10/18/2005

Contractor's Legal Name	Federal ID Number
DOE- Lawrence Berkeley National Laboratory	94-2951741

Title of Project
Assessment of barriers and value of CO2 sequestration in California

Term	Start Date	End Date	Amount
New/Original Contract	11/16/2009	8/31/2011	\$ 400,000

Line up the Amendment information as best as possible within the following table.

Amendment #	End Date (mm/dd/yy)	Amount
Amendment 1	2/29/2012	\$0
Amendment 2	2/28/2013	\$0

Business Meeting Information			
Proposed Business Meeting Date	2/8/2012	<input checked="" type="checkbox"/> Consent	<input type="checkbox"/> Discussion
Business Meeting Presenter		Time Needed:	

Agenda Item Subject and Description
Possible approval of Amendment # 2 to Contract 500-09-005 with Lawrence Berkeley National Laboratory for a no-cost time extension of 12 months. This amendment will provide additional time to complete the work after a delay in transitioning this agreement from Lawrence Livermore National Laboratory to Lawrence Berkeley National Laboratory. Contact: Mike Gravely

Business Meeting approval is not required for the following types of contracts: <i>Executive Director's signature is required in all cases.</i>
<input type="checkbox"/> Contracts less than \$10k (<i>Policy Committee's signature is also required</i>)
<input type="checkbox"/> Amendment for a no-cost time extension. Must be first extension, less than one year and original contract less than \$100k.
<input type="checkbox"/> Contracts less than \$25k for Expert Witness in Energy Facility licensing cases and amendments.

Purpose of Contract or Purpose of Amendment, if applicable
The purpose of this amendment is to ensure the continuing efforts of the Commission's Carbon Capture and Sequestration research and development. Amendment #1 was a transition from Lawrence Livermore National Laboratory to the Lawrence Berkeley National Laboratory (LBNL). This transition encountered excessive delays in the administrative and operational transition to LBNL. The transition is now complete and this extension allows more time for the principle investigator to complete the remaining tasks on this effort.

California Environmental Quality Act (CEQA) Compliance
1. Is Contract considered a "Project" under CEQA? <input type="checkbox"/> Yes: skip to question 2 <input checked="" type="checkbox"/> No: complete the following (PRC 21065 and 14 CCR 15378): Explain why contract is not considered a "Project": Contract will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because the research involves writing a report with no field work.
2. If contract is considered a "Project" under CEQA: <input type="checkbox"/> a) Contract IS exempt. (Draft NOE required) <input type="checkbox"/> Statutory Exemption. List PRC and/or CCR section number: _____ <input type="checkbox"/> Categorical Exemption. List CCR section number: _____ <input type="checkbox"/> Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why contract is exempt under the above section: _____ <input type="checkbox"/> b) Contract IS NOT exempt. The Contract Manager needs to consult with the Energy Commission attorney assigned to their division and the Siting Office regarding a possible Initial Study.

CONTRACT REQUESTS FORM (CRF)

CEC-94 (Revised 5/11)

CALIFORNIA ENERGY COMMISSION



Budgets Information								
Contract Amount Funded		Breakdown by FY			Funding Sources			
Funding Source	Amount	FY	Amount	Approved?	Funding Source	FY	Budget List No.	Amount
ARFVTF	\$		\$					\$
ECAA	\$		\$					\$
State- ERPA	\$		\$					\$
Federal	\$		\$					\$
PIER - E	\$		\$					\$
PIER - NG	\$		\$					\$
Reimbursement	\$		\$					\$
Other	\$		\$					\$
TOTAL:	\$0	TOTAL:	\$0		TOTAL:			\$0
Reimbursement Contract #:					Federal Agreement			

Contractor's Administrator/ Officer		Contractor's Project Manager	
Name:	Rick M. Inada	Name:	Elizabeth Burton
Address:	1 Cyclotron Rd. MS 90R2000	Address:	1 Cyclotron Rd # 90R3111 MS 90R3027D
City, State, Zip:	Berkeley, CA 94720	City, State, Zip:	Berkeley, CA 94720-2000
Phone/ Fax:	(510) 486-5882/(510) 486-4673	Phone/ Fax:	(925) 899-6397 /
E-Mail:	rminada@lbl.gov	E-Mail:	elizabethburton25@gmail.com

Contractor Is
<input type="checkbox"/> Private Company (including non-profits) <input type="checkbox"/> CA State Agency (including UC and CSU) <input checked="" type="checkbox"/> Government Entity (i.e. city, county, federal government, air/water/school district, joint power authorities, university from another state)

Selection Process Used
<input type="checkbox"/> Solicitation <u>Select Type</u> Solicitation #: _____ # of Bids: _____ Low Bid? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Non Competitive Bid (Attach CEC 96) <input checked="" type="checkbox"/> Exempt Other Government Entity

Civil Service Considerations
<input type="checkbox"/> Not Applicable (Contract is with a CA State Entity or a membership/co-sponsorship) <input checked="" type="checkbox"/> Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER) <input type="checkbox"/> The Services Contracted: <input type="checkbox"/> are not available within civil service <input type="checkbox"/> cannot be performed satisfactorily by civil service employees <input type="checkbox"/> are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system. <input type="checkbox"/> The Services are of such an: <input type="checkbox"/> urgent <input type="checkbox"/> temporary, or <input type="checkbox"/> occasional nature that the delay to implement under civil service would frustrate their very purpose. Justification: Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER)

Payment Method
<input type="checkbox"/> A. Reimbursement in arrears based on: <input type="checkbox"/> Itemized Monthly <input type="checkbox"/> Itemized Quarterly <input type="checkbox"/> Flat Rate <input type="checkbox"/> One-time <input checked="" type="checkbox"/> B. Advanced Payment <input type="checkbox"/> C. Other, explain:

CONTRACT REQUESTS FORM (CRF)

CEC-94 (Revised 5/11)

CALIFORNIA ENERGY COMMISSION

**Retention**

1. Is contract subject to retention? No Yes
 If Yes, Do you plan to release retention prior to contract termination? No Yes

Justification of Rates

The contract price is reasonable, particularly considering the facility provided by the contract terms. The research will be conducted by a national laboratory; salaries and wages are in accordance with costing practice for all Department of Energy programs.

Disabled Veteran Business Enterprise Program (DVBE)

1. Not Applicable
 2. Meets DVBE Requirements DVBE Amount:\$ _____ DVBE %: _____
 Contractor is Certified DVBE
 Contractor is Subcontracting with a DVBE: _____
 3. Requesting DVBE Exemption (attach CEC 95)

Is Contractor a certified Small Business (SB), Micro Business (MB) or DVBE? No Yes

If yes, check appropriate box: SB MB DVBE

Is Contractor subcontracting any services? No Yes

If yes, give company name and identify if they are a Small Business (SB), Micro Business (MB) and/or DVBE:

Miscellaneous Contract Information

1. Will there be Work Authorizations? No Yes
 2. Is the Contractor providing confidential information? No Yes
 3. Is the contractor going to purchase equipment? No Yes
 4. Check frequency of progress reports
 Monthly Quarterly _____
 5. Will a final report be required? No Yes
 6. Is the contract, with amendments, longer than a year? If yes, why? No Yes

The Department of General Services has agreed to give the Commission blanket authority to execute multi-year contracts to support the Commission's RD&D Programs.

CONTRACT REQUESTS FORM (CRF)



The following items should be attached to this CRF		
1. Scope of Work, Attach as Exhibit A.	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
2. Budget Detail, Attach as Exhibit B.	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
3. CEC 96, NCB Request	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
4. CEC 30, Survey of Prior Work	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
5. CEC 95, DVBE Exemption Request	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
6. Draft CEQA Notice of Exemption (NOE)	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
7. Resumes	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
8. CEC 105, Questionnaire for Identifying Conflicts		<input checked="" type="checkbox"/> Attached
9. CEC 106, IT Component Reporting Form		<input checked="" type="checkbox"/> Attached

 Contract Manager Date Office Manager Date Deputy Director Date

The following signatures are only required when contract approval is delegated to the Executive Office and not approved at a Business Meeting. See Business Meeting Information Section.

 Presiding Policy Committee Date Associate Policy Committee Date Executive Director Date