

CONTRACT REQUEST FORM (CRF)

CEC-94 (Revised 10/2015)

CALIFORNIA ENERGY COMMISSION

A) New Agreement 300-15-011 (To be completed by CGL Office)

B) Division	Agreement Manager:	MS-	Phone
EAD	Sabaratham Thamilseran	22	916-651-2927

C) Contractor's Legal Name	Federal ID Number
ADM Associates, Inc.	94-2564794

D) Title of Project
California Commercial End-Use Survey

E) Term and Amount	Start Date	End Date	Amount
	6/15/2016	3/30/2020	\$ 12,990,063

F) Business Meeting Information			
<input type="checkbox"/> Operational agreement (see CAM Manual for list) to be approved by Executive Director			
<input type="checkbox"/> ARFVTP agreements under \$75K delegated to Executive Director.			
Proposed Business Meeting Date	5/17/2016	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Sabaratham Thamilseran	Time Needed:	5 minutes
Please select one list serve. EPIC (Electric Program Investment Charge)			

Agenda Item Subject and Description
ADM ASSOCIATES, INC. Proposed resolution approving Agreement 300-15-011 with ADM Associates, Inc. for a \$12,990,063 contract to (1) develop a methodology to conduct a survey of the energy-using characteristics of commercial utility customers that will serve as a baseline and support the Energy Commission's work on the demand forecast, (2) implement the survey, and (3) provide an unbiased, comprehensive analysis of the data for more geographically disaggregated forecasts. The Commercial End-Use Survey (CEUS) will facilitate the commercial success and market adoption of technologies, strategies, and other innovations. Of the total contract budget, \$7,990,063 will be funded from the EPIC Program, and is immediately available. The total budget includes up to an additional \$5,000,000 contingent upon other non-EPIC funding becoming available. (EPIC and other funding) Contact: Sabaratham Thamilseran. (Staff presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance
1. Is Agreement considered a "Project" under CEQA? <input checked="" type="checkbox"/> Yes (skip to question 2) <input type="checkbox"/> No (complete the following (PRC 21065 and 14 CCR 15378)): Explain why Agreement is not considered a "Project": Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because
2. If Agreement is considered a "Project" under CEQA: <input checked="" type="checkbox"/> a) Agreement IS exempt. (Attach draft NOE) <input type="checkbox"/> Statutory Exemption. List PRC and/or CCR section number: _____ <input checked="" type="checkbox"/> Categorical Exemption. List CCR section number: <u>Cal. Code Regs., tit 14, § 15306</u> <input type="checkbox"/> Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section: California Code of Regulations, Title 14, Section 15306 provides categorical exemption for a project consisting of basic data collection, research, experimental management, and resource evaluation activities that does not result in a serious or major disturbance to an environmental resource. This project involves the collection and analytics of energy consumption and building data for the commercial sector in California. Therefore, the project qualifies as a categorical exemption under Section 15306. <input type="checkbox"/> b) Agreement IS NOT exempt. (Consult with the legal office to determine next steps.) Check all that apply <input type="checkbox"/> Initial Study <input type="checkbox"/> Environmental Impact Report <input type="checkbox"/> Negative Declaration <input type="checkbox"/> Statement of Overriding Considerations <input type="checkbox"/> Mitigated Negative Declaration

H) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)				
Legal Company Name:	Budget	SB	MB	DVBE
Matrix Energy Service, Inc.	\$ 2,933,289	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DAV Energy Solutions, Inc.	\$ 417,586	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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I) List all key partners: (attach additional sheets as necessary)
Legal Company Name:

J) Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
EPIC Program	14/15	301.001B	\$ 7,990,063
ERPA	15/16	800.014	\$ 1,200,000
ERPA	15/16	800.010	75,000
ERPA	15/16	800.012	100,000
ERPA	15/16		\$ 300,000
ERPA	16/17		\$ 500,000
TBD	17/18		\$ 2,825,000
R&D Program Area:	EDMFO: EDMF	TOTAL:	\$ 12,990,063
Explanation for "Other" selection		N/A	
Reimbursement Contract #:		N/A	
Federal Agreement #:		N/A	

K) Contractor's Administrator/ Officer				Contractor's Project Manager			
Name:	Taghi Alereza			Name:	Sasha Baroiant		
Address:	3239 RAMOS CIR			Address:	3239 RAMOS CIR		
City, State, Zip:	SACRAMENTO, CA 95827-2501			City, State, Zip:	SACRAMENTO, CA 95827-2501		
Phone:	916-363-8383 /	Fax:	916-363-1788	Phone:	916-363-8383 /	Fax:	916-363-1788
E-Mail:	Talereza@ADM-Energy.com			E-Mail:	sasha@admenergy.com		

L) Selection Process Used (For amendments, address amendment exemption or NCB, do not identify solicitation type of original agreement.)							
<input checked="" type="checkbox"/>	Solicitation	Select Type	Solicitation #:	RFP-15-319	# of Bids:	4	Low Bid? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
<input type="checkbox"/>	Non Competitive Bid (Attach CEC 96)						
<input type="checkbox"/>	Exempt Select Exemption (see instructions)						

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

N) Is Contractor a certified Small Business (SB), Micro Business (MB) or DVBE?	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
If yes, check appropriate box:	<input checked="" type="checkbox"/> SB	<input type="checkbox"/> MB <input type="checkbox"/> DVBE

O) Civil Service Considerations
<input type="checkbox"/> Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)
<input 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 checked="" type="checkbox"/> The Services are of such an:
<input type="checkbox"/> urgent
<input checked="" type="checkbox"/> temporary, or
<input type="checkbox"/> occasional nature
that the delay to implement under civil service would frustrate their very purpose.
Justification:
The work to be performed consists of (1) methodology development, (2) collection of energy end-use data from on-site visits, phone calls, and third-parties, and (3) data analysis. The data collection portion of the work will last approximately 9-12 months and will be performed by experienced surveyors, knowledgeable in energy consumption, which is critical to the delivery of a good quality survey.



P) Payment Method

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

Q) Retention

1. Is Agreement subject to retention? No Yes
 If Yes, Will retention be released prior to Agreement termination? No Yes

R) Justification of Rates

ADM's rates, and those of their subcontractors, are much lower than those proposed by other bidders for this solicitation.

S) Disabled Veteran Business Enterprise Program (DVBE)

1. Exempt (Interagency/Other Government Entity)
 2. Meets DVBE Requirements DVBE Amount:\$ 417,586.00 DVBE %: 5.2
 Contractor is Certified DVBE
 Contractor is Subcontracting with a DVBE: DAV Energy Solutions, Inc.
 3. Contractor selected through CMAS or MSA with no DVBE participation.
 4. Requesting DVBE Exemption (attach CEC 95)

T) 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 agreement, 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.

U) The following items should be attached to this CRF (as applicable)

1. Exhibit A, Scope of Work	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
2. Exhibit B, Budget Detail	<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 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. CEQA Documentation	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
7. Resumes	<input type="checkbox"/> N/A	<input type="checkbox"/> Attached
8. CEC 105, Questionnaire for Identifying Conflicts		<input checked="" type="checkbox"/> Attached

Agreement Manager _____ Date _____ Office Manager _____ Date _____ Deputy Director _____ Date _____

Exhibit A Scope of Work

TASK LIST

Task #	Task Name
1	Agreement Management and Administration (EPIC Funding)
2	Agreement Management and Administration (Non-EPIC Funding)
3	CEUS Project Research Plan for Electric Investor-Owned Utility (IOU) Service Territories
4	Sample Design, Sample Frame Construction, Participant Recruitment, Development of Survey Instruments, Data Collection Protocols and Pretest for Electric IOU Service Territories
5	Survey Implementation and Results in Electric IOU Service Territories
6	Contingencies and Additional Topic Areas within Commercial Forecasting
7	Survey Implementation and Results in Publicly-Owned Utility (POU) Service Territories
8	IOU Natural Gas Survey Implementation and Results
9	Evaluation of Contract Benefits
10	Technology/Knowledge Transfer Activities

KEY WORDS/TERMS

Specific key words and terms used throughout this scope of work are defined as follows:

Word/Term	Definition
CAISO	California Independent System Operator
CAM	Commission Agreement Manager, the person designated by the Energy Commission to oversee the performance of this agreement and to serve as the main point of contact for the Contractor
CAO	Commission Agreement Officer
CEUS	Commercial End Use Survey
Contractor	Awardee who will perform the tasks specified in this Scope of Work under the direction of the Energy Commission's Agreement Manager.
CPUC	California Public Utilities Commission
EPIC	Electric Program Investment Charge
Energy Commission	California Energy Commission
IOU	Investor-Owned Utility
NAICS	North American Industry Classification System
POU	Publicly-Owned Utility
Project Manager	The person designated by the Contractor to oversee the project and to serve as the main point of contact for the Energy Commission
Proposal	Formal written response to this document from Bidder
State	State of California
TAC	Technical Advisory Committee
WA	Work Authorization

Exhibit A Scope of Work

FORMAT/REPORTING REQUIREMENTS

Deliverables/Reports

When creating reports, the Contractor shall use and follow, unless otherwise instructed in writing by the Commission Agreement Manager (CAM), the latest version of the Consultant Reports Style Manual published on the Energy Commission's web site:

http://www.energy.ca.gov/contracts/consultant_reports/index.html

Each final deliverable shall be delivered as one original, reproducible, 8 ½" by 11", camera-ready master in black ink. Illustrations and graphs shall be sized to fit an 8 ½" by 11" page and readable if printed in black and white.

Electronic File Format

The Contractor shall deliver an electronic copy (CD ROM or memory stick or as otherwise specified by the CAM) of the full text 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 contract deliverables and establishes the computer platforms, operating systems and software versions that will be required to review and approve all software deliverables.

- 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.

Software Application Development

If this scope of work includes any software application development, including but not limited to databases, websites, models, or modeling tools, contractor shall utilize 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 Software Application Development requirements above must be approved in writing by the Energy Commission Information Technology Services Branch.

Exhibit A Scope of Work

BACKGROUND/PROBLEM STATEMENT

Commercial electricity and natural gas forecasting activities at the Energy Commission (Commercial Building Forecasting Model and associated forecasting work that results in *California Energy Demand 2016 through 2026*) are supported by three separate models. These include a commercial building energy model, a commercial floor space model and a peak demand forecasting model that requires commercial load profiles by end-use. Although these models are complex and require a vast array of input data, they rely most heavily on four primary types of inputs. These include (1) estimates of electricity and gas use for each combination of 12 building types and 15 end-uses, (2) electric and gas fuel saturations for each of these same combinations, (3) floor space estimates for each of the 12 building types, and (4) annual (8760 hours) electricity load profiles by building type and end-use. At the present time, all of these estimates are developed for six building vintages and 16 climate zones across California.¹ Moving forward, the Energy Commission will disaggregate demand forecasts into 20 to 30 new forecasting zones that are associated with resource planning areas used by the California Independent System Operator (CAISO) to manage the state's electricity grid. These forecasting zones are roughly defined by aggregating counties and are not determined on the basis of climatological characteristics. The desire to disaggregate energy demand forecasts into smaller geographical regions is the primary design driver of this Commercial End-Use Survey (CEUS). While many previous CEUSs did not have enough sample points to make robust population estimates at the climate zone level, this project is charged with the task of developing that capability at an even finer level of granularity.

RATEPAYER BENEFITS, TECHNOLOGICAL ADVANCEMENTS, AND BREAKTHROUGHS

California Public Resources Code Section 25711.5(a) requires Electric Program Investment Charge (EPIC)-funded projects to:

- Benefit electricity ratepayers; and
- Lead to technological advancement and breakthroughs to overcome the barriers that prevent the achievement of the state's statutory energy goals.

The California Public Utilities Commission (CPUC) defines "ratepayer benefits" as greater reliability, lower costs, and increased safety.² The CPUC has also adopted the following guiding principles as complements to the key principle of electricity ratepayer benefits: societal benefits; greenhouse gas emissions mitigation and adaptation in the electricity sector at the lowest possible cost; the loading order; low-emission vehicles/transportation; economic development; and efficient use of ratepayer monies.³

¹ The characteristics of each building vintage are defined by building standards requirements and construction practices of that era. The peak demand forecasting model does not require input data by vintage.

² CPUC "Phase 2" Decision 12-05-037 at page 19, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF.

³ *Id.* at pp. 19-20.

Exhibit A Scope of Work

The resulting data from this agreement will lead to more accurate energy forecasts, which will assist in keeping rates low as they are used to determine infrastructure needs in long term procurement planning by the CPUC. Furthermore, this agreement will:

- Provide high quality interval-meter data information to support the identification and accurate characterization of opportunities for:
 - Demand-side management,
 - Energy efficiency program planning,
 - Load shifting, and
 - Demand response.
- Increase reliability in day-to-day grid management through a more detailed understanding of the variables that influence particular end-uses, and provide a more useful forecast to the CAISO for planning purposes.
- Estimate the impact that state energy policies for building energy efficiency and any self-generation is having on the commercial sector's power consumption.
- Include information to support traditional uses of the CEUS, such as estimation of commercial floor space, end-use saturations, and energy usage intensities.
- Begin to incorporate information from smart meters into demand forecasting which will lead to a better understanding of how this technology can assist in forecasting and be improved upon.

GOALS AND OBJECTIVES OF THE AGREEMENT

The goal of this agreement is to facilitate the commercial success and market adoption of technologies, strategies and other innovations funded through the EPIC Program. The objectives of this agreement are the following:

- Increase the sample size for on-site surveys significantly above that of historical CEUS levels to support disaggregation of energy demand forecasts.
- Calculate end-use fuel saturations at the forecast zone level by building type.
- Calculate commercial floor space estimates at the forecast zone level by building type.
- Calculate annual whole building energy use estimates at the forecasting zone level by building type.
- Calculate annual whole-building hourly load profiles at the forecasting zone level by building type.
- Incorporate interval-metered electricity consumption data into forecasting model input development.
- Develop a potential methodology, and evaluate the pros and cons, for over-sampling newly constructed commercial facilities so that statistically significant population estimates can be made of the most recent building stock vintage.
- Examine the potential for using purchased commercial real estate data to benefit the CEUS design or as a means of collecting commercial end-user characteristics.

Exhibit A Scope of Work

- Accurately characterize building economic activity to determine the type of business (e.g., retail, hospital, school, etc.) and assess North American Industry Classification System's (NAICS) code misclassification.⁴
- Develop Energy Commission staff expertise in the evaluation of sample design alternatives, construction of sampling frames and recruitment pools, computation of sample weights and population estimation techniques.

⁴ A misclassified (NAICS code) site affects energy-use-intensity for building categories. Consequently this will impact the forecasting process and ends up with bias and deviation from the intended forecast results.

Exhibit A Scope of Work

Task 1- Agreement Management and Administration (EPIC Funding)

The Contractor shall manage a team capable of undertaking Tasks 3, 4, 5, 9, and 10 identified in this Scope of Work.⁵

All project work performed by the Contractor team shall be directed by and coordinated with Energy Commission staff as designated by the CAM. Work performed by the Contractor or its subcontractors beyond the term end date of the agreement will not be reimbursed for payment.

Task 1.1 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement. The meeting will be held in Sacramento, CA, unless otherwise specified by the CAM, and the CAM will designate the specific location and provide Web-Ex or teleconference information. The administrative and technical aspects of this Agreement will be discussed at the meeting.

The administrative portion of the meeting will include discussion of the following:

- Terms and conditions of the Agreement;
- Administrative deliverables;
- Project meetings and briefings;
- Match fund documentation (if applicable);
- Permit documentation (if applicable);
- Subcontracts; and
- Any other relevant topics.

The technical portion of the meeting will include discussion of the following:

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
- An updated Project Schedule;
- Technical deliverables;
- Progress reports and invoices;
- Final Report;
- Technical Advisory Committee meetings; and
- Any other relevant topics.

The Contractor shall:

- Attend a "kick-off" meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the Accounting Office.
 - The meeting will be held via Web-Ex or teleconference. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. The administrative and technical aspects of this Contract will be discussed at the meeting.
- Provide a List of Match Funds, as applicable.
- If necessary, prepare an updated Schedule of Deliverables based on the decisions made in the kick-off meeting.

The CAM shall:

⁵ Separate final reports, invoices, progress reports, and other administrative deliverables between EPIC and non-EPIC tasks, as described in Tasks 1 and 2, are necessary for reporting requirements on activity and funding spent in the EPIC annual report to the CPUC and legislature.

Exhibit A Scope of Work

- Arrange the meeting including scheduling the location, date, and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

- An Updated Schedule of Deliverables (if applicable).
- A List of Match Funds (if applicable).

Task 1.2 Invoices

The goal of this subtask is to ensure that invoices contain all required information and are submitted in the appropriate format.

The Contractor shall:

- Prepare quarterly invoices for all reimbursable expenses incurred performing work under this Agreement in compliance with the Exhibit D of the Terms and Conditions of the Agreement and in the format provided by the CAM. In addition, each invoice must document and verify:
 - Energy Commission funds received by California-based entities.
 - Energy Commission funds spent in California (if applicable).
 - Match fund expenditures (if applicable).
- Invoices shall be submitted with the same frequency as progress reports (subtask 1.3). Invoices must be submitted to the Energy Commission's Accounting Office.

Deliverables:

- Quarterly Invoices

Task 1.3 Progress Reports

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

The Contractor shall:

- Prepare progress reports that summarize all Agreement activities conducted by the Contractor and any subcontractors 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 within 15 calendar days after the end of the reporting period. The CAM will provide the format for the progress reports.

Deliverables:

- Quarterly Progress Reports

Task 1.4 Manage Subcontractors

The goal of this subtask is to ensure quality products, to enforce subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommend solutions to resolve the problem.

Exhibit A Scope of Work

The Contractor shall:

- Manage and coordinate subcontractor activities. The Contractor is responsible for the quality of all subcontractor work and the Energy Commission will assign all work to the Contractor. If the Contractor decides to add new subcontractors, they shall 1) comply with the Terms and Conditions of the Agreement, and 2) notify the CAM who will follow the Energy Commission's process for adding or replacing subcontractors.
- Prepare and submit a subcontractor conflict of interest policy to ensure that no conflicts of interest exist between subcontractors and sub awardees.

Deliverables:

- Written notification to CAM of subcontractor change.
- The subcontractor conflict of interest policy

Task 1.5 Project Meetings and Briefings

The goal of this subtask is to determine whether any modifications must be made to the tasks, products, schedule, or budget. Project meetings provide the opportunity for frank discussions between the Energy Commission and the Contractor. As determined by the CAM, discussions may include project status, challenges, successes, findings, project goals and benefits, recommendations, and final report preparation. Participants will include the CAM and the Contractor, and may include the CAO and any other individuals selected by the CAM to provide support to the Energy Commission.

The Contractor shall:

- Attend or participate in program support and project-related meetings or discussions in person or via WebEx or conference call, as requested by the CAM.
- Respond to e-mails or other written communication requests regarding project management status and issues, as requested by the CAM.
- Prepare meeting notes for each formal meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project, as requested by the CAM.
- Submit the meeting notes to the CAM for review and approval.

Deliverables:

- Responses to written requests on project status.
- Meeting notes for each formal meeting.

Task 1.6 Technical Advisory Committee (TAC)

The goal of this subtask is to create an advisory committee for this Agreement. For this project, the TAC can be composed of Energy Commission staff as well as other diverse professionals. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
 - Technical area expertise;
 - Knowledge of market applications; or

Exhibit A Scope of Work

- Linkages between the Contract work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the State of California, and provide recommendations as needed to enhance the benefits.

The TAC shall be composed of qualified professionals with expertise which may span the following types of disciplines:

- Energy Commission staff knowledgeable about the project subject matter;
- Researchers knowledgeable about the project subject matter;
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project; and
- Utility representatives.

The Contractor shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, electronic addresses, and phone numbers of potential members. The 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. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.7.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each non-Energy Commission TAC member to the CAM.

Deliverables:

- List of Potential TAC Members
- List of TAC Members
- Documentation of TAC Member Commitment for non-Energy Commission members

Subtask 1.7 TAC Meetings

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

The Contractor shall:

- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.

Exhibit A Scope of Work

- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

Deliverables:

- TAC Meeting Schedule (draft and final)
- TAC Meeting Agendas (draft and final)
- TAC Meeting Back-up Materials
- TAC Meeting Summaries

Task 1.8 Final Report

The goal of this subtask is to prepare a written Final Report. The Final Report shall be prepared in language easily understood by the public or layperson with a limited technical background.

The Final Report must be completed before the termination date of the Agreement in accordance with the Schedule of Deliverables.

The Final Report shall be a public document. If the Contractor's work on all or part of this project has obtained confidential status from the Energy Commission, then the Contractor must prepare both a public and a confidential version of the Final Report, and the Contractor shall perform the following subtasks for both the public and confidential versions of the Final Report. When creating the Final Report, the Contractor must use a Style Manual provided by the CAM.

Task 1.8.1 Final Report Outline

The Contractor shall:

- Prepare a draft outline of the Final Report.
- Submit the draft outline of the Final Report to the CAM for review and approval. The CAM will provide written comments to the Contractor on the draft outline. The Contractor shall review the comments and discuss any concerns regarding the recommended changes with the CAM.
- Prepare and submit the final outline of the Final Report, incorporating the CAM's comments.

Deliverables:

- Outline of the Final Report (Draft and Final)

Task 1.8.2 Final Report

The Contractor shall:

- Prepare the draft Final Report for this Agreement in accordance with the approved final report outline.
- Submit the draft Final Report for review and comment. The CAM will provide written comments to the Contractor. The Contractor shall review the comments and discuss any issues with the recommended changes with the CAM.
- Prepare and submit the Final Report, incorporating CAM comments.

Deliverables:

- Final Report (Draft and Final)

Exhibit A Scope of Work

Task 1.9 Final Meeting

The goal of this subtask is to discuss closeout of this Agreement and review the project. The meeting will be held in Sacramento, CA and the CAM will designate the specific location, or via Web-Ex or teleconference. The administrative and technical aspects of Agreement closeout will be discussed at the meeting.

The Contractor shall:

- Meet with Energy Commission staff prior to the term end-date of this Agreement. This meeting will be attended by the Contractor Project Manager and the CAM. The CAM will determine any additional appropriate meeting participants.
- Present findings, conclusions, and recommended next steps (if any) for the Agreement, based on the information included in the Final Report.
- Prepare a written document of meeting agreements and unresolved activities.
- Prepare a schedule for completing the closeout activities for this Agreement, based on determinations made during the meeting.
- Provide ALL Draft and Final written deliverables provided under this Agreement on a CD-ROM or USB memory stick, organized by the tasks in the Agreement.

Deliverables:

- Written documentation of meeting agreements.
- Schedule for completing closeout activities.
- CD-ROM or USB memory stick containing ALL draft and final written deliverables provided under this Agreement, organized by task.

Task 1.10 Match Funds (If applicable)

The goal of this subtask is to ensure that the Contractor obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Contractor may spend match funds for this task. The Contractor may only spend match funds during the Agreement term, either concurrently or prior to the use of Energy Commission funds. 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:

- If match funds were a part of the Proposal that led to the Energy Commission awarding this Agreement, prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement and includes:
 - A list of the match funds that identifies:
 - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.

Exhibit A Scope of Work

- The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the 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 must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
- A copy of a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at project meetings and briefings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM if receipt of additional match funds is obtained.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the agreement. Reduction of match funds may trigger a project meeting.

Deliverables:

- Match Funds Status Letter with necessary back-up letters of commitment from each source of match funding or contribution (if applicable).
- Supplemental Match Funds Notification Letter (if applicable).
- Match Funds Reduction Notification Letter (if applicable).

Task 2- Agreement Management and Administration (Non-EPIC Funding)

The Contractor shall manage a team capable of undertaking Tasks 6, 7 and 8 identified in this Scope of Work. No work shall be undertaken in these tasks unless authorized by the Energy Commission through a specific Work Authorization (WA). The CAM will prepare and issue written WAs that define the scope of work, the schedule of deliverables, and the project budget. Final assignment of tasks and maximum payment for individual projects under Tasks 6, 7, and 8 will be described in WAs signed by the Contractor and the Energy Commission. Written authorization must be obtained from the Energy Commission before work can begin on any WA.

All project work performed by the Contractor team shall be directed by and coordinated with Energy Commission staff as designated by the CAM. Work performed by the Contractor or its subcontractors beyond the term end date of the agreement will not be reimbursed for payment.

Task 2.1 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement. The meeting will be held in Sacramento, CA, unless otherwise specified by the CAM, and the CAM will designate the specific location and provide Web-Ex or teleconference information. The administrative and technical aspects of this Agreement will be discussed at the meeting.

Exhibit A Scope of Work

The administrative portion of the meeting will include discussion of the following:

- Terms and conditions of the Agreement;
- Administrative deliverables;
- Project meetings and briefings;
- Match fund documentation (if applicable);
- Permit documentation (if applicable);
- Subcontracts; and
- Any other relevant topics.

The technical portion of the meeting will include discussion of the following:

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
- An updated Project Schedule;
- Technical deliverables;
- Progress reports and invoices;
- Final Report;
- Technical Advisory Committee meetings; and
- Any other relevant topics.

The Contractor shall:

- Attend a "kick-off" meeting with the CAM, the CAO, and a representative of the Accounting Office.
 - The meeting will be held via Web-Ex or teleconference. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. The administrative and technical aspects of this Contract will be discussed at the meeting.
- Provide a List of Match Funds, as applicable.
- If necessary, prepare an updated Schedule of Deliverables based on the decisions made in the kick-off meeting.

The CAM shall:

- Arrange the meeting including scheduling the location, date, and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

- An Updated Schedule of Deliverables (if applicable).
- A List of Match Funds (if applicable).

Task 2.2 Invoices

The goal of this subtask is to ensure that invoices contain all required information and are submitted in the appropriate format. Invoices for non-EPIC tasks may be submitted with invoices for EPIC tasks, but must clearly be marked as a separate invoice number so that the funding can be tracked separately.

Exhibit A Scope of Work

The Contractor shall:

- Prepare quarterly invoices for all reimbursable expenses incurred performing work under this Agreement in compliance with the Exhibit D of the Terms and Conditions of the Agreement and in the format provided by the CAM. In addition, each invoice must document and verify:
 - Energy Commission funds received by California-based entities.
 - Energy Commission funds spent in California (if applicable).
 - Match fund expenditures (if applicable).
- Invoices shall be submitted with the same frequency as progress reports (task 2.3). Invoices must be submitted to the Energy Commission's Accounting Office.

Deliverables:

- Quarterly Invoices

Task 2.3 Progress Reports

The goal of this subtask is to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement. Progress reports for non-EPIC tasks may be submitted with progress reports for EPIC tasks, but must clearly be marked as a separate section so that the activity can be tracked separately.

The Contractor shall:

- Prepare progress reports that summarize all Agreement activities conducted by the Contractor and any subcontractors 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 within 15 calendar days after the end of the reporting period. The CAM will provide the format for the progress reports.

Deliverables:

- Quarterly Progress Reports

Task 2.4 Work Authorizations

The goal of this subtask is to develop and manage all technical and budgetary aspects of WAs in accordance with the requirements of this Agreement for work to be performed under Task 6, Task 7, and Task 8.

The Contractor shall:

- Help prepare WAs in accordance with the agreement requirements.
 - The WA format and content shall be specified by the CAM.
 - The WA term end date should be no later than 90 days prior to the termination of the agreement. This allows the Contractor time to complete closeout activities for all WAs and to prepare the Final Report.
- Administer WAs.
 - Establish and maintain contractual agreements with entities performing work.
 - Develop project schedules.
 - Manage subcontractor activities in accordance with the agreement terms and conditions.

Exhibit A Scope of Work

- Provide oversight and first-level review of reports and documentation, and comment on the content of deliverables.
- Review and approve all WA invoices.
- Provide audit and accounting services for all WAs.
- Immediately report any significant variances affecting performance of WAs and recommend mitigation actions for consideration by the Energy Commission's Work Authorization Manager (WAM) and CAM. Examples of significant variances include the inability to deliver products by key WA dates, unavailability of key personnel that will effect timely submittal of deliverables, and key technical issues that would require change in scope, budget, redirection of the effort, or discontinuation of the project.
- Coordinate with the CAM to close out completed WAs and remaining unallocated balances.
- Monitor and Track each WA and the Overall Agreement
 - Determine the fiscal status of each WA and the overall agreement.
 - Prevent accumulation of cost overruns.
 - Determine if each WA is on schedule.
 - Determine whether deliverables have been submitted and accepted.
 - Track the start, progress, and closure of each WA.

Deliverables:

- WAs in a format to be provided by the CAM, including, but not limited to, the following:
 - Project SOW.
 - Project Team.
 - Project and Deliverables Schedule.
 - Project Budget.

Task 2.5 Manage Subcontractors

The goal of this subtask is to ensure quality products, to enforce subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommend solutions to resolve the problem.

The Contractor shall:

- Manage and coordinate subcontractor activities. The Contractor is responsible for the quality of all subcontractor work and the Energy Commission will assign all work to the Contractor. If the Contractor decides to add new subcontractors, they shall 1) comply with the Terms and Conditions of the Agreement, and 2) notify the CAM who will follow the Energy Commission's process for adding or replacing subcontractors.
- Prepare and submit a subcontractor conflict of interest policy to ensure that no conflicts of interest exist between subcontractors and subawardees.

Deliverables:

- Written notification to CAM of subcontractor change.
- The subcontractor conflict of interest policy

Exhibit A Scope of Work

Task 2.6 Project Meetings and Briefings

The goal of this subtask is to determine whether any modifications must be made to the tasks, products, schedule, or budget. Project meetings provide the opportunity for frank discussions between the Energy Commission and the Contractor. As determined by the CAM, discussions may include project status, challenges, successes, findings, project goals and benefits, recommendations, and final report preparation. Participants will include the CAM and the Contractor, and may include the CAO and any other individuals selected by the CAM to provide support to the Energy Commission.

The Contractor shall:

- Attend or participate in program support and project-related meetings or discussions in person or via WebEx or conference call, as requested by the CAM.
- Respond to e-mails or other written communication requests regarding project management status and issues, as requested by the CAM.
- Prepare meeting notes for each formal meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project, as requested by the CAM.
- Submit the meeting notes to the CAM for review and approval.

Deliverables:

- Responses to written requests on project status.
- Meeting notes for each formal meeting.

Task 2.7 Final Report

The goal of this subtask is to prepare a separate written Final Report for activity conducted under the agreement that is related to non-EPIC tasks. The Final Report shall be prepared in language easily understood by the public or layperson with a limited technical background.

The Final Report must be completed before the termination date of the Agreement in accordance with the Schedule of Deliverables.

The Final Report shall be a public document. If the Contractor's work on all or part of this project has obtained confidential status from the Energy Commission, then the Contractor must prepare both a public and a confidential version of the Final Report, and the Contractor shall perform the following subtasks for both the public and confidential versions of the Final Report. When creating the Final Report, the Contractor must use a Style Manual provided by the CAM.

Task 2.7.1 Final Report Outline

The Contractor shall:

- Prepare a draft outline of the Final Report.
- Submit the draft outline of the Final Report to the CAM for review and approval. The CAM will provide written comments to the Contractor on the draft outline. The Contractor shall review the comments and discuss any concerns regarding the recommended changes with the CAM.
- Prepare and submit the final outline of the Final Report, incorporating the CAM's comments.

Deliverables:

- Outline of the Final Report (Draft and Final)

Exhibit A Scope of Work

Task 2.7.2 Final Report

The Contractor shall:

- Prepare the draft Final Report for this Agreement in accordance with the approved final report outline.
- Submit the draft Final Report for review and comment. The CAM will provide written comments to the Contractor. The Contractor shall review the comments and discuss any issues with the recommended changes with the CAM.
- Prepare and submit the Final Report, incorporating CAM comments.

Deliverables:

- Final Report (Draft and Final)

Task 2.8 Final Meeting

The goal of this subtask is to discuss closeout of this Agreement and review the project. The meeting will be held in Sacramento, CA and the CAM will designate the specific location, or via Web-Ex or teleconference. The administrative and technical aspects of Agreement closeout will be discussed at the meeting.

The Contractor shall:

- Meet with Energy Commission staff prior to the term end-date of this Agreement. This meeting will be attended by the Contractor Project Manager and the CAM. The CAM will determine any additional appropriate meeting participants.
- Present findings, conclusions, and recommended next steps (if any) for the Agreement, based on the information included in the Final Report.
- Prepare a written document of meeting agreements and unresolved activities.
- Prepare a schedule for completing the closeout activities for this Agreement, based on determinations made during the meeting.
- Provide ALL Draft and Final written deliverables provided under this Agreement on a CD-ROM or USB memory stick, organized by the tasks in the Agreement.

Deliverables:

- Written documentation of meeting agreements.
- Schedule for completing closeout activities.
- CD-ROM or USB memory stick containing ALL draft and final written deliverables provided under this Agreement, organized by task.

Task 2.9 Match Funds (If applicable)

The goal of this subtask is to ensure that the Contractor obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Contractor may spend match funds for this task. The Contractor may only spend match funds during the Agreement term, either concurrently or prior to the use of Energy Commission funds. 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.

Exhibit A Scope of Work

The Contractor shall:

- If match funds were a part of the Proposal that led to the Energy Commission awarding this Agreement, prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement and includes:
 - A list of the match funds that identifies:
 - The amount of cash match funds, their source(s) (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 of the contribution type (e.g., property, services), the documented market or book value, the 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 must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
 - A copy of a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at project meetings and briefings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM if receipt of additional match funds is obtained.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the agreement. Reduction of match funds may trigger a project meeting.

Deliverables:

- Match Funds Status Letter with necessary back-up letters of commitment from each source of match funding or contribution (if applicable).
- Supplemental Match Funds Notification Letter (if applicable).
- Match Funds Reduction Notification Letter (if applicable).

Exhibit A Scope of Work

TECHNICAL TASKS

Task 3. CEUS Project Research Plan for Electric IOU Service Territories

The goal of this task is to develop a comprehensive project research plan for electric IOU service territories in coordination with the Energy Commission that will incorporate processes to refine CEUS goals and develop methodologies for each task. The research plan will describe the scope of work and the procedures for data collection and management. To further support geographical disaggregation of energy demand forecasts being called for by policy makers, the research plan shall include a design strategy that reduces the amount of information collected per site (when compared to previous CEUS methodologies) in order to maximize the sample size. Additionally, it should address options for (1) a commercial new construction study conducted for each new vintage to support energy demand forecasting (e.g., oversampling sites built since the last round of building standards.⁶), and (2) the potential of using commercial real estate databases available for purchase from private companies (e.g., CoStar and SMR Research Corporation) to benefit the CEUS design or compliment CEUS data.

The draft survey instrument in Exhibit A, Attachment A-2 has been included to provide a starting point for the on-site survey instrument design. However, the Contractor shall review the draft instrument and propose modification as necessary.

The Contractor shall:

- Work jointly with Energy Commission staff to refine and finalize the goals of the CEUS. Submit the *Draft CEUS Goals* to the CAM for review and approval. Upon receipt of the CAMs comments, the Contractor will revise the goals to incorporate any edits as necessary and submit the *Final CEUS Goals* to the CAM for approval.
- Work jointly with Energy Commission staff to develop a project research plan for the CEUS ensuring it addresses or includes all of the following topics in addition to those the CAM or he contractor includes to make the plan comprehensive:
 - Project schedule
 - Geographic areas to be covered by the CEUS
 - Definition of the new forecasting zones
 - Definition of the NAICS mapping to commercial building types
 - Overview of the sample design
 - Strategies to avoid survey bias
 - Weighting technique and expansion methodology
 - NAICS code accuracy and its effect on sample design and making population estimates
 - Identify training opportunities for Energy Commission staff
 - Assessment of oversampling new construction
 - Assessment of using purchased commercial building data
 - Define the role for utility staff in data collection
 - Identify data required from participating utilities

⁶ The most recent new construction vintage is defined as 2010 through 2015.

Exhibit A Scope of Work

- Draft on-site and telephone survey instruments
 - Preliminary estimates for the number of on-site and phone surveys
 - Participant recruitment procedures
 - Logistics of field implementation
 - Identification of building types that require unique surveying approaches
 - Data collection methods
 - Data collection protocols and project personnel training
 - Quality control procedures
 - Verification of data
 - Database structure and format of survey results
 - Procedures to review, clean, and adjust monthly and interval-metered consumption data.
 - Description of project documentation requirements (e.g. all methodologies, databases, sources, etc.) including an overview of methodologies and procedures for each task and provide a thorough discussion of the key issues, implementation barriers related to each task, and recommended mitigation steps to minimize the potential impact of identified issues and barriers.
 - Quantified estimate of the resources needed to implement the survey as detailed in the research plan, including staff resources, staff qualifications, staff time, and information technology resources.
- Submit a *Draft Project Research Plan* to the CAM for review and approval. Upon receipt of the CAMs comments, the Contractor will revise the plan to incorporate any edits as necessary and submit a *Final Project Research Plan* to the CAM for approval.
 - As directed by the CAM, develop a *Research Plan Update* that includes the following:
 - Description of any other activities and products that are outside of the Final CEUS Goals or Final Project Research Plan which are necessary to complete the electric IOU portion of the CEUS. This includes any products that are directly relevant to the outlined CEUS Goals, but were not presented in the Final Project Research Plan.

Deliverables

- 3.1 Draft CEUS Goals
- 3.2 Final CEUS Goals
- 3.3 Draft Project Research Plan (three bound copies)
- 3.4 Final Project Research Plan (three bound copies)
- 3.5 Research Plan Update (as directed by the CAM)

Exhibit A Scope of Work

Task 4. Sample Design, Sample Frame Construction, Participant Recruitment, Development of Survey Instruments, Data Collection Protocols and Pretest for Electric IOU Service Territories

Task 4 is a compilation of the analytical work for electric IOU service territories that is required before full-scale field implementation begins. Work under this task includes: (1) data acquisition, (2) sample design and sample frame development, (3) development of survey instruments, (4) development of data collection protocols, (5) development of participant recruitment letters and questionnaires, (6) development and implementation of a pretest for the survey, and (7) summarizing the results of the pretest and developing recommendations for any modifications that are needed.

The Contractor shall:

- Participate in data acquisition meetings and facilitate transfer of data between utilities, the Energy Commission, and the contractor.
- Process utility customer billing system information into formats required by the Energy Commission and utilities. Work together with Energy Commission staff to determine the feasibility of expanding the number of commercial building types and revising the NAICS to building type mapping.
- Work with participating utilities and the Energy Commission to define the geographies used to stratify the sample.
- Prepare a comprehensive *Sample Design Report* for on-site, telephone and utility staff survey methods for review and approval by the CAM. This report must address sample size, stratification, allocation method, survey bias, weighting and expansion methodology, NAICS code misclassification, oversampling new construction, use of purchased commercial building data, the use of utility staff in data collection, and any other elements as required by the CAM. The Contractor will submit a *Draft Sample Design Report* for review and approval by the CAM. Upon receipt of the CAM's comments on the draft, the Contractor will revise the report to incorporate any edits as necessary, and submit a *Final Sample Design Report* for the CAM's approval.
- Create a *Premises-Based Sample Frame for the Commercial Sector* and submit it to the Cam for approval.
- Develop training materials and provide Energy Commission staff with training to develop their expertise in the evaluation of sample design alternatives, construction of sampling frames and recruitment pools, computation of sample weights and population estimation techniques as these topics relate to CEUS design.
- Submit the *Draft Training Materials* to the CAM for review. Upon receipt of the CAM's comments, the Contractor will incorporate any edits as necessary and submit the *Final Training Materials*.
- Develop and submit the *Draft Survey Instruments and Telephone Questionnaires*, including utility staff data collection forms for use in collecting data from on-site visits and telephone conversations, according to the Final Project Research Plan approved in Task 3. Upon receipt of the CAM's comments on the drafts, the Contractor will revise these forms to incorporate any edits as necessary and submit the *Final Survey Instruments and Telephone Questionnaires* for the CAM's approval.

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- Develop *Draft Data Collection Protocols* to govern on-site surveying, telephone interviews and data collection performed by utility staff. The Contractor will submit a draft of the protocols for review and approval by the CAM. Upon receipt of the CAM's comments for the draft, the Contractor will revise the protocols to incorporate any edits as necessary, and submit the *Final Data Collection Protocols* for the CAM's approval.
- If the CAM determines it is necessary, work jointly with the CAM to coordinate with utility staff on the development of participant recruitment letters used to recruit customers for participation in the CEUS.
- Develop a survey pretest process and submit a *Draft Pretest Work Plan* to the CAM for review and approval. Upon receipt of the CAMs comments, revise the work plan to incorporate any edits as necessary and submit a *Final Pretest Work Plan* to the CAM for approval.
- Conduct the pretest once the *Final Pretest Work Plan* has been approved.
- Prepare and submit a *Pretest Results and Recommendations* report that documents findings made during the pretest as well as recommendations for corrective action to any identified problems for CAM approval.

Deliverables:

- 4.1 Draft Sample Design Report (six bound copies)
- 4.2 Final Sample Design Report (six bound copies)
- 4.3 Draft Training Materials for each training session
- 4.4 Final Training Materials for each training session
- 4.5 Premises-based Sample Frame for Commercial Sector
- 4.6 Draft Data Collection Protocols
- 4.7 Final Data Collection Protocols (three bound copies and electronic file)
- 4.8 Draft Survey Instruments and Telephone Questionnaires
- 4.9 Final Survey Instruments and Telephone Questionnaires
- 4.10 Draft Pretest Work Plan
- 4.11 Final Pretest Work Plan
- 4.12 Pretest Results, and Recommendations (three bound copies).

Task 5. Survey Implementation and Results in Electric IOU Service Territories

The purpose of this task is to conduct the telephone and on-site surveys as described in the *Final Project Research Plan*, taking into account any modifications resulting from the pretest and other work completed in Task 4.

The Contractor shall:

- Develop and submit to the CAM, a *Draft Survey Implementation Plan* that minimizes travel expenses, maximizes efficiency and maintains the continuity of surveys over time, taking into account modifications resulting from the pretest and other work completed in Task 4. The *Draft Survey Implementation Plan* shall include a description of quality control procedures and screening techniques to review survey data, minimize data entry errors, and

Exhibit A Scope of Work

to check for entries that are out of bounds. Upon receipt of comments from the CAM on the draft, the Contractor will revise the report to incorporate any edits as necessary and submit a *Final Survey Implementation Plan* to the CAM for approval.

- Prepare a *Schedule for Data Collection Activities* and submit it to the CAM for review and approval.
- Implement the telephone and on-site surveys as described in the approved *Final Survey Implementation Plan*.
- Verify and document that all survey participants are part of the commercial sector as defined by the Energy Commission's NAICS to commercial building mapping.
- Verify that energy consumption records associated with each premises, including all electricity accounts and meters, match the survey area and reconcile any discrepancies.
- Recommend methods for managing sites without complete consumption histories for the study period because they are newly constructed, have new tenants or are simply missing data.
- Identify shared energy services, purchased energy services or subleased energy services for all participant buildings.
- Develop monthly electricity energy use histories at the total premises level for all CEUS telephone and on-site participants over the study period, including any changes to the sample frame construction, as described under the approved *Final Survey Implementation Plan*.
- Provide supporting electricity consumption information at the individual account and meter level for each premises.
- Develop hourly electricity use for all CEUS telephone and on-site participants with interval-metered consumption records over the study period determined by the CAM.
- Develop and submit a *Draft Recommended Database Structure and Format Memo* for CEUS characteristic data, to the CAM, that fulfills the objectives of this project and meets Energy Commission IT standards. Upon receipt of the CAM's comments, the Contractor will revise the memo to incorporate edits as necessary and submit a *Final Recommended Database Structure and Format Memo* to the CAM for approval. The memo shall include:
 - Documentation describing variable names and identifiers and data model diagrams that show all tables, fields, relationships, queries, forms and reports.
- Implement quality control procedures and screening techniques to review survey data, minimize data entry errors and check for entries that are out of bounds, according to the *Final Survey Implementation Plan*.
- During the data collection period, the Contractor will periodically submit *Interim Survey Data* to the CAM for approval. This shall include collected survey data and additional information as needed for Energy Commission staff to evaluate the quality, status, and validity of survey data and results, as directed by the CAM.
- Calculate and submit to the CAM a set of *Commercial Sector Population Estimates* from CEUS data. As directed by the CAM, these estimates will be at the forecasting zone (or subzone) level by building type. This set of estimates will include: :
 - End-use electricity fuel saturations
 - Floor space

Exhibit A Scope of Work

- Annual whole-building electricity intensities
- Annual whole-building hourly electricity load profiles
- Prepare and submit to the CAM, a *Draft CEUS Report* documenting project goals, design, methodologies, preliminary findings and results, including a summarization of the commercial population estimates developed earlier in the task. This report will be finalized after the completion of data collection process.
- Provide utility customer energy use information as documented, over the study period for all CEUS participants. This includes monthly electricity use summed to the premises level, along with supporting energy use records at the account and meter level. This also includes hourly electricity use summed to the premise level for customers with interval-meters along with supporting interval-metered electricity use at the account and meter level. The Contractor will submit to the CAM for approval, two databases and a methodology report, as follows:
 - A *Pre On-site Energy Consumption Database* which includes data presumed to belong to the site prior to the survey.
 - A *Post On-site Energy Consumption Database*, verified and cleaned of all irregularities, and reconciled to the survey area.
 - A *Verifying and Cleaning Energy Use Data Methodology Report* describing the methodology for verifying and cleaning energy use data, including protocols for managing sites without complete consumption histories for the study period. The report shall document findings from the energy use data review process and assess the quality of energy use histories.
- Develop *Draft Staff Training Manuals* to use during training of Energy Commission staff for review by the CAM. The manuals will contain instruction for CEUS data management, data validation procedures and techniques for making population estimates with CEUS data. Upon receipt of comments from the CAM, the Contractor will incorporate edits as necessary and submit *Final Staff Training Manuals* to the CAM for approval.
- Provide Energy Commission staff training for each training session, in CEUS data management, data validation procedures and techniques for making population estimates with CEUS data. Training will be set up by the CAM and will occur at the Energy Commission in Sacramento, CA. Upon
- Provide *Database Documentation* describing variable names and identifiers and data model diagrams that show all tables, fields, relationships, queries, forms and reports contained in the *Final Database of Results*.
- Submit to the CAM for approval, the *Final Database of Results* containing all surveyed information (on-site, telephone, photos, etc.). The Energy Commission will not pay for sample points that are outside the commercial sector as defined by the NAICS code to building type map.
- Prepare and submit to the CAM for approval, a comprehensive *Final CEUS Report* documenting project goals, design, methodologies, findings and results, including a summarization of the commercial population estimates developed earlier in the task.

Deliverables

5.1 Draft Survey Implementation Plan

Exhibit A Scope of Work

- 5.2 Final Survey Implementation Plan
- 5.3 Schedule for Data Collection Activities
- 5.4 Draft Recommended Database Structure and Format Memo
- 5.5 Final Recommended Database Structure and Format Memo
- 5.6 Interim Survey Data.
- 5.7 Commercial Sector Population Estimates for:
 - End-use electricity fuel saturations;
 - Floor space;
 - Annual whole-building electricity intensities;
 - Annual whole-building hourly electricity load profiles
- 5.8 Draft CEUS Report (six bound copies)
- 5.9 Pre On-site Energy Consumption Database
- 5.9 Post On-site Energy Consumption Database
- 5.10 Verifying and Cleaning Energy Use Data Methodology Report
- 5.11 Draft Training Manuals (three bound copies)
- 5.10 Final Staff Training Manuals (Sufficient number of copies for all participants).
- 5.11 Database Documentation
- 5.12 Final Database of Results
- 5.13 Final CEUS Report (20 bound copies)

Task 6. Contingencies and Additional Topic Areas within Commercial Forecasting

The goal of this task is to support the Energy Commission staff with developing and resolving methodologies for program components as described in Task 3. The work in this task is expected to include but not be limited to the following:

- Providing technical expertise to conduct unexpected research and analyses needed to develop program components as they arise during the agreement period, as described in the Research Plan Update.

The Contractor shall:

- Conduct unexpected research and analyses related to the CEUS as needed by the Energy Commission and defined by the CAM.
- Attend workshops, meetings and hearings to support the CEUS as directed by the CAM
- Fulfill any other unexpected requirements related to this agreement arising from new or existing legislation as directed by the CAM.

Deliverables will be defined as needed during the agreement period and approved as work authorizations by the Energy Commission and directed by the CAM.

Exhibit A Scope of Work

Task 7. Survey Implementation and Results in POU Service Territories

The goal of this task is to conduct the CEUS in the service areas of the Los Angeles Department of Water and Power and the Sacramento Municipal Utility District should they choose to participate. This task is expected to mirror the technical work for the investor-owned utility areas as described within Tasks 3, 4 and 5, but will be adjusted to accommodate for the differences in Public Owned Utility service territories. This task will also address additional work identified as needed to complete the POU portion of the CEUS goals. All work under this task is contingent upon available funding.

The Contractor shall:

- Perform WA-based tasks to conduct the CEUS in POU service territories.
- Help prepare WAs in accordance with the agreement requirements.
 - The WA format and content shall be specified by the CAM.
 - The WA term end date should be no later than 30 days prior to the termination of the agreement. This allows the Contractor time to complete closeout activities for all WAs and to prepare the Final Report.

Deliverables will be defined as needed during the agreement period and approved as work authorizations by the Energy Commission and directed by the CAM.

Task 8. IOU Natural Gas Survey Implementation and Results

Contingent upon available funding, this task is intended to perform analytical work and implement a natural gas end-use survey to be completed in parallel with the IOU electricity-focused survey (as described in Tasks 3, 4 and 5). This task is expected to interface with certain electricity technical work for the investor-owned utility areas to leverage resources and activities to reduce the duplication of effort and minimize overall survey costs. The work in this task is expected to include but not be limited to the following:

- Develop on-site survey instruments that will include verification of gas accounts and meters, and, presence of other fuels, fuel saturation percentages for three conditioning end-uses (heating, cooling and ventilation), and fuel saturations for seven non-conditioning end-uses (water heating, refrigeration, cooking, indoor lighting, outdoor lighting, office equipment and miscellaneous equipment).
- Develop accurate histories of gas consumption for all participants.
- Verify that energy consumption records associated with each premises, including all gas accounts and meters, match the survey area and reconcile any discrepancies.
- Provide supporting gas consumption information at the individual account and meter level for each premises.
- Calculate the gas fuel saturation and annual whole-building gas intensities *Commercial Sector Population Estimates* from CEUS data (similar to the Commercial Sector Population Estimates described in Task 5) at the forecasting zone (or subzone) level by building type as specified by the CAM.
- Provide utility customer monthly gas energy use information over the study period for all CEUS participants.
- Provide additional work identified as needed to complete the IOU natural gas portion of the CEUS goals.

Exhibit A Scope of Work

The Contractor shall:

- Perform WA-based tasks to implement natural gas end-use survey instrument and data collection in the IOU service territories.
- Help prepare WAs in accordance with the agreement requirements.
 - The WA format and content shall be specified by the CAM.
 - The WA term end date should be no later than 30 days prior to the termination of the agreement. This allows the Contractor time to complete closeout activities for all WAs and to prepare the Final Report.

Deliverables will be defined as needed during the agreement period and approved as work authorizations by the Energy Commission.

Task 9 Evaluation of Contract Benefits

The goal of this task is to report the estimated benefits resulting from this agreement.

The Contractor shall:

- Complete three Project Benefits Questionnaires that correspond to three main intervals in the Agreement: (1) Kick-off Meeting Benefits Questionnaire; (2) Mid-term Benefits Questionnaire; and (3) Final Meeting Benefits Questionnaire.
- Provide all key assumptions used to estimate projected benefits, including targeted market sector (e.g., population and geographic location), projected market penetration, baseline and projected energy use and cost, operating conditions, and emission reduction calculations. Examples of information that may be requested in the questionnaires include:
 - For Information/Tools and Other Research Studies resulting from agreement:
 - Outcome of project.
 - Published documents, including date, title, and periodical name.
 - A discussion of policy development. State if the project has been cited in government policy publications or technical journals, or has been used to inform regulatory bodies.
 - The number of website downloads.
 - An estimate of how the project information has affected energy use and cost.
 - An estimate of energy and non-energy benefits.
 - Data on potential job creation, market potential, economic development, and increased state revenue as a result of project.
 - A discussion of project product downloads from websites, and publications in technical journals.
 - A comparison of project expectations and performance. Discuss whether the goals and objectives of the Agreement have been met and what improvements are needed, if any.
- Respond to CAM questions regarding the benefits assessments and estimates.

Deliverables:

9.1 Kick-off Meeting Benefits Questionnaire

Exhibit A Scope of Work

9.2 Mid-term Benefits Questionnaire

9.3 Final Meeting Benefits Questionnaire

Task 10 Technology/Knowledge Transfer Activities

The goal of this task is to develop a plan to make the knowledge gained, and lessons learned available to the public and key decision makers.

The Contractor shall:

- Prepare an *Initial Fact Sheet* at start of the project that describes the project. Use the format provided by the CAM.
- Prepare a *Technology/Knowledge Transfer Plan* that includes:
 - An explanation of how the knowledge gained from the project will be made available to the public, including the targeted market sector, utilities, regulatory agencies, and others as identified by the CAM.
 - A description of the intended use(s) for and users of the project results.
 - Identification of fact sheets, and other documents prepared for public dissemination with CAM approval. Indicate where and when the documents will be disseminated.
 - Additional areas as determined by the CAM.
- Conduct technology transfer activities in accordance with the CAM-approved *Technology/Knowledge Transfer Plan*. These activities will be reported in the Progress Reports. Documents shall include the Legal Notice required in the terms and conditions as appropriate. The CAM must review and approve all publications before they are submitted for dissemination.
- Develop presentation materials for an Energy Commission workshop (at the direction of the CAM) and/or the Final Contract Meeting on the results of the project.
- Prepare a *Final Project Fact Sheet* at the project's conclusion that discusses results. Use the format provided by the CAM.
- Include a summary of technology transfer activities conducted during the project to be included in the Final Project Report including:
 - A list of any published documents, including date, title, and periodical name.
 - A discussion of policy developments and if the project has been (or will be) cited in government policy publications, or used to inform regulatory bodies in any way.

Deliverables:

10.1 Draft Initial Fact Sheet

10.2 Final Initial Fact Sheet

10.3 Draft Technology/Knowledge Transfer Plan

10.4 Final Technology/Knowledge Transfer Plan

10.5 Draft Presentation Materials

10.6 Final Presentation materials

10.7 Draft Final Project Fact Sheet

10.8 Final Project Fact Sheet

**Exhibit A
Scope of Work**

SCHEDULE OF DELIVERABLES AND DUE DATES

Task	Deliverable	Due Date
1	Agreement Management and Administration (EPIC Funding)	
1.1	<ul style="list-style-type: none"> • Updated schedule of deliverables (if applicable) • A list of Match Funds (if applicable) 	<ul style="list-style-type: none"> • 1 week following the Kick-off meeting • At the Kick-off meeting
1.2	Quarterly Invoices	15 calendar days after the end of the quarterly reporting period; quarterly by calendar year.
1.3	Quarterly Progress Reports	15 calendar days after the end of the quarterly reporting period; quarterly by calendar year.
1.4	<ul style="list-style-type: none"> • Written Notification of Subcontractor changes • Subcontractor Conflict of Interest Policy 	<ul style="list-style-type: none"> • As Applicable • As requested by CAM
1.5	<ul style="list-style-type: none"> • Responses to written requests on project status • Meeting notes 	As requested by CAM
1.6	<ul style="list-style-type: none"> • List of Potential TAC Members • List of TAC Members • Documentation of TAC Member Commitment for non-Energy Commission members 	<ul style="list-style-type: none"> • At the Kick-off meeting • 1 week following the finalization of the TAC • 2 weeks following the finalization of the TAC.
1.7	<ul style="list-style-type: none"> • Draft TAC Meeting Schedule • Final TAC Meeting Schedule • Draft TAC Meeting Agendas • Final TAC Meeting Agendas • TAC Meeting Back-up Materials • TAC Meeting Summaries 	<ul style="list-style-type: none"> • 1 week after Kick-off meeting. • 1 week after receipt of the list of approved TAC Members. • 1 week prior to TAC meeting. • 1 day following receipt of CAM edits to draft agenda. • 1 week prior to TAC meeting • 2 days following TAC meeting.
1.8.1	<ul style="list-style-type: none"> • Draft outline of final report • Final outline of final report 	<ul style="list-style-type: none"> • 6 months prior to agreement end-date. • 2 days following receipt of CAM approval.
1.8.2	<ul style="list-style-type: none"> • Draft Final Report • Final Report 	<ul style="list-style-type: none"> • 4 months prior to agreement end-date. • 2 months prior to agreement end-date

**Exhibit A
Scope of Work**

Task	Deliverable	Due Date
1.9	<ul style="list-style-type: none"> Schedule for completing closeout activities Written documentation of meeting agreements CD-ROM or USB memory stick containing all draft and final written deliverables provided under the agreement, organized by task. 	<ul style="list-style-type: none"> 8 months prior to agreement end-date 6 months prior to agreement end-date 2 months prior to agreement end-date
1.10	<ul style="list-style-type: none"> Match Funds Status Letter Supplemental Match Funds Notification Letter (if applicable) Match Funds Retention Notification Letter (if applicable) 	<ul style="list-style-type: none"> Kick-off Meeting Within 2 days of receiving notification of additional funds being matched or being reduced (as applicable).
2	Agreement Management and Administration (Non-EPIC Funding)	
2.1	<ul style="list-style-type: none"> Updated schedule of deliverables (if applicable) A list of Match Funds (if applicable) 	<ul style="list-style-type: none"> 1 week following the Kick-off meeting At the Kick-off meeting
2.2	Quarterly Invoices	15 calendar days after the end of the quarterly reporting period; quarterly by calendar year.
2.3	Quarterly Progress Reports	15 calendar days after the end of the quarterly reporting period; quarterly by calendar year.
2.4	WAs for Tasks 6, 7, and 8	As requested by CAM
2.5	<ul style="list-style-type: none"> Written Notification of Subcontractor changes Subcontractor Conflict of Interest Policy 	<ul style="list-style-type: none"> As Applicable As requested by CAM
2.6	<ul style="list-style-type: none"> Responses to written requests on project status Meeting notes 	As requested by CAM
2.7.1	<ul style="list-style-type: none"> Draft outline of final report Final outline of final report 	<ul style="list-style-type: none"> 6 months prior to agreement end-date. 2 days following receipt of CAM approval.
2.7.2	<ul style="list-style-type: none"> Draft Final Report Final Report 	<ul style="list-style-type: none"> 4 months prior to agreement end-date. 2 months prior to agreement end-date
2.8	<ul style="list-style-type: none"> Schedule for completing closeout activities Written documentation of meeting agreements CD-ROM or USB memory stick containing all draft and final written deliverables provided under the agreement, organized by task. 	<ul style="list-style-type: none"> 8 months prior to agreement end-date 6 months prior to agreement end-date 2 months prior to agreement end-date

**Exhibit A
Scope of Work**

Task	Deliverable	Due Date
2.9	<ul style="list-style-type: none"> Match Funds Status Letter Supplemental Match Funds Notification Letter (if applicable) Match Funds Retention Notification Letter (if applicable) 	<ul style="list-style-type: none"> Kick-off Meeting Within 2 days of receiving notification of additional funds being matched or being reduced (as applicable).
3	CEUS Project Research Plan for Electric IOU Service Territories	
3.1	<ul style="list-style-type: none"> Draft CEUS Goals 	<ul style="list-style-type: none"> 8/19/2016
3.2	<ul style="list-style-type: none"> Final CEUS Goals 	<ul style="list-style-type: none"> 9/9/2016
3.3	<ul style="list-style-type: none"> Draft Project Research Plan (three bound copies). 	<ul style="list-style-type: none"> 11/18/2016
3.4	<ul style="list-style-type: none"> Final Project Research Plan (three bound copies). 	<ul style="list-style-type: none"> 12/19/2016
4	Sample Design, Sample Frame Construction, Participant Recruitment, Development of Survey Instruments, Data Collection Protocols and Pretest for Electric IOU Service Territories	
4.1	<ul style="list-style-type: none"> Draft sample design report (six bound copies). 	<ul style="list-style-type: none"> 1/27/2017
4.2	<ul style="list-style-type: none"> Final sample design report (six bound copies). 	<ul style="list-style-type: none"> 2/24/2017
4.3	<ul style="list-style-type: none"> Draft Training Materials for each training session. 	<ul style="list-style-type: none"> As Needed
4.4	<ul style="list-style-type: none"> Final Training Materials for each training session. 	<ul style="list-style-type: none"> As Needed
4.5	<ul style="list-style-type: none"> Premises-based Sample Frame for Commercial Sector. 	<ul style="list-style-type: none"> 4/1/2017
4.6	<ul style="list-style-type: none"> Draft Data Collection Protocols. 	<ul style="list-style-type: none"> 3/1/2017
4.7	<ul style="list-style-type: none"> Final Data Collection Protocols (three bound copies and electronic file) 	<ul style="list-style-type: none"> 4/1/2017
4.8	<ul style="list-style-type: none"> Draft Survey Instruments and Telephone Questionnaires. 	<ul style="list-style-type: none"> 2/21/2017
4.9	<ul style="list-style-type: none"> Final Survey Instruments and Telephone Questionnaires. 	<ul style="list-style-type: none"> 3/21/2017
4.10	<ul style="list-style-type: none"> Draft Pretest Work Plan 	<ul style="list-style-type: none"> 3/15/2017
4.11	<ul style="list-style-type: none"> Final Pretest Work Plan 	<ul style="list-style-type: none"> 4/7/2017
4.12	<ul style="list-style-type: none"> Pretest Results, and Recommendations (three bound copies). 	<ul style="list-style-type: none"> 6/15/2017
5	Survey Implementation and Results in Electric IOU Service Territories	
5.1	<ul style="list-style-type: none"> Draft Survey Implementation Plan. 	<ul style="list-style-type: none"> 7/1/2017

**Exhibit A
Scope of Work**

Task	Deliverable	Due Date
5.2	<ul style="list-style-type: none"> • Final Survey Implementation Plan. 	<ul style="list-style-type: none"> • 7/15/2017
5.3	<ul style="list-style-type: none"> • Recommended Database Structure and Format Memo. 	<ul style="list-style-type: none"> • 4/7/2017
5.4	<ul style="list-style-type: none"> • Schedule for Data Collection Activities. 	<ul style="list-style-type: none"> • 7/15/2017
5.5	<ul style="list-style-type: none"> • Interim survey data at a frequency specified by the CAM. 	<ul style="list-style-type: none"> • Beginning 7/15/2017
5.6	<ul style="list-style-type: none"> • Pre On-site Energy Consumption Databases. 	<ul style="list-style-type: none"> • Beginning 4/15/2017
5.7	<ul style="list-style-type: none"> • Post on-site set Energy Consumption Databases. 	<ul style="list-style-type: none"> • 11/16/2018
5.8	<ul style="list-style-type: none"> • Draft Energy Commission Staff Training Manuals for each session two weeks prior to the training dates (three bound copies). 	<ul style="list-style-type: none"> • As Needed
5.9	<ul style="list-style-type: none"> • Final Energy Commission Staff Training Manuals for each session two weeks prior to training dates (Sufficient number of copies for all participants). 	<ul style="list-style-type: none"> • As Needed
5.10	<ul style="list-style-type: none"> • Commercial Sector Population Estimates for: <ul style="list-style-type: none"> ○ End-use electricity fuel saturations; ○ Floor space; ○ Annual whole-building electricity intensities; ○ Annual whole-building hourly electricity load profiles 	<ul style="list-style-type: none"> • 11/16/2018
5.11	<ul style="list-style-type: none"> • <i>Database Documentation</i> 	<ul style="list-style-type: none"> • 4/14/2017
5.12	<ul style="list-style-type: none"> • Final Database of Results 	<ul style="list-style-type: none"> • 11/16/2018
5.13	<ul style="list-style-type: none"> • Draft Final CEUS Report (six bound copies). 	<ul style="list-style-type: none"> • 11/16/2018
5.14	<ul style="list-style-type: none"> • Final CEUS Report (20 bound copies). 	<ul style="list-style-type: none"> • 12/15/2018

**Exhibit A
Scope of Work**

Task	Deliverable	Due Date
6	Contingencies and Additional Topic Areas within Commercial Forecasting	
	<ul style="list-style-type: none"> Contingencies and Additional Commercial forecasting topic area deliverables 	<ul style="list-style-type: none"> As scheduled in the individually executed WAs, developed on an as-needed basis
7	Survey Implementation and Results in POU Service Territories	
	<ul style="list-style-type: none"> POU deliverables will replicate those for the IOUs 	Schedule for completion of POU related deliverables will mirror the IOU dates
8	IOU Natural Gas Survey Implementation and Results	
	<ul style="list-style-type: none"> IOU natural gas topic area deliverables 	<ul style="list-style-type: none"> As scheduled in the individually executed WAs, developed on an as-needed basis
9	Evaluation of Contract Benefits	
9.1	<ul style="list-style-type: none"> Kick-off Meeting Questionnaire 	<ul style="list-style-type: none"> 1 week following the Kick-off Meeting
9.2	<ul style="list-style-type: none"> Mid-term Benefits Questionnaire 	<ul style="list-style-type: none"> TBD
9.3	<ul style="list-style-type: none"> Final Meeting Benefits Questionnaire 	<ul style="list-style-type: none"> 1 week prior to the Final Meeting
10	Technology/Knowledge Transfer Activities	
10.1	<ul style="list-style-type: none"> Draft Initial Fact Sheet 	<ul style="list-style-type: none"> 2 days after Kick-off Meeting
10.2	<ul style="list-style-type: none"> Final Initial Fact Sheet 	<ul style="list-style-type: none"> 2 days after receipt of written comments from CAM
10.3	<ul style="list-style-type: none"> Draft Technology/Knowledge Transfer Plan 	<ul style="list-style-type: none"> 6 months prior to agreement end-date
10.4	<ul style="list-style-type: none"> Final Technology/Knowledge Transfer Plan 	<ul style="list-style-type: none"> 4 months prior to agreement end-date
10.5	<ul style="list-style-type: none"> Draft Presentation Materials 	<ul style="list-style-type: none"> 2 weeks before final meeting
10.6	<ul style="list-style-type: none"> Final Presentation Materials 	<ul style="list-style-type: none"> 5 days before Final Meeting
10.7	<ul style="list-style-type: none"> Draft Final Project Fact Sheet 	<ul style="list-style-type: none"> 1 week after Final Meeting
10.8	<ul style="list-style-type: none"> Final Project Fact Sheet 	<ul style="list-style-type: none"> 1 week after receipt of comments from CAM

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION - RE: ADM ASSOCIATES, INC.

RESOLVED, that the State Energy Resources Conservation and Development Commission (Energy Commission) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the Energy Commission approves Agreement 300-15-011 from RFP-15-319 with ADM Associates, Inc. for a \$12,990,063 contract to (1) develop a methodology to conduct a survey of the energy-using characteristics of commercial utility customers that will serve as a baseline and support the Energy Commission's work on the demand forecast, (2) implement the survey, and (3) provide an unbiased, comprehensive analysis of the data for more geographically disaggregated forecasts. The Commercial End-Use Survey (CEUS) will facilitate the commercial success and market adoption of technologies, strategies, and other innovations. Of the total contract budget, \$7,990,063 will be funded from the EPIC Program, and is immediately available. The total budget includes up to an additional \$5,000,000 contingent upon other non-EPIC funding becoming available; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on May 17, 2016.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat