

CONTRACT REQUESTS FORM (CRF)

CEC-94 (Revised 5/11)

CALIFORNIA ENERGY COMMISSION


 New Contract 500-12-013 Amendment to Existing Contract: _____ Amendment Number: _____

Division	Contract Manager:	MS-	Phone	CM Training Date
ERDD - Environmental Area	Janna Franks	43	916-327-1351	10/8/2009

Contractor's Legal Name	Federal ID Number
The Regents of the University of California on behalf of the Berkeley campus	94-6002123

Title of Project
Updating and Enhancing the Cal-Adapt Website - Visualizing Climate Change Risk and Adaptation Options for

Term	Start Date	End Date	Amount
New/Original Contract	6/30/2013	3/31/2015	\$ 515,000

Line up the Amendment information as best as possible in the following boxes.

Amendment #	End Date (mm/dd/yy)	Amount

Business Meeting Information

Proposed Business Meeting Date	6/12/2013	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Janna Franks	Time Needed:	5 minutes

Agenda Item Subject and Description

Possible approval of Agreement 500-12-013 with the University of California on behalf of the Berkeley campus for \$515,000 to update the Cal-Adapt website, and to perform planning and outreach activities for the Fourth California Climate Assessment. (ERPA funding) Contact: Janna Franks

Business Meeting approval is not required for the following types of contracts: *Executive Director's signature is required in all cases.*

- Contracts less than \$10k (*Policy Committee's signature is also required*)
- Amendment for a no-cost time extension. Must be first extension, less than one year and original contract less than \$100k.
- 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 agreement is to update the Cal-Adapt website to make it more open, scalable, and flexible to the needs of local level decision makers. Since its release, Cal-Adapt has offered visualization tools and data in an accessible manner to members of the climate change adaptation community, conveying the nature of the risk posed by climate change to a wider audience.

This agreement will also provide project management support for the upcoming Fourth California Climate Assessment. Periodic climate assessments were mandated in Executive Order #S-3-05, signed in 2005. The Natural Resources Agency, Energy Commission, and others have begun to plan the Fourth Assessment, which will be more ambitious and stakeholder-driven than previous assessments. Planning and outreach activities will require high-level project management support.

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California Environmental Quality Act (CEQA) Compliance

1. Is Contract considered a "Project" under CEQA?
 Yes: skip to question 2 No: complete the following (PRC 21065 and 14 CCR 15378):
 Explain why contract is not considered a "Project":
 The Contract will not cause a direct or reasonably foreseeable indirect physical change in the environment because it involves updating an existing website and planning/outreach activities.

2. If contract is considered a "Project" under CEQA:
 a) Contract **IS** exempt. (Draft NOE required)
 Statutory Exemption. List PRC and/or CCR section number: _____
 Categorical Exemption. List CCR section number: _____
 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why contract is exempt under the above section:
 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.

Budgets Information								
Contract Amount Funded		Breakdown by FY			Funding Sources			
Funding Source	Amount	FY	Amount	Approved?	Funding Source	FY	Budget List No.	Amount
ARFVTF	\$	12-13	\$515,000	Yes	ERPA	12-13	100.151	\$515,000
ECAA	\$		\$					\$
State- ERPA	\$515,000		\$					\$
Federal	\$		\$					\$
PIER - E	\$		\$					\$
PIER - NG	\$		\$					\$
Reimbursement	\$		\$					\$
Other	\$		\$					\$
TOTAL:	\$515,000	TOTAL:	\$515,000				TOTAL:	\$515,000
Reimbursement Contract #:					Federal Agreement			

Contractor's Administrator/ Officer		Contractor's Project Manager	
Name:	Wendi Hayes	Name:	Kevin Koy
Address:	2150 Shattuck Ave., Suite 313	Address:	Sponsored Projects Office, 2150 Shattuck Ave., Suite 313
City, State, Zip:	Berkeley, CA 94704-5940	City, State, Zip:	Berkeley, CA 94704
Phone/ Fax:	(510) 643-3391 / (510) 642-8236	Phone/ Fax:	510.643.4539 /
E-Mail:	wendih@berkeley.edu	E-Mail:	kkoy@berkeley.edu

Contractor Is

Private Company (including non-profits)
 CA State Agency (including UC and CSU)
 Government Entity (i.e. city, county, federal government, air/water/school district, joint power authorities, university from another state)

Selection Process Used

Solicitation _____ Solicitation #: _____ # of Bids: _____ Low Bid? No Yes
 Non Competitive Bid (Attach CEC 96)
 Exempt Interagency

Civil Service Considerations

Not Applicable (Contract is with a CA State Entity or a membership/co-sponsorship)
 Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER)

CONTRACT REQUESTS FORM (CRF)



- The Services Contracted:
 - are not available within civil service
 - cannot be performed satisfactorily by civil service employees
 - are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system.
- The Services are of such an:
 - urgent
 - temporary, or
 - 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

- A. Reimbursement in arrears based on:
 - Itemized Monthly
 - Itemized Quarterly
 - Flat Rate
 - One-time
- B. Advanced Payment
- C. Other, explain:

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

Rates have been negotiated between the Energy Commission and the University of California.

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?

	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
If yes, give company name and identify if they are a Small Business (SB), Micro Business (MB) and/or DVBE:		
To Be Determined	<input checked="" type="checkbox"/> No	<input type="checkbox"/> SB <input type="checkbox"/> MB <input type="checkbox"/> DVBE
	<input type="checkbox"/> No	<input type="checkbox"/> SB <input type="checkbox"/> MB <input type="checkbox"/> DVBE
	<input type="checkbox"/> No	<input type="checkbox"/> SB <input type="checkbox"/> MB <input type="checkbox"/> DVBE
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	<input type="checkbox"/> No	<input type="checkbox"/> SB <input type="checkbox"/> MB <input type="checkbox"/> 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 type="checkbox"/>	N/A	<input checked="" 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 checked="" type="checkbox"/> Attached
8. CEC 105, Questionnaire for Identifying Conflicts			<input checked="" type="checkbox"/> Attached
9. CEC 106, IT Component Reporting Form			<input 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

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1	N/A	Administration
2	N/A	Enhance the Cal-Adapt Website
3	N/A	Perform Planning and Outreach Activities for the Fourth California Climate Assessment

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Maggi Kelly and Kevin Koy (UC Berkeley)		
2			
3			

GLOSSARY

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

Acronym	Definition
API	Application Programming Interface
CAT	California Climate Action Team
CCM	Commission Contract Manager
CPR	Critical Project Review
GIF	Geospatial Innovation Facility
IPPC	Intergovernmental Panel on Climate Change
PIER	Public Interest Energy Research
UC Berkley	University of California at Berkeley

Problem Statement

The Cal-Adapt Website

In 2009, former Governor Schwarzenegger released a comprehensive Climate Adaptation Strategy for California, and unveiled the prototype Cal-Adapt website, and mandated making the website operational. The website's purpose is to address the scarcity of tools and established methodologies that convey the nature of the risk posed by climate change to a wide audience. There is a serious bottleneck in delivering relevant information, much of which is spatial in nature, to decision makers in a manner that allows them to turn climate change research results into effective climate change adaptation decisions and policies.

The Secretary of California Resources Agency and the Chairman of the California Energy Commission released the official Cal-Adapt website in June 2011. Since its

release, local and regional entities have used the website to determine how climate may change in their jurisdictions. Recently, the Natural Resources Agency issued an adaptation guidance document to local agencies recommending the use of Cal-Adapt as one of its main tools to obtain climate change information at the local level. This agreement will be used to update and enhance the Cal-Adapt website.

The Fourth California Climate Assessment

Executive Order #S-3-05, signed by the Governor in 2005, mandates the generation of periodic assessments of potential climate change impacts and the status of mitigation and adaptation responses in California. The First Assessment, released in 2006, influenced the passage of Assembly Bill 32 (the California Global Warming Solutions Act of 2006). The Second Assessment, released in 2009, informed California's 2009 statewide adaptation strategy. The Third Assessment, released in 2012, made significant progress in projecting climate change impacts and identifying potential barriers to adaptation due to regulatory, legal, institutional, and other factors.

The Natural Resources Agency, Energy Commission, and others have begun to plan the Fourth Assessment, which will involve high-level planning and outreach activities. Specifically, high-level project management support is necessary for planning and outreach to engage those who might contribute directly, as well as potential sources of in-kind contributions. The information from the Fourth Assessment is complex and will require expertise to successfully disseminate it to those outside of the scientific fields of expertise.

Goals of the Agreement

The Cal-Adapt Website

The goal of this Agreement is to enhance the Cal-Adapt website to make it more open, scalable, and flexible. Given the vast amount of data available through the site, it is impossible for any organization to build tools that might satisfy every potential use of the information. By developing an open application programming interface (API) to host the site's data and tools, developers in any organization may use Cal-Adapt's wealth of resources in their own applications. Cal-Adapt will also host a showcase to promote tools that have been built by third party developers using the API.

Hundreds of thousands of data layers are currently available through the site, and with plans to incorporate new data from the Fourth Climate Assessment these numbers will continue to grow. The proposed enhancements will only increase the utilization and value of the information that has been produced by California-funded climate projects.

The Fourth California Climate Assessment

The goal of this Agreement is to foster communications and outreach between the scientists that are producing the new climate change information and the users of the information, including: the general public, planners, decision makers, and experts from other fields.

Objectives of the Agreement

The Cal-Adapt Website

The objectives of this Agreement are to enhance the Cal-Adapt website in the following ways: (1) georeferencing the research projects and reports in a manner that allows users to find all available products relevant to a given geographical location; (2) generation of an open API that will allow third party developers to create their own applications using Cal-Adapt data; and (3) running models interactively via Cal-Adapt, allowing users to change model parameters. The selected models will be examples of successful adaptation studies.

The Fourth California Climate Assessment

The objectives of this Agreement are to provide support for a high-level planning and outreach activities, including: (1) assisting in securing funds; (2) leading interactions with climate researchers and stakeholders; (3) planning and orchestrating outreach activities; and (4) leading the administration of the assessment. The Recipient will subcontract these activities via a competitive bidding process.

TASK 1.0 ADMINISTRATION

Instructions for Submitting Project Deliverables

Please see Task 1.5. Deliverables that do not require a draft version are indicated by marking "(no draft)" after the deliverable name.

Instructions for Submitting Electronic Files and Developing Software

Electronic File Format

The Contractor will deliver an electronic copy (CD ROM or memory stick or as otherwise specified by the CCM) of the full text of any Agreement products in a compatible version of Microsoft Word (.doc).

The following describes the accepted formats of electronic data and documents provided to the Energy Commission as products, and establishes the computer platforms, operating systems, and software versions that will be required to review and approve all software deliverables:

- Data sets will be in Microsoft (MS) Access or MS Excel file format.
- PC-based text documents will be in MS Word file format.
- Documents intended for public distribution will be in PDF file format, with the native file format provided as well.
- Project management documents will be in MS Project file format.

Software Application Development

If this Scope of Work includes any software application development, including but not limited to databases, websites, models, or modeling tools, the Contractor will use the following standard Application Architecture components in compatible versions:

- Microsoft ASP.NET framework (version 3.5 and up) Recommend 4.0.
- Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5.
- Visual Studio.NET (version 2008 and up) Recommend 2010.
- C# Programming Language with Presentation (UI), Business Object and Data Layers.
- SQL (Structured Query Language).
- Microsoft SQL Server 2008, Stored Procedures Recommend 2008 R2.
- Microsoft SQL Reporting Services Recommend 2008 R2
- XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the Energy Commission's Information Technology Services Branch.

MEETINGS

Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement.

The Contractor shall:

- Attend a “kick-off” meeting with the Commission Contract Manager (CCM), the Contracts Officer, and a representative of the Accounting Office. The Contractor will bring its Project Manager, Contracts Administrator, Accounting Officer, and any other individuals designated by the CCM to this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting. Prior to the meeting, the CCM will provide an agenda to all potential meeting participants.

The administrative portion of the meeting shall include, but not be limited to, the following:

- Terms and conditions of the Agreement
- CPR Meetings (Task 1.2)
- Match fund documentation (Task 1.7)
- Permit documentation (Task 1.8)

The technical portion of the meeting shall include, but not be limited to, the following:

- The CCM's expectations for accomplishing tasks described in the Scope of Work;
- An updated Schedule of Deliverables
- Progress Reports (Task 1.4)
- Technical Deliverables (Task 1.5)
- Final Report (Task 1.6)

The CCM will designate the date and location of this meeting.

- Submit an updated Schedule of Products, Gantt Chart (if included), List of Match Funds, and List of Permits to the CCM.

Contractor Deliverables:

- An Updated Schedule of Deliverables (no draft)
- An Updated Gantt Chart (if included) (no draft)
- An Updated List of Match Funds (no draft)
- An Updated List of Permits (no draft)

Task 1.2 CPR Meetings

The goal of this task is to determine if the project should continue to receive Energy Commission funding, and if so whether any modifications must be made to the tasks, deliverables, schedule, or budget.

CPRs provide the opportunity for frank discussions between the Energy Commission and the Contractor. CPRs generally take place at key, predetermined points in the Agreement, as determined by the CCM and as shown in the Technical Task List on page 1 of this Exhibit. However, the CCM may schedule additional CPRs as necessary. The budget will be reallocated to cover the additional costs borne by the Contractor, but the overall contract amount will not increase.

Participants will include the CCM and the Contractor, and may include the Commission Contracts Officer, the PIER Program Team Lead, other Energy Commission staff and Management, and any other individuals selected by the CCM to provide support to the Energy Commission.

The CCM shall:

- Determine the location, date, and time of each CPR meeting with the Contractor. These meetings generally take place at the Energy Commission, but they may take place at another location.
- Send the Contractor an agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion of both match funding and permits.
- Conduct and make a record of each CPR meeting. One of the outcomes of this meeting will be a schedule for providing the written determination described below.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, deliverables, or budget for the remainder of the Agreement. If the CCM concludes that satisfactory progress is not being made, this conclusion will be referred to the Deputy Director of the Energy Research and Development Division.
- Provide the Contractor with a written determination on continuation of the project, in accordance with the schedule. The written determination may include a requirement for the Contractor to revise one or more deliverables that were included in the CPR.

The Contractor shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. The report shall include recommendations and conclusions regarding continued work on the project. The report shall be submitted along with any other deliverables identified in this Scope of Work. Submit these documents to the CCM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

Contractor Deliverables:

- CPR Report(s)
- CPR deliverables identified in the Scope of Work

CCM Deliverables:

- Agenda and a List of Expected Participants

- Schedule for Providing Written Determination
- Written Determination

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Contractor shall:

- Meet with the Energy Commission to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by, at a minimum, the Contractor, the CCM, and the Commission Contracts Officer. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the discretion of the CCM.

The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CCM will determine the appropriate meeting participants.

The administrative portion of the meeting will involve a discussion with the CCM and the Contracts Officer of the following Agreement closeout items:

- Disposition of any state-owned equipment
- Need to file a UCC.1 form regarding the Energy Commission's interest in patented technology
- The Energy Commission's request for specific "generated" data (not already provided in Agreement deliverables)
- Need to document the Contractor's disclosure of "subject inventions" developed under the Agreement
- "Surviving" Agreement provisions such as repayment provisions and confidential deliverables
- Final invoicing and release of retention
- Prepare written documentation of any agreements made between the Contractor and Commission staff during the meeting.
- Prepare a schedule for completing the closeout activities for this Agreement.

Deliverables:

- Written documentation of meeting agreements and all pertinent information (no draft)
- Schedule for completing closeout activities (no draft)

REPORTING

See Exhibit D, Reports/Deliverables/Records.

Task 1.4 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the research objectives of this Agreement.

The Contractor shall:

- Prepare quarterly progress reports that summarize all Agreement activities conducted by the Contractor for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due to the CCM within 10 working days after the end of the reporting period. Attachment A-2, Progress Report Format, provides the recommended specifications.
- In each progress report and invoice, document and verify:
 - Energy Commission funds received by California-based entities;
 - Energy Commission funds spent in California (*required only if the Agreement resulted from a solicitation that required documentation of funds spent in California*); and
 - Match fund expenditures.

Also provide a synopsis of project progress.

Deliverables:

- Quarterly Progress Reports

Task 1.5 Deliverables

The goal of this task is to set forth the general requirements for submitting project deliverables (e.g., reports, summaries, plans, presentation materials). When creating these deliverables, the Contractor will use and follow, unless otherwise instructed in writing by the CCM, the latest version of the PIER Style Manual published on the Energy Commission's website:

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

The Contractor shall:

- Unless otherwise directed in this Scope of Work, submit a draft of each deliverable listed in the Technical Tasks to the CCM for review and comment in accordance with the approved Schedule of Deliverables.
 - Deliverables that do not require a draft version are indicated by marking “(no draft)” after the deliverable name.
 - The CCM will provide written comments to the Contractor on the draft deliverable within 10 working days of receipt.
- Once agreement has been reached on the draft, submit the final deliverable to the CCM. The CCM will provide written approval of the final deliverable within 5 working days of receipt. Key elements from deliverables will be included in the Final Report for this project.

Task 1.6 Final Report

The goal of this task is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. The CCM will review and approve the Final Report, which must be completed on or before the termination date of the Agreement. When creating these deliverables, the Contractor will use and follow, unless otherwise instructed in writing by

the CCM, 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>.

The Final Report will be a public document. If the Contractor has obtained confidential status from the Energy Commission and will also prepare a confidential version of the Final Report, the Contractor will perform the following subtasks for both the public and confidential versions of the Final Report.

Task 1.6.1 Final Report Outline

The Contractor shall:

- Prepare a draft outline of the Final Report.
- Submit the draft outline of Final Report to the CCM for review and approval. The CCM will provide written comments to the Contractor on the draft outline within 10 working days of receipt.
- Once agreement has been reached on the draft, submit the final outline to the CCM. The CCM will provide written approval of the final outline within 5 working days of receipt.

Deliverables:

- Outline of the Final Report

Task 1.6.2 Final Report

The Contractor shall:

- Prepare the draft Final Report for this Agreement in accordance with the approved outline.
- Submit the draft Final Report to the CCM for review and comment. The CCM will provide written comments within 15 working days of receipt. Once agreement on the draft Final Report has been reached, the CCM will forward the electronic version of the report for Energy Commission internal approval. Once the approval is given, the CCM will provide written approval to the Contractor within 5 working days.
- Submit one bound copy of the Final Report with the final invoice.

Deliverables:

- Final Report

MATCH FUNDS AND PERMITS

Task 1.7 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. While the PIER budget for this task will be zero dollars, the Contractor may utilize match funds for this task. Match funds must be spent

concurrently or in advance of PIER funds during the term of this Agreement. Match funds must be identified in writing, and the Contractor must obtain any associated commitments before incurring any costs for which the Contractor will request reimbursement.

The Contractor shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CCM at least 2 working days prior to the kick-off meeting:
 1. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter.
 2. If match funds were a part of the proposal that led to the Energy Commission awarding this Agreement, then provide in the letter:
 - A list of the match funds that identifies:
 - The amount of each cash match fund, its source (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
 - The amount of each in-kind contribution, a description, documented market or book value, its source (including a contact name, address and telephone number), and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Contractor will identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
 - A copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured.
- Discuss match funds and the implications to the Agreement if they are significantly reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a letter notifying the CCM of any additional match funds received during the Agreement.
- Provide a letter to the CCM within 10 working days if during the course of the Agreement existing match funds are reduced. Reduction in match funds may trigger an additional CPR.

Deliverables:

- A Letter Documenting Match Funds (no draft)
- Letter(s) for new Match Funds (*if applicable*) (no draft)
- Letter that Match Funds were Reduced (*if applicable*) (no draft)

Task 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are reimbursable under this Agreement. Permits must be identified in writing before the Contractor can incur any costs related to the use of the permit(s) for which the Contractor will request reimbursement.

The Contractor shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CCM at least 2 working days prior to the kick-off meeting:
 1. If there are no permits required at the start of this Agreement, then state such in the letter.
 2. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies:
 - The type of permit
 - The name, address, and telephone number of the permitting jurisdictions or lead agencies
 - The schedule the Contractor will follow in applying for and obtaining these permits.
- The list of permits and the schedule for obtaining them will be discussed at the kick-off meeting, and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the progress reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, then provide an updated list of permits (including the appropriate information on each permit) and an updated schedule to the CCM.
- As permits are obtained, send a copy of each approved permit to the CCM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CCM within 5 working days. Either of these events may trigger an additional CPR.

Deliverables:

- A letter documenting the permits or stating that no permits are required (no draft)
- Updated list of Permits as they change during the term of the Agreement (no draft)
- Updated schedule for acquiring permits as it changes during the Term of the Agreement (no draft)
- A copy of each approved permit (no draft)

Technical Advisory Committee (TAC)

Task 1.9 Establish a TAC

The goal of this task is to create an advisory committee for Task 2, Update and Enhance the Cal-Adapt Website.

The TAC should be composed of diverse professionals. The number may vary depending on potential interest and availability. The exact composition of the TAC may change as the need warrants. TAC members serve at the discretion of the CCM.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter
- Members of the trades who will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives)
- Public Interest Market Transformation Implementers
- Product Developers relevant to project subject matter
- The U.S. Department of Energy Research Manager
- Public Interest Environmental Groups
- Utility Representatives
- Members of relevant technical society committees

The purpose of the TAC is to:

- Provide guidance in research direction. The guidance may include scope of research; research methodologies; timing; and coordination with other research. The guidance may be based on:
 - Technical area expertise
 - Knowledge of market applications
 - Linkages between the agreement work and other past, present, or future research (both public and private sectors) TAC members are aware of in a particular area.
- Review deliverables. Provide specific suggestions and recommendations for needed adjustments, refinements, or enhancement of the deliverables.
- Evaluate tangible benefits to California of this research and provide recommendations as needed to enhance tangible benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the research products.

The Contractor shall:

- Prepare a draft list of potential TAC members that includes name, company, physical and electronic addresses, and phone numbers, and submit it to the CCM at least 2 working days prior to the kick-off meeting. This list will be discussed at the kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.
- Recruit TAC members and ensure that each individual understands the member obligations described above, as well as the meeting schedule outlined in Task 1.10.
- Prepare the final list of TAC members.
- Submit letters of acceptance or other comparable documentation of commitment for each TAC member.

Deliverables:

- List of TAC Members

- Letters of acceptance or other comparable documentation of commitment for each TAC Member (no draft)

Task 1.10 Conduct TAC Meetings

The goal of this task is for the TAC to provide strategic guidance to this project by participating in regular meetings, which may be held via teleconference.

The Contractor shall:

- Discuss the TAC meeting schedule at the kick-off meeting. The number of face-to-face meetings and the location of TAC meetings will be determined in consultation with the CCM. This draft schedule will be presented to the TAC members during recruiting and finalized at the first TAC meeting.
- Organize and lead TAC meetings in accordance with the schedule. Changes to the schedule must be pre-approved in writing by the CCM.
- Prepare TAC meeting agenda(s) with back-up materials for agenda items.
- Prepare TAC meeting summaries, including any recommended resolutions of major TAC issues.

Deliverables:

- TAC Meeting Schedule
- TAC Meeting Agenda(s) with Back-up Materials for Agenda Items(no draft)
- Written TAC meeting summaries, including recommended resolutions of major TAC issues (no draft)

TECHNICAL TASKS

The Contractor must prepare all deliverables in accordance with the requirements in Task 1.5. Deliverables not requiring a draft version are indicated by marking “(no draft)” after the deliverable name.

Task 2 Enhance the Cal-Adapt Website

The goal of this task is to add the latest scientific data to the Cal-Adapt website and improve the ability of users and developers to access the information.

The Contractor shall:

- Develop an open application programming interface for Cal-Adapt that allows third party developers to create their own applications using Cal-Adapt data. These applications would be solely developed and hosted by other interested parties. Applications that pass the Contractor’s standards will be highlighted in an “Application Showcase” on the Cal-Adapt website.
- Prepare a Memo on Completed API and Showcased Applications that confirms the completion of the API and includes a list of applications highlighted on the Application Showcase Cal-Adapt webpage.
- Acquire, format, and post new and updated data including new Intergovernmental Panel on Climate Change (IPCC) assessment outputs for climate projections, wildfire risks, and inundation maps. Develop additional climate tools (<http://cal-adapt.org/tools/>) based on the new and updated data. The tools will allow users to visualize the information in locally-relevant ways.
- Prepare a List of New Cal-Adapt Tools.
- Launch the query and visualization interface for the California Climate Action Team (CAT) Climate Research Catalog. It will include a georeferencing of CAT research projects and reports so that users can easily find all available products that are relevant to a given geographical location. For example, users may use an online map to easily find all the reports, data, and research activities relevant to a particular county.
- Take a Screen Shot of the Working Georeferenced CAT Climate Research Catalog.
- Acquire, format, and post ancillary point of interest data such as facilities locations (e.g., emergency response units) that have the potential to be impacted from extreme climate events. The data must come from applied research covered under other contracts.
- Develop a programming interface (wrapper) that allows Cal-Adapt’s large data sets to be directly queried by research experts using the data analysis software R Project for Statistical Computing. This interface will enable experts to efficiently model and analyze large amounts of data in unique ways using a powerful and open source suite of tools. Select analyses and models derived from these tools will be highlighted in an “Adaptation Studies Showcase.”
- Prepare a List of Analyses and Models Highlighted on the “Adaptation Studies Showcase”.

Deliverables:

- Memo on Completed API and Showcased Applications (no draft)
- List of New Cal-Adapt Tools (no draft)
- Screen Shot of the Working Georeferenced CAT Climate Research Catalog (no draft)
- List of Analyses and Models Highlighted on the “Adaptation Studies Showcase” (no draft)

Task 3 Perform Planning and Outreach Activities for the Fourth California Climate Assessment

The goal of this task is to foster communications and outreach between the scientists that are producing the new climate change information and the users of the information, including: the general public, planners and decision makers, and experts from other fields.

The Contractor shall:

- Prepare a Competitive Bid Opportunity Notice and perform a competitive bidding process (with a three bid minimum) to obtain a subcontractor to perform the project management activities necessary for the Fourth California Climate Assessment.
- Provide the Resume of the Selected Subcontractor.
- Update the Energy Commission agreement budget to include subcontractor expenses.

The Subcontractor shall:

- Assist in securing necessary funds to support the Fourth California Climate Assessment.
- Lead interactions with climate researchers and stakeholders.
- Plan and orchestrate outreach activities.
- Lead the administration of the Fourth Assessment.

Deliverables:

- Competitive Bid Opportunity Notice
- Resume of the Selected Subcontractor
- Updated Energy Commission Agreement Budget