

CONTRACT REQUESTS FORM (CRF)

CEC-94 (Revised 5/11)

CALIFORNIA ENERGY COMMISSION


 New Contract _____ Amendment to Existing Contract: _____ Amendment Number: _____

Division	Contract Manager:	MS-	Phone	CM Training Date
ERDD - Environmental Area	Dan Gallagher	43	916-327-1315	9/29/2009

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
Guidebook on Title 24 Benefits for Local Governments

Term	Start Date	End Date	Amount
New/Original Contract	1/1/2013	9/30/2014	\$ 200,000

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

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

Business Meeting Information

Proposed Business Meeting Date	10/10/2012	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Dan Gallagher	Time Needed:	5 minutes

Agenda Item Subject and Description

Possible approval of Contract 500-12-003 for \$200,000.00 with the Regents of the University of California on behalf of the Berkeley campus to develop a guidebook on Title 24 Benefits for Local Governments as it pertains to natural gas efficiency standards for new and retrofits of commercial and residential buildings. The length of this agreement is 18 months. (PIER natural gas funding) Contact: Dan Gallagher (5 minutes)

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

This project will document the environmental, economic, and equity costs and benefits to local governments of mandatory (i.e. Title 24, Part 6) and voluntary natural gas efficiency standards, both for new buildings and for retrofits of existing commercial and residential structures. This project will consider costs and benefits to local governments such as:

- Direct energy cost savings in new and future local government buildings;
- Avoidance of hospitalizations, missed workdays, and other public health problems in local populations due to reduced emissions of natural gas-related air pollutants;
- Job creation effects of required or encouraged efficiency upgrades to residential structures;
- Local sales tax effects of required or encouraged purchase of new building components or appliances;
- Property value, property tax, and transfer tax effects of natural gas efficiency upgrades in residential structures;
- Direct administrative costs of implementing local building energy efficiency programs.

The product of this work will be a user-friendly Guidebook directed at the 530+ local building departments in California that enforce the Building Energy Efficiency Standards and implement energy efficiency upgrade programs, as well as select policy makers in those municipalities. This Guidebook will provide specific findings on the anticipated magnitude of net benefits to local governments from natural gas efficiency upgrades in residential and nonresidential building stock, and will discuss options to overcome real or perceived barriers to local enforcement of existing and future Building Energy Efficiency Standards. The Guidebook will be accompanied by an outreach program conducted in coordination with organizations such as the Governor's Office of Planning and Research and the Air Resources Board.

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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":
 Contract will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because it involves research 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	\$200,000	Yes	NG Subaccount,	11-12	501.001F	\$200,000
ECAA	\$		\$					\$
State- ERPA	\$		\$					\$
Federal	\$		\$					\$
PIER - E	\$		\$					\$
PIER - NG	\$200,000		\$					\$
Reimbursement	\$		\$					\$
Other	\$		\$					\$
TOTAL:	\$200,000	TOTAL:	\$200,000				TOTAL:	\$200,000
Reimbursement Contract #:					Federal Agreement			

Contractor's Administrator/ Officer		Contractor's Project Manager	
Name:	Jyl Baldwin	Name:	Louise Mozingo
Address:	130 Mulford Hall # 3114	Address:	202 Wurster Hall
City, State, Zip:	Berkeley, CA 94720-3114	City, State, Zip:	Berkeley, CA 94720-2000
Phone/ Fax:	510-642-8114 / 510-642-8236	Phone/ Fax:	510-643-9804 / 510-643-6166
E-Mail:	Jbaldwin@uclink.berkeley.edu	E-Mail:	lmozingo@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 Select Type 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)

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- 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:

This is an interagency Contract which is exempt from civil service consideration.

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

The rates charged in this contract are in accordance with the industry standard for like work.

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 checked="" type="checkbox"/> No	<input type="checkbox"/> Yes		
If yes, give company name and identify if they are a Small Business (SB), Micro Business (MB) and/or 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	
	<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	
	<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	
	<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	
	<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 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

**Exhibit A
SCOPE OF WORK**

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Local Government Benefits from Building Energy Efficiency Standards
3		Technology Transfer and Outreach

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Louise Mozingo, Bill Eisenstein (UC Berkeley)		
2	Louise Mozingo, Bill Eisenstein, Cynthia Kroll, David Lehrer (UC Berkeley)		
3	Louise Mozingo, Bill Eisenstein, Cynthia Kroll, David Lehrer (UC Berkeley)		

GLOSSARY

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

Acronym	Definition
AB 758	Assembly Bill 758 (Building Retrofits)
ARB	California Air Resources Board
CALBO	California Building Officials (as an organization)
CPR	Critical Project Review
Energy Commission	California Energy Commission
GHG	Greenhouse Gas
PAC	Project Advisory Committee
PIER	Public Interest Energy Research
Standards	Residential and Nonresidential Building Energy Efficiency Standards, Title 24, Part 6

Acronym	Definition
UCC.1	Uniform Commercial Code (Financing Statement)

Problem Statement

The California Energy Commission has the authority to adopt residential and nonresidential building energy efficiency standards (Standards) for newly constructed buildings and additions and alterations, to minimize the energy consumption and environmental footprints of buildings. These Standards, commonly known as Title 24, Part 6, are not directly enforced by the Energy Commission, but instead are enforced by the 530+ local building departments across the state that issue permits for, and conduct inspections of, construction activities. The achievement of the Standard's predicted energy and cost savings is therefore dependent upon vigorous enforcement by these local agencies. Research providing information on the net benefits to local governments from the Standards is needed to inform future regulatory development and ensure that present and future energy efficiency and greenhouse gas (GHG) emissions goals are achieved.

Significant GHG emission reductions can be achieved through sustainable construction, operation, and renovation of new and existing commercial and residential buildings. According to the California Air Resources Board (ARB), buildings are the second largest source of the state's GHG emissions (<http://www.arb.ca.gov/cc/greenbuildings/greenbuildings.htm>). The residential sector alone accounts for about 22% of all natural gas usage in the state, predominantly for space heating and water heating, each of which account for about 44% of total residential use. Since 1978, when Title 24 was first introduced, per-household consumption of natural gas has dropped from 848 therms to 454, a reduction of nearly 48%. Since the major Title 24 update in 1998, per-household natural gas usage in California has dropped from 609 therms to 454 therms, a decrease of more than 25%.

In addition, the likelihood of widespread compliance with future building energy efficiency standards, or voluntary efforts by local governments to go beyond state-required standards through Energy Commission-approved local ordinances, will be enhanced by such research. This is critical given that future Standards will have to be much more far-reaching than today's if the State is to achieve the ambitious long-range energy and greenhouse gas emissions goals of Assembly Bill 32 (AB 32). The AB 32 Scoping Plan seeks to achieve 26 MMT CO₂e of emission reductions from the green building sector (primarily through energy efficiency improvements), which represents 15% of California's 2020 greenhouse gas emission reduction target of 169 MMT CO₂e. Much deeper reductions will be necessary to achieve the Executive Order S-03-05 goal to reduce GHG emissions 80% below 1990 levels by 2050, or the Energy Commission's building goals of zero-net-energy in newly constructed residential by 2020 and nonresidential by 2030.

Goals of the Project

The goals of the project are to:

- Document the environmental, economic, and equity costs and benefits to local governments of mandatory (i.e. Title 24, Part 6) and voluntary natural gas efficiency standards for residential and nonresidential buildings, including newly constructed buildings, additions, and alterations.
- Identify critical factors that affect the level of costs or benefits to local governments, or play a role in incentivizing or impeding achievement of benefits
- Communicate research findings to local government agencies that implement Title 24, Part 6 and other state or local building energy efficiency programs, and selected local government policymakers.

Objectives of the Project

The objectives of the project are:

- Greater achievement of the Standards' anticipated statewide energy and monetary savings through improved enforcement by local government agencies
- Improved understanding of economic benefits of building energy efficiency to key decision-making and enforcement entities
- Improved local government support for future Standards updates and other state and local building energy efficiency initiatives

TASK 1.0 ADMINISTRATION

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 Project.

The Contractor shall:

- Attend a "kick-off" meeting with the Commission Contract Manager, the Contracts Officer, and a representative of the Accounting Office. The Contractor shall bring their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the Commission Contract Manager to this meeting. The administrative and technical aspects of this Project will be discussed at the meeting. Prior to the kick-off meeting, the Commission Contract Manager will provide an agenda to all potential meeting participants.

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

- CPRs (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 Commission Contract Manager'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)
- Establish the PAC (Task 1.10)
- PAC Meetings (Task 1.11)

The Commission Contract Manager shall designate the date and location of this meeting.

Contractor Deliverables:

- An Updated Schedule of Deliverables
- An Updated List of Match Funds
- An Updated List of Permits
- Schedule for Recruiting PAC Members

Commission Contract Manager Deliverables:

- Final Report Instructions

Task 1.2 CPR Meetings

The goal of this task is to determine if the project should continue to receive Energy Commission funding to complete this Project and if it should, are there any modifications that need to 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 Project, as determined by the Commission Contract Manager and as shown in the Technical Task List above and in the Schedule of Deliverables. However, the Commission Contract Manager may schedule additional CPRs as necessary, and, if necessary, the budget will be reallocated to cover the additional costs borne by the Contractor, but the overall contract amount will not increase.

Participants include the Commission Contract Manager and the Contractor, and may include the Commission Contracts Officer, the PIER Program Team Lead, other Energy Commission staff and Management as well as other individuals selected by the Commission Contract Manager to provide support to the Energy Commission.

The Commission Contract Manager 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 the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on 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 continuing, whether or not to modify the tasks, schedule, deliverables and budget for the remainder of the Project, including not proceeding with one or more tasks.

The Contractor shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Project toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other deliverables identified in this Scope of Work. Submit these documents to the Commission Contract Manager 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 Project.

Contractor Deliverables:

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

Commission Contract Manager Deliverables:

- Agenda and a List of Expected Participants
- Schedule for Written Determination
- Written Determination

Task 1.3 Final Meeting

The goal of this task is to closeout this Project.

The Contractor shall:

- Meet with the Energy Commission to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Project.

This meeting will be attended by, at a minimum, the Contractor, the Commission Contracts Officer, and the Commission Contract Manager. The technical and administrative aspects of Project closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the Commission Contract Manager.

The technical portion of the meeting shall present findings, conclusions, and recommended next steps (if any) for the Project. The Commission Contract Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Contract Manager and the Contracts Officer about the following Project closeout items:

- What to do with any state-owned equipment (Options)
 - Need to file UCC.1 form re: Energy Commission's interest in patented technology
 - Energy Commission's request for specific "generated" data (not already provided in Project deliverables)
 - Need to document Contractor's disclosure of "subject inventions" developed under the Project
 - "Surviving" Project provisions, such as repayment provisions and confidential deliverables
 - Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Project.

Deliverables:

- Written documentation of meeting agreements and all pertinent information
- Schedule for completing closeout activities

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 Project.

The Contractor shall:

- Prepare progress reports which summarize all Project activities conducted by the Project for the reporting period, including an assessment of the 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 10 working days after the end of the reporting period. Attachment A-2, Progress Report Format, provides the recommended specifications.

Deliverables:

- Quarterly Progress Reports

Task 1.5 Test Plans, Technical Reports and Interim Deliverables

The goal of this task is to set forth the general requirements for submitting test plans, technical reports and other interim deliverables, unless described differently in the Technical Tasks. When creating these deliverables, the Contractor 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>

The Contractor shall:

- Unless otherwise directed in this Scope of Work, submit a draft of each deliverable listed in the Technical Tasks to the Commission Contract Manager for review and comment in accordance with the reviewed Schedule of Deliverables. The Commission Contract Manager will provide written comments back to the Contractor on the draft deliverable within 10 working days of receipt. Once comment and review has been conducted on the draft, the Contractor shall submit the final deliverable to the Commission Contract Manager. The Commission Contract Manager shall provide written review and comment 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.

Task 1.6 Final Report

The goal of this task is to prepare a comprehensive written Final Report that describes the original purpose, approach, results and conclusions of the work done under this Project. The Commission Contract Manager will review and comment on the Final Report. The Final Report must be completed on or before the termination date of the Project. When creating these deliverables, the Contractor 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>

The Final Report shall be a public document. If the Contractor has obtained confidential status from the Energy Commission and will be preparing a confidential version of the Final Report as well, the Contractor shall 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 Commission Contract Manager for review and comment. The Commission Contract Manager will provide written comments back to the Contractor on the draft outline within 10 working days of receipt. Once the review and comment period has ended on the draft, the Contractor shall submit the final outline to the Commission Contract Manager. The Commission Contract Manager shall provide written review of the final outline within 5 working days of receipt.

Deliverables:

- Draft Outline of the Final Report
- Final Outline of the Final Report

Task 1.6.2 Final Report

The Contractor shall:

- Prepare the draft Final Report for this Project in accordance with the reviewed outline.
- Submit the draft Final Report to the Commission Contract Manager for review and comment. The Commission Contract Manager will provide written comments within 10 working days of receipt.

Once the review and comment period on the draft Final Report has concluded, the Commission Contract Manager shall forward the electronic version of this report for Energy Commission internal review. Once the review is given, the Commission Contract Manager shall provide written review and comment to the Contractor within 5 working days.

- Submit one bound copy of the Final Report with the final invoice.

Deliverables:

- Draft Final Report
- Final Report

MATCH FUNDS, PERMITS, AND ELECTRONIC FILE FORMAT**Task 1.7 Identify and Obtain Matching Funds**

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

The costs to obtain and document match fund commitments are not reimbursable through this Project. While the PIER budget for this task will be zero dollars, the Contractor may utilize match funds for this task. Match funds shall be spent concurrently or in advance of PIER funds during the term of this Project. Match funds must be identified in writing, and the associated commitments obtained before the Contractor can incur any costs for which the Contractor will request reimbursement.

The Contractor shall:

- Prepare a letter documenting the match funding committed to this Project and submit it to the Commission Contract Manager 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 Project 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 Project, 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.
 - Amount of each in-kind contribution, a description, documented market or book value, and 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 shall identify its owner and provide a contact name, address and 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 Project 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 the appropriate information to the Commission Contract Manager if during the course of the Project additional match funds are received.
- Notify the Commission Contract Manager within 10 working days if during the course of the Project existing match funds are reduced. Reduction in match funds may trigger an additional CPR.

Deliverables: N/A

- A letter regarding Match Funds or stating that no Match Funds are provided
- Letter(s) for New Match Funds
- A copy of each Match Fund commitment letter
- Letter that Match Funds were Reduced (if applicable)

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 Project schedule on track.

Permit costs and the expenses associated with obtaining permits are reimbursable under this Project. 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 Project and submit it to the Commission Contract Manager at least 2 working days prior to the kick-off meeting:
 1. If there are no permits required at the start of this Project then state such in the letter.
 2. If it is known at the beginning of the Project that permits will be required during the course of the Project, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or

lead agencies

- 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 the copies of the permits will be developed. The implications to the Project 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 Project additional permits become necessary, then provide the appropriate information on each permit and an updated schedule to the Commission Contract Manager.
- As permits are obtained, send a copy of each reviewed permit to the Commission Contract Manager.
- If during the course of the Project permits are not obtained on time or are denied, notify the Commission Contract Manager 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
- Updated list of Permits as they change during the Term of the Project
- Updated schedule for acquiring Permits as it changes during the Term of the Project
- A copy of each reviewed Permit

Task 1.9 Electronic File Format

The goal of this task is to unify the formats of electronic data and documents provided to the Energy Commission as contract deliverables. Another goal is to establish the computer platforms, operating systems and software that will be required to review and comment on all software deliverables.

The Contractor shall:

- Deliver documents to the Commission Contract Manager in the following formats:
 - Data sets shall be in Microsoft (MS) Access or MS Excel file format.
 - PC-based text documents shall be in MS Word file format.
 - Documents intended for public distribution shall be in PDF file format, with the native file format provided as well.
 - Project management documents shall be in MS Project file format.
- Request exemptions to the electronic file format in writing at least 90 days before the deliverable is submitted.

Deliverables:

- A letter requesting exemption from the Electronic File Format (if applicable)

PAC**Task 1.10 Establish the PAC**

The goal of this task is to create an advisory committee for this Agreement.

The PAC should be composed of diverse professionals. The number can vary depending on potential interest and time availability. The exact composition of the PAC may change as the need warrants. PAC members serve at the discretion of the Commission Contract Manager.

The PAC 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
- U.S. Department of Energy Research Manager
- Public Interest Environmental Groups
- Utility Representatives
- Members of the relevant technical society committees

The purpose of the PAC is to:

- Provide guidance in research direction. The guidance may include scope of research; research methodologies; timing; 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) they 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 PAC members that includes name, company, physical and electronic address, and phone number and submit it to the Commission Contract Manager 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 PAC meeting will be developed.
- Recruit PAC members and ensure that each individual understands the member obligations described above, as well as the meeting schedule outlined in Task 1.11.
- Prepare the final list of PAC members.
- Submit letters of acceptance or other comparable documentation of commitment for each PAC member.

Deliverables:

- Draft List of PAC Members
- Final List of PAC Members
- Letters of acceptance, or other comparable documentation of commitment for each PAC Member

Task 1.11 Conduct PAC Meetings

The goal of this task is for the PAC to provide strategic guidance to this project by participating in regular meetings or teleconferences.

The Contractor shall:

- Discuss the PAC meeting schedule at the kick-off meeting. The number of face-to-face meetings and teleconferences and the location of PAC meetings shall be determined in consultation with the Commission Contract Manager. This draft schedule shall be presented to the PAC members during recruiting and finalized at the first PAC meeting.
- Organize and lead PAC meetings in accordance with the schedule. Changes to the schedule require prior review in writing by the Commission Contract Manager.
- Prepare PAC meeting agenda(s) with back-up materials for agenda items.
- Prepare PAC meeting summaries, including recommended resolution of major PAC issues.

Deliverables:

- Draft PAC Meeting Schedule
- Final PAC Meeting Schedule
- PAC Meeting Agenda(s) with Back-up Materials for Agenda Items
- Written PAC meeting summaries, including recommended resolution of major PAC issues

TECHNICAL TASKS

The Contractor shall 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 2.0 Local Government Benefits from Building Energy Efficiency Standards

The goal of this task is to document the environmental, economic, and equity costs and benefits to local governments of mandatory (i.e. Title 24, Part 6 Standards) and voluntary natural gas efficiency standards for residential and nonresidential buildings, including newly constructed buildings, additions, and alterations. Potential benefits and costs to be covered include:

- Direct energy cost savings in new and future local government buildings;
- Avoidance of hospitalizations, missed workdays, and other public health problems in local populations due to reduced emissions of natural gas-related air pollutants;
- Job creation effects of required or encouraged efficiency upgrades to residential structures;
- Local sales tax effects of required or encouraged purchase of new building components or appliances;
- Property value, property tax, and transfer tax effects of natural gas efficiency upgrades in residential structures;
- Direct administrative costs of implementing local building energy efficiency programs; and
- Indirect costs from sales and property tax due to higher costs of construction or administrative delays.

The research will also identify any issues and concerns surrounding implementation of the Standards that may either incentivize or impede achievement of the potential benefits. This work will generate findings pertinent not only to recent Standards updates, Energy Upgrade California and AB 758 implementation efforts, but also to potential long-term costs and benefits from future efforts to meet more ambitious natural gas efficiency standards consistent with the policy goals of the Energy Commission, the ARB, and the State of California generally. Where possible, the work will also document any observed or predicted variance in the findings across the major regions of the state.

The Contractor shall:

- Conduct interviews with local building department staff and selected builders in a sample of California cities, including those anticipating extensive new development, those where the housing stock is predominantly older upgrade candidates (where Energy Upgrade California implementation is more pertinent), and those with local ordinances for energy efficiency going beyond the Standards

or finance programs for energy efficiency upgrades (such as PACE programs). Interviews will cover how Standards are implemented, the observations of city and building department staff on the effects of the Standards on adoption of energy efficient design and equipment, the state of staffing resources within local building departments, as well as the identification of factors that incentivize or impede the achievement of benefits to local government from the Standards.

- Write a memorandum that summarizes the results of interviews conducted with local building officials and California Building Officials (CALBO) energy committee.
- Assess previous Energy Commission findings regarding the cost effectiveness of energy efficiency upgrade programs, particularly those components relevant to natural gas usage and benefits and costs experienced by local government.
- Assess relevant analytical and policy research from other sources, including the U.S. Department of Energy, public health agencies, and academic literature.
- Consult the California Controller's Office Annual Cities and Counties report, which summarizes the budgets of each city and county government in the state of California.
- Synthesize findings from these sources on the benefits and costs experienced by local government from enforcement of Building Energy Efficiency Standards, including those listed above, as well as any factors incentivizing or impeding the achievement of benefits to local governments.
- Prepare a user-friendly Guidebook directed primarily at the 530+ local building departments in California, as well as select policy makers in those municipalities, that summarizes findings on the net economic benefits to them from enforcement of the Standards and identifies ways of minimizing costs and reducing barriers to the achievement of benefits.

Deliverables:

- A memorandum summarizing the results of interviews conducted with local building officials and CALBO energy committee (no draft)
- A user-friendly Guidebook directed primarily at the 530+ local building departments in California that enforce the Standards and implement energy efficiency upgrade programs, as well as select policy makers in those municipalities, that summarizes findings on the net economic benefits to local governments of compliance with the Building Energy Efficiency Standards

Task 3.0 Technology Transfer and Outreach

The goal of this task is to make the knowledge gained, research results, and lessons learned available to key decision-makers in state and local government.

The Contractor shall:

- Conduct presentations and other outreach activities based on the Guidebook prepared in Task 2 to selected local building departments and local governments throughout California.
- Submit a copy of Powerpoint presentation and handouts used in presentations to the Commission Contract Manager.
- Work with the Governor's Office of Planning and Research, the California Air Resources Board, CALBO, Energy Commission staff, utilities and other entities that routinely conduct outreach to California local governments to distribute the Guidebook and disseminate its findings.
- Present the findings of the Guidebook to at least one appropriate professional conference.

Deliverables:

- Copy of Powerpoint presentation and handouts used in presentations (no draft)