

**CONTRACT REQUEST FORM (CRF)**



A) New Agreement 300-15-001 (To be completed by CGL Office)

B) Division	Agreement Manager:	MS-	Phone
300 Energy Research and Development Division	Chris Scruton	51	916-327-2341

C) Contractor's Legal Name	Federal ID Number
The Regents of the University of California on behalf of CIEE	94-6002123

D) Title of Project
Water Energy Technology Program Support

E) Term and Amount	Start Date	End Date	Amount
	07 / 08 / 2015	03 / 31 / 2018	\$ 250,000

**F) Business Meeting Information**

Operational agreement (see CAM Manual for list) to be approved by Executive Director

ARFVTP agreements under \$75K delegated to Executive Director.

Proposed Business Meeting Date	07 / 08 / 2015	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Chris Scruton	Time Needed:	5 minutes

Please select one list serve. Research (Energy RDD / PIER program)

**Agenda Item Subject and Description**

Proposed resolution approving Agreement 300-15-001 with The Regents of the University of California on behalf of CIEE for a \$250,000 contract to provide technical support to the Water Energy Technology Program. The purpose of this program is to accelerate the deployment of innovative energy saving technologies and reduce greenhouse gas emissions. The program focuses on innovative technologies for the residential, commercial and industrial sectors and for renewable energy desalination.

**G) California Environmental Quality Act (CEQA) Compliance**

1. Is Agreement considered a "Project" under CEQA?  
 Yes (skip to question 2)       No (complete the following (PRC 21065 and 14 CCR 15378)):  
 Explain why Agreement is not considered a "Project":  
 This Agreement is not a project under CEQA because it is part of the Water Energy Technology (WET) Program that Governor's Executive Order B-29-15 authorizes (section 17) and exempts (section 26) from CEQA requirements. Even without the exemption in the Executive Order, this Agreement is not project under CEQA because it will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment. The contractor will provide technical assistance to the Energy Commission for the agricultural component of WET, including identifying appropriate technologies, evaluating project applications, and verifying project installations and benefits.

2. If Agreement is considered a "Project" under CEQA:  
 a) Agreement **IS** exempt. (Attach draft NOE)  
 Statutory Exemption. List PRC and/or CCR section number: \_\_\_\_\_  
 Categorical Exemption. List CCR section number: \_\_\_\_\_  
 Common Sense Exemption. 14 CCR 15061 (b) (3)  
 Explain reason why Agreement is exempt under the above section: \_\_\_\_\_

b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)  
 Check all that apply  
 Initial Study       Environmental Impact Report  
 Negative Declaration       Statement of Overriding Considerations  
 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
TBD	\$ 143,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	\$ 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	\$ 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**I) List all key partners: (attach additional sheets as necessary)**

**CONTRACT REQUEST FORM (CRF)**

CEC-94 (Revised 01/13)

CALIFORNIA ENERGY COMMISSION



Legal Company Name:

**J) Budget Information**

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
Other	2015/16		\$250,000
Funding Source			\$
R&D Program Area: N/A		TOTAL:	\$ 250,000
Explanation for "Other" selection		Greenhouse Gas Reduction Fund	
Reimbursement Contract #:		Federal Agreement #:	

**K) Contractor's Administrator/ Officer****Contractor's Project Manager**

Name:	Eric Lee	Name:	Carl Blumstein
Address:	UC-CIEE 2087 Addison Street, 2 <sup>nd</sup> floor	Address:	UC-CIEE 2087 Addison Street, 2nd floor
City, State, Zip:	Berkeley, CA 94704	City, State, Zip:	Berkeley, CA 94704
Phone:	510-643-1449	Fax:	- -
E-Mail:	eric.lee@uc-ciee.org	E-Mail:	carl.blumstein@uc-ciee.org

**L) Selection Process Used** (For amendments, address amendment exemption or NCB, do not identify solicitation type of original agreement.)

Solicitation Select Type Solicitation #: - - # of Bids: Low Bid?  No  Yes  
 Non Competitive Bid (Attach CEC 96)  
 Exempt This contract is part of the Water Energy Technology (WET) Program authorized by the Governor's Executive Order B-29-15, section 17. Section 31 of the Executive Order exempts WET contracts from public contracting requirements, including competitive bidding. Even without this exemption, this contract would not require competitive bidding because it is with another government entity.

**M) Contractor Entity Type**

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

**N) Is Contractor a certified Small Business (SB), Micro Business (MB) or DVBE?**

No  Yes  
 If yes, check appropriate box:  SB  MB  DVBE

**O) Civil Service Considerations**

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

**Justification:**

This contract is part of the Water Energy Technology (WET) Program authorized by the Governor's Executive Order B-29-15, section 17. Section 31 of the Executive Order exempts WET contracts from the Government Code provisions applicable to public contracts, which includes the civil service requirements contained in section 19130 et seq.



**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**

The rates paid under this agreement are comparable to rates paid by the Energy Commission for similar services that were competitively bid.

**S) Disabled Veteran Business Enterprise Program (DVBE)**

1.  Exempt (Executive Order B-29-15, Section 31 and Interagency/Other Government Entity)  
 2.  Meets DVBE Requirements      DVBE Amount:\$ 0      DVBE %: \_\_\_\_\_  
      Contractor is Certified DVBE  
      Contractor is Subcontracting with a DVBE: Name of DVBE Company  
 3.  Contractor selected through CMAS or MSA with no DVBE participation.  
 4.  Requesting DVBE Exemption (attach CEC 95)

**T) Miscellaneous Agreement 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       Other...  
 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 agreement term is consistent with the liquidation date for the Greenhouse Gas Reduction fund.

**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 checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
5. CEC 95, DVBE Exemption Request	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
6. CEQA Documentation	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Attached
7. Resumes	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
8. CEC 105, Questionnaire for Identifying Conflicts		<input checked="" type="checkbox"/> Attached

\_\_\_\_\_  
 Agreement Manager      Date      Office Manager      Date      Deputy Director      Date

# Exhibit A Scope of Work

## I. TASK ACRONYM/TERM LISTS

### TASK LIST

Task #	CPR <sup>1</sup>	Task Name
1		General Project Tasks
2		Assess Technologies for the WET Program
3		Model for Water Energy Efficiency
4		Technical and Program Support

### ACRONYM/GLOSSARY

Acronym/Term	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPUC	California Public Utilities Commission
Energy Commission	California Energy Commission
GHG	Greenhouse Gas
IOU	Investor Owned Utility
MWD	Metropolitan Water District of Southern California
WET	Water Energy Technology

## II. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT, AND GOALS AND OBJECTIVES

### A. Purpose of Agreement:

The purpose of this agreement is to secure technical assistance to support the Energy Commission's Water Energy Technology Program. The technical assistance will focus primarily on innovative water energy technologies to be deployed in the residential, commercial and industrial sectors, on improving the energy efficiency, water production and integration of renewable energy into desalination plants, verifying project savings, and providing other technical support for the program.

In response to California's drought, Governor Brown's Executive Order (B-29-15) outlines bold steps to save water, increase enforcement of water use standards, streamline the state's drought response, and invest in new technologies to make California more drought-resilient.<sup>2</sup> In

<sup>1</sup>Please see subtask 1.3 in Part III of the Scope of Work (General Project Tasks) for a description of Critical Project Review (CPR) Meetings.

<sup>2</sup>The Governor's Executive Order B-29-15, Item 17, states: "The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting edge technologies such as renewable energy powered desalination, integrated on site reuse systems, water use monitoring software, irrigation system timing and precision technology and on farm precision technology."

an effort to accelerate innovative water and energy saving technologies, the California Energy Commission, jointly with the Department of Water Resources and the State Water Resources Control Board, will implement the Water Energy Technology (WET) program and provide funding for emerging technologies that meet the following criteria:

- Display significant potential for both water and energy savings, and greenhouse gas emissions.
- Demonstrate actual operation beyond the R&D stage.
- Document readiness for rapid, large-scale deployment (but not yet widely deployed) in California.

Examples of potential eligible technologies are those that will integrate onsite water reuse with a reduction in net energy use and greenhouse gas emissions, no or reduced water use technologies, and renewable energy-powered desalination. These technologies are not widely deployed in California, but have high potential for savings.

## **B. Problem/ Solution Statement:**

### **Problem**

On April 1, 2015, Governor Brown's Executive Order B-29-15 outlines bold steps to save water, increase enforcement of water use standards, streamline the state's drought response, and invest in new technologies to make California more drought-resilient. In an effort to accelerate innovative water and energy technologies, the Energy Commission will implement the program in three phases:

1. Agricultural
2. Commercial/Industrial/Residential
3. Desalination

The three phases of the program focus on advancing energy and water reducing technologies within their respective sectors. This agreement will provide assistance to the second and third phase of the program. The second phase encompasses commercial, industrial and the residential sectors which include food processing, commercial laundry, food service, institutional, industrial operations, and other businesses and industries. This sector includes many businesses and industries. There are many opportunities to expand promising advanced technologies state wide, but there is a need to verify technical and economic feasibility and savings. The third phase focuses on renewable energy powered desalination. Desalination of ocean or brackish water is very energy intensive, requiring between 980 to 4,560 kWh/acre feet of water.<sup>3</sup> Advancements in membrane technology integrated with renewable energy and controls could increase water production and reduce overall production and greenhouse gas emissions. However, there is a need to verify economics of improvements and feasibility of renewable energy integration.

### **Solution**

The Contractor will supply technical expertise in the second and third phases of the program to identify cutting-edge technologies with proven energy and water savings and greenhouse gas reduction characteristics for use in the residential, commercial and industrial sectors. The

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<sup>3</sup> Water Reuse Association, "Seawater Desalination Power Consumption," Table 2, November 2011; [https://www.watereuse.org/sites/default/files/u8/Power\\_consumption\\_white\\_paper.pdf](https://www.watereuse.org/sites/default/files/u8/Power_consumption_white_paper.pdf)

Contractor will evaluate and recommend applications for funding, evaluate new technologies for rebate and grant consideration, and verify project installations and benefits, if requested by the Commission Agreement Manager (CAM). The Contractor may also provide recommendations for rebate and grant program design and provide estimates of energy, water and greenhouse gas reductions associated with recommended technologies. The Contractor will assist in determining that projects funded under the WET program are not excessively duplicative of projects funded by the rebates and incentives from other programs (i.e., State, utility or water/irrigation district) and the total amount of all incentives do not exceed 100% of the total project cost. Other programs include but are not limited to the Metropolitan Water District's SoCal WaterSmart Rebate Program and Water Savings Incentive Program, and Investor-owned utility (IOU) rebate programs.

### **C. Goals and Objectives of the Agreement**

#### **Agreement Goals**

The goals of this Agreement are to:

- Reduce water use or reduce on-site net water use
- Reduce energy consumption
- Reduce greenhouse gas emissions
- Increase water production efficiency for desalination projects
- Identify advanced technologies and integrated systems that can help reduce the drought impact in the commercial, industrial, residential, and desalination sectors.
- Obtain water, energy, and greenhouse gas reduction data from completed projects to determine overall cost effectiveness

Benefits: This Agreement will result in water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies in the commercial, residential and industrial sectors and in desalination facilities with documented benefits of water and energy savings. These results will increase the technologies' possibility for broader adoption.

Advancing Deployment of Innovative Water Energy Technologies: This Agreement will provide funding to advance deployment of cutting edge technologies to achieve goals of the Governor's Executive Order B-29-15, Assembly Bill 32, the Global Warming Solutions Act of 2006, the Energy Commission's Integrated Energy Policy Report, and CPUC's proceeding on the Water Energy Nexus.<sup>4</sup>

#### **Agreement Objectives**

The objectives of this Agreement are to:

- Identify advanced, innovative technologies that can reduce water and energy use and greenhouse gas emissions in the commercial, residential and industrial sectors and the desalination industry
- Determine rebate and incentive levels for recommended technologies or strategies
- Verify energy, water, and GHG reductions
- Assist in the development of an application and program delivery documents

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<sup>4</sup> Assembly Bill 32: [www.arb.ca.gov/cc/ab32/ab32.htm](http://www.arb.ca.gov/cc/ab32/ab32.htm);

- Coordinate with various entities to prevent excessive duplicative work and incentives

### III. TASK 1 GENERAL PROJECT TASKS

#### DELIVERABLES

##### Subtask 1.1 Deliverables

The goal of this subtask is to establish the requirements for submitting project Deliverables (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Contractor must deliver deliverables as required below by the dates listed in the **Project Schedule (Part V)**. Deliverables that require a draft version are indicated by marking “**(draft and final)**” after the deliverable name in the “Deliverables” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

##### The Contractor shall:

###### For deliverables that require a draft version

- Submit all draft deliverables to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Contractor on the draft deliverable within 15 days of receipt, unless otherwise specified in the task/subtask for which the deliverable is required.
- Consider incorporating all CAM comments into the final deliverable. If the Contractor disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final deliverable.
- Submit the revised deliverable and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period.

###### For deliverables that require a final version only

- Submit the product to the CAM for approval. The CAM may request minor revisions or explanations prior to approval.

###### For all deliverables

- Submit all data and documents required as deliverables in accordance with the following Instructions for Submitting Electronic Files and Developing Software:
  - **Electronic File Format**  
Submit all data and documents required as deliverables under this Agreement in an electronic file format that is fully editable and compatible with the Energy Commission’s software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick, CD-ROM or email attachment.

The following describes the accepted formats for electronic data and documents provided to the Energy Commission as deliverables under this Agreement, and establishes the software versions that will be required to review and approve all software deliverables:

- Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.
  - Text documents will be in MS Word file format, version 2007 or later.
  - Documents intended for public distribution will be in PDF file format. The Contractor must also provide the native Microsoft file format.
  - Project management documents will be in Microsoft Project file format, version 2007 or later.
- **Software Application Development**  
Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open source programs:
    - Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
    - Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5.
    - Visual Studio.NET (version 2008 and up). Recommend 2010.
    - C# Programming Language with Presentation (UI), Business Object and Data Layers.
    - SQL (Structured Query Language).
    - Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
    - Microsoft SQL Reporting Services. Recommend 2008 R2.
    - XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the Energy Commission's Information Technology Services Branch to determine whether the exceptions are allowable.

## MEETINGS

### Subtask 1.2 Kick-off Meeting

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

#### The Contractor shall:

- Attend a "Kick-off" meeting with the CAM, the Commission Agreement Officer (CAO), and any other Energy Commission staff relevant to the Agreement. The Contractor will bring its Project Manager and any other individuals designated by the CAM to this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., WebEx), with approval of the CAM.

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

- Terms and conditions of the Agreement;
- Administrative deliverables (subtask 1.1);

- Subcontracts (subtask 1.5); 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 (subtask 1.1);
  - Progress reports and invoices (subtask 1.3);
  - Any other relevant topics.
- Provide an *Updated Project Schedule* as needed to reflect any changes in the documents.

**The CAM shall:**

- Designate the date and location of the meeting.
- Send the Contractor a *Kick-off Meeting Agenda*.

**Contractor Deliverables:**

- Updated Project Schedule (*if applicable*)
- Updated List of Match Funds (*not applicable*)
- Updated List of Permits (*not applicable*)

**CAM Deliverable:**

- Kick-off Meeting Agenda

**REPORTS AND INVOICES**

**Subtask 1.3 Progress Reports and Invoices**

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

**The Contractor shall:**

- Submit a monthly *Progress Report* to the CAM. Each progress report must:
  - Summarize all Agreement activities conducted by the Contractor for the preceding month, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. See the Progress Report Format Attachment for the recommended specifications.
  - Provide a synopsis of the project progress, including accomplishments, problems, milestones, deliverables, schedule, fiscal status, and any evidence of progress such as photographs.
  - Submit a quarterly Invoice that follows the instructions in the "Payment of Funds" section of the terms and conditions.

**Contractor Deliverables:**

- Monthly Progress Reports
- Invoices

### **Subtask 1.4 Final Report**

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. The CAM will review and approve the Final Report, which will be due at least **two months** before the Agreement end date. When creating the Final Report Outline and the Final Report, the Contractor must use a Style Manual provided by the CAM.

#### **Subtask 1.4.1 Final Report Outline**

##### **The Contractor shall:**

- Prepare a *Final Report Outline* in accordance with the *Style Manual* provided by the CAM. (See Task 1.1 for requirements for draft and final products.)
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##### **Contractor Deliverables:**

- Final Report Outline (draft and final)

##### **CAM Deliverables:**

- Style Manual
- Comments on Draft Final Report Outline
- Approval of Final Report Outline

#### **Subtask 1.4.2 Final Report**

##### **The Contractor shall:**

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline and the Style Manual, and Final Report Template provided by the CAM with the following considerations:
  - Ensure that the document is written in the third person.
  - Ensure that the Executive Summary is understandable to the lay public.
    - Briefly summarize the completed work. Succinctly describe the project results and whether or not the project goals were accomplished.
    - Identify which specific ratepayers can benefit from the project results and how they can achieve the benefits.
    - If it's necessary to use a technical term in the Executive Summary, provide a brief definition or explanation when the technical term is first used.
  - Follow the format requirements for headings, figures/tables, citations, and acronyms/abbreviations.
  - Ensure that the document omits subjective comments and opinions. However, recommendations in the conclusion of the report are allowed.
  - Include a brief description of the project results in the Abstract.
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 30 days of receipt
- Consider incorporating all CAM comments into the Final Report. If the Recipient

disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product

- Submit the revised Final Report and responses to comments within 30 days of notice by the CAM, unless the CAM specifies a longer time period.
- Submit one bound copy of the *Final Report* to the CAM along with *Written Responses to Comments on the Draft Final Report*.

**Deliverables:**

- Final Report (draft and final)
- Written Responses to Comments on the Draft Final Report

## **SUBCONTRACTS**

### **Subtask 1.5 Subcontracts**

The goals of this subtask are to: (1) procure subcontracts required to carry out the tasks under this Agreement; and (2) ensure that the subcontracts are consistent with the terms and conditions of this Agreement.

**The Contractor shall:**

- Manage and coordinate subcontractor activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subcontract.
- Include any required Energy Commission flow-down provisions in each subcontract, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subcontract terms.
- If required by the CAM, submit a draft of each *Subcontract* required to conduct the work under this Agreement.
- Submit a final copy of the executed subcontract's Scope of Work and/or Budget.
- Notify and receive written approval from the CAM prior to adding any new subcontractors (see the discussion of subcontractor additions in the terms and conditions).

**Contractor Deliverables:**

- Subcontracts (Final Scope of Work and/or Budget only)

## **IV. TECHNICAL TASKS**

*Deliverables that require a draft version are indicated by marking “(draft and final)” after the product name in the “Deliverables” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. **Subtask 1.1 (Deliverables)** describes the procedure for submitting deliverables to the CAM.*

### **TASK 2: Assess Technologies for the WET Program**

The objective of this task is to: a) assess the current state of innovative technologies for use in the commercial, residential and industrial sectors that will reduce water and energy use and result in reductions in greenhouse gas; b) make recommendations on rebate and incentive levels.

**The Contractor shall:**

- Prepare *Innovative Technologies for WET Program Memos for each category (commercial, residential, industrial and desalination)*, that will include, but not be limited to the following:
  - List of proposed innovative technologies for potential rebates/incentives that are commercially available, not widely used in California, but ready for large scale deployment in the commercial, residential and/or industrial sectors. In developing the list, include:
    - Methodology for estimating baseline and post retrofit energy, water and GHG reductions, and assumptions
    - Identify barriers and how WET program funding could help with overcoming these barriers
    - Determine technology costs (equipment, materials, installation cost), permit requirements and any other considerations
    - Rebate or incentive amount and provide rationale.
    - Consider technologies from Australia, Israel, Singapore and others for feasibility and use in California.
    - Estimate energy and water savings and greenhouse gas reductions for the technology and for the applicable sector(s)
- Participate in calls when requested by the CAM.

**Contractor Deliverables:**

- Innovative Technologies for WET Program Memo for Commercial (draft & final)
- Innovative Technologies for WET Program Memo for Residential (draft & final)
- Innovative Technologies for WET Program Memo for Industrial (draft & final)
- Innovative Technologies for WET Program Memo for Desalination (draft & final)

**TASK 3: Model for Water Energy Efficiency**

The goal of this task is to finalize model to determine project level energy and water savings and greenhouse gas reductions (baseline conditions and after technology implementation).

**Contractor shall:**

- Finalize the Water Energy Efficiency model to determine project level energy and water savings and greenhouse gas reductions based on technologies implemented, and with site specific inputs for water and energy utilities.
  - Test model on specific WET program recipients, such as pre- and post-retrofit and compare tests with actual conditions
  - Provide *Water Energy Efficiency Model Memo* to include:
    - Test results
    - How to use of the model to verify pre-and post-water, energy and GHG reductions in Energy Commission WET program and Appliance Rebate program participants
    - System requirements and instruction
    - All assumptions and sources of data used in calculating the energy and water savings and greenhouse gas reductions.
  - Provide *Website Address for Model* where the CAM, program applicants and recipients can use the model to determine pre- and post-project energy, water and greenhouse gas reductions

**Contractor Deliverables:**

- Water Energy Efficiency Model Memo (draft and final)
- Website address for the Model

**TASK 4: Technical and Program Support**

Upon request, the purpose of this task is to provide technical reviews of applications and proposals, provide evaluations of installed technologies to determine energy, and water savings and greenhouse gas reductions, assist with project troubleshooting, and provide WET program outreach.

**The Contractor shall:**

- Determine potential expert(s) to provide the technical support
- Work with the CAM to develop the work scope/budget and schedule for each *subcontract*, if the work will not be done by the Contractor.
- When directed by the CAM, the Contractor or its subcontractor can provide technical assistance that can include, but is not limited to:
  - Review WET Program applications for technical feasibility and conformance with program requirements (e.g., not widely deployed)
    - Provide a *Notification Memo(s)* documenting the results of the application review
  - Prepare and implement monitoring and verification plan for project installations to verify pre- and post-energy and water savings
  - Provide troubleshooting assistance for WET Program projects that are not meeting its energy and water saving goals
  - Evaluation of program effectiveness and achievement of goals
  - Assist with organization of workshops/conferences for the WET program

**Contractor Deliverables**

- Subcontracts (Final Scope of Work, Budget and Schedule)

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA  
INSTITUTE FOR ENERGY AND ENVIRONMENT

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

**RESOLVED**, that the Energy Commission approves Agreement 300-15-001 with **The Regents of the University of California, on behalf of the California Institute for Energy and Environment** for **\$250,000** contract to provide technical support to the Water Energy Technology Program. The purpose of this program is to accelerate the deployment of innovative energy saving technologies and reduce greenhouse gas emissions. The program focuses on innovative technologies for the residential, commercial and industrial sectors and for renewable energy desalination; 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 July 8, 2015.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

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Harriet Kallemeyn,  
Secretariat

