

CONTRACT REQUEST FORM (CRF)

CEC-94 (Revised 01/13)

CALIFORNIA ENERGY COMMISSION

A) New Agreement 400-14-005 (To be completed by CGL Office)

B) Division	Agreement Manager:	MS-	Phone
400 Efficiency Renewable Energy Division	Alexander Wan	26	916-654-4880

C) Contractor's Legal Name	Federal ID Number
Regents of the University of California, Davis California Lighting Technology Center	94-6036494

D) Title of Project
Online Resource Center- CLTC

E) Term and Amount	Start Date	End Date	Amount
	06 / 30 / 2015	03 / 31 / 2017	\$ 645,000

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	05 / 27 / 2015	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Alexander Wan	Time Needed:	5 minutes
Please select one list serve. BuildingStandards			

Agenda Item Subject and Description
Proposed resolution approving Agreement 400-14-005 with the Regents of the University of California on behalf of the Davis campus's California Lighting Technology Center for a \$645,000 contract to develop training courses about the lighting requirements of the Building Energy Efficiency Standards, and creating compliance resource materials and videos for the Online Resource Center. Contact: Alexander Wan. (Staff presentation: 5 minutes).

G) California Environmental Quality Act (CEQA) Compliance
1. Is Agreement considered a "Project" under CEQA? <input type="checkbox"/> Yes (skip to question 2) <input checked="" type="checkbox"/> No (complete the following (PRC 21065 and 14 CCR 15378)): Explain why 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 this contract involves development that is service-based. Specifically, it entails the development of course curriculum and online resources. Thus, it will not cause a direct physical change in the environment or a reasonably foreseeable indirect change in the environment..
2. If Agreement is considered a "Project" under CEQA: <input type="checkbox"/> a) Agreement IS exempt. (Attach draft NOE) <input type="checkbox"/> Statutory Exemption. List PRC and/or CCR section number: _____ <input type="checkbox"/> Categorical Exemption. List CCR section number: _____ <input type="checkbox"/> Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section: <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
UC Davis or TBD competitively selected private vendor	\$ 70,000	<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)
Legal Company Name:
N/A

**J) Budget Information**

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
State - ERPA	14/15	400.009	\$500,000
State - ERPA	14/15	400.008	\$145,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
R&D Program Area: <input type="text"/> Select Program Area <input type="text"/>	TOTAL:		\$645,000
Explanation for "Other" selection <input type="text"/>			
Reimbursement Contract #:		Federal Agreement #:	

K) Contractor's Administrator/ Officer

Contractor's Administrator/ Officer				Contractor's Project Manager			
Name:	Denise Pennington			Name:	Cori Jackson		
Address:	633 Pena Drive			Address:	633 Pena Drive		
City, State, Zip:	Davis, CA 95618			City, State, Zip:	Davis, CA 95618		
Phone:	530-747-3840	Fax:	530-747-3812	Phone:	530-747-3843	Fax:	530-747-3812
E-Mail:	mdpennington@ucdavis.edu			E-Mail:	cmjackson@ucdavis.edu		

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 Interagency

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:

CLTC is a California State Entity. Thus, it is exempt from Civil Service Considerations.

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 overhead rate identified in this contract is the negotiated rate between the University of California and the Energy Commission. The labor rates charged are in accordance with standard published state rates for these classifications.

S) Disabled Veteran Business Enterprise Program (DVBE)

1. Exempt (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
 It will take two years to complete the modules. The 2016 standards will not be implemented until 2017

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 type="checkbox"/> Attached |
| 8. CEC 105, Questionnaire for Identifying Conflicts | <input checked="" type="checkbox"/> N/A | <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
2	Training Course Development – Lighting Related Requirements of Standards
3	Web Site Technical Consulting
4	Resource Materials
5	Customized Technical Support

ACRONYMS/GLOSSARY

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

Acronym	Definition
Energy Commission	California Energy Commission
CAM	Commission Agreement Manager
CLTC	California Lighting Technology Center
CCT	Correlated Color Temperature
CRI	Color Rendering Index
ITSB	Energy Commission Information Technology Services Branch
ORC	Online Resource Center
PPT	PowerPoint

BACKGROUND/PROBLEM STATEMENT

The purpose of this contract is to assist the California Energy Commission (Energy Commission) in establishing an Online Resource Center (ORC) to provide lighting-related educational tools, training and information in support of the 2013 and 2016 Building Energy Efficiency Standards (Energy Standards). The ORC will be a living resource, designed to raise awareness of the benefits of each new cycle of Energy Standards, and increase knowledge of energy efficient best practices for residential and non-residential buildings. The ORC will serve as a “one stop shop”, providing technical assistance resources that address barriers to Energy Code compliance. With the primary goal of improving compliance with the Energy Standards, the ORC will provide 24-hours a day, 7 days a week, free access for enforcement agencies, contractors, builders, energy consultants, and building designers. The ORC is necessary because the Energy Commission has received numerous complaints from stakeholders, such as building designers and contractors, who have said that the Standards are complicated and confusing. Moreover, rates of compliance with the Energy Standards are low.

The ORC will reside on the Energy Commission's website, and will be constructed and maintained by Information Technology Services Branch (ITSB) and Efficiency Division staff. ORC content may include Training Modules with instructional videos, webinars, PowerPoint presentations, fact sheets and other technical assistance publications, and tools for identifying compliance forms and Standards navigation. It will also link to additional free resources provided on the Energy Code Ace Website (developed by the California Statewide Codes & Standards Program, funded by California utility customers under the auspices of the California Public Utilities Commission, and implemented by Pacific Gas and Electric Company, San Diego Gas and Electric, Southern California Edison and Southern California Gas, in support of the California Energy Commission). The process to develop the educational Center will include consulting and coordinating with subject matter experts at the California Technology Lighting Center (CLTC) to develop multi-media technical content that will apply across all California climate zones.

In addition, the CLTC will provide technical assistance to the Energy Commission on a variety of lighting topics as they relate to Energy Standards and Title 20 Appliance Efficiency Standards (Appliance Standards). CLTC expertise will help Energy Commission staff on lighting-related issues to clarify, update and maintain the existing Energy Standards, support for development of the 2016 Energy Standards, as well as support for the Appliance Standards. These activities will directly impact and inform efforts related to development and deployment of the ORC.

GOALS OF THE AGREEMENT

The goals of the Agreement are to improve clarity, content and understanding of existing and forthcoming building efficiency and appliance standards through targeted technical support and resource development.

With respect to the ORC, the Energy Commission expects that:

- Building Department personnel will have a greater knowledge and understanding of the Energy Standards, allowing them to enforce the Standards more effectively, resulting in greater energy savings and increased compliance and enforcement rates;
- Architects, contractors, engineers, energy consultants and builders will be better able to design and construct buildings that are in compliance with the Energy Standards; and
- Consumers will have increased knowledge of the Energy Standards, leading to a greater demand for energy efficient buildings.

TASK 1: AGREEMENT MANAGEMENT

Subtask 1.1 Deliverables

The goal of this subtask is to establish the requirements for submitting agreement 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 Schedule of Deliverables). 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 deliverable name, only a final version of the deliverable 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 Schedule of Deliverables and Due Dates. 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.

Submit the final deliverable to the CAM once agreement has been reached on the draft. The CAM will provide written approval of the final deliverable within 15 days of receipt, unless otherwise specified in the task/subtask for which the deliverable is required.

If the CAM determines that the final deliverable does not sufficiently incorporate his/her comments, submit the revised deliverable to the CAM 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 deliverable to the CAM for approval.
- If the CAM determines that the deliverable requires revision, submit the revised deliverable to the CAM within 10 days of notice by the CAM, unless the CAM specifies a longer time period.

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 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 or CD-ROM.
- 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.

All video files will be submitted in the format and medium specified by the Energy Commission's Media and Public Communications Office, as directed by the CAM.

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.

Subtask 1.2 Kick-off Meeting

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

The Contractor shall:

- Attend a "kick-off" meeting with the CAM, Project Manager, and the Commission Agreement Officer. The meeting may be held via teleconference and the Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and may include others designated by the CAM in this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting. Priorities and deadlines will also be discussed with the Contractor.
- Prepare a meeting summary report.
- Prepare an updated Schedule of Deliverables based on the decisions made in the kick-off meeting if necessary.

The CAM shall:

- Arrange the meeting including scheduling the date and time.
- Provide a list of deliverables to be developed for the ORC.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

- Meeting summary report.
- Updated Schedule of Deliverables.

Task 1.3 Invoices

The Contractor shall:

- Prepare invoices for all reimbursable expenses incurred performing work under this Agreement in compliance with the Exhibit B of the Terms and Conditions of the Agreement. Invoices shall be submitted with the same frequency as progress reports (Task 1.5). Invoices must be submitted to the Energy Commission's Accounting Office.

Deliverables:

- Quarterly Invoices

Task 1.4 Manage Subcontractors

The goal of this task 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.

Deliverables:

- Copy of all executed subcontract agreements.

Task 1.5 Progress Reports

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

The Contractor shall:

- Prepare progress reports which summarize all Agreement activities conducted by the Contractor for the reporting period, including, but not limited to, an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns, task-by-task updates, invoices for services, and deliverable production status. Each progress report is due within 15 calendar days after the end of the reporting period.

The CAM shall:

- Provide the format for the progress reports.

Deliverables:

- Quarterly Progress Reports.

Task 1.6 Final Report

The goal of this task is to prepare a comprehensive written Final Report that describes the original purpose, approach, results and conclusions of the work completed under this Agreement. The Final Report shall be prepared in language easily understood by the public or layperson with a limited technical background. The format for the Final Report can be found here: http://www.energy.ca.gov/contracts/consultant_reports/index.html.

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 has obtained confidential status from the Energy Commission and will be preparing both a public and a confidential version of the Final Report, the Contractor shall perform the following subtasks for both the public and confidential versions of the Final Report.

The Contractor shall:

- Prepare the draft Final Report for this Agreement.
- 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:

- Draft Final Report and Final Report.

TECHNICAL TASKS

Task 2: Training Course Development – Lighting Related Requirements of Standards

The goal of this task is to develop new technical training courses for posting on the Energy Commission ORC Website. Courses will be designed to simplify Energy Standards compliance for building department personnel, building designers, and contractors. A course is a video-based education module, roughly one hour in length, and broken out in a series of smaller lessons. A Course Module may contain learning tools such as study guides, quizzes, tests and links to other educational resources.

The Contractor shall:

- Ensure that the courses will accurately address the most complex lighting-related compliance issues that are new in the 2013 Standards, and the 2016 Standards.
- Collaborate with Energy Commission staff to determine the training module topics and audience, prioritize them for development, and set due dates.
- Develop module components to support and enhance existing course modules, in addition to all new course modules, as directed by the CAM. (See www.energyvideos.com).
- Potential Course Module topics include:
 - Nonresidential Indoor Lighting Alterations
 - Nonresidential Indoor Lighting (New Construction)
 - Electrical Power Distribution
 - Outdoor Lighting
 - Sign Lighting
 - Residential Lighting
- Develop an ORC Course Module Proposal in outline format for each course approved by the CAM. The Proposal will list the components of the proposed Course Module and the delivery dates.

- As part of the Proposal development process, the contractor will identify and recommend portions of existing training modules, including video, suitable for incorporation into the new module by reviewing the existing training modules located on the Energy Commission website at www.energyvideos.com.
- The Contractor must receive written approval of the Course Module Proposal prior to developing the Module components.
- Collaborate with Energy Commission Building Standards Implementation Office staff, and incorporate comments received from the Energy Commission staff prior to finalizing the module components.
- When a video is a module component, the Contractor will develop and submit for approval a draft Video Presentation Plan for each new video (see below) and a draft script, prior to developing the Module's video components. A Video Presentation Plan for each video will include production details such as arrangements to obtain cooperation from participating manufacturers, builders and others necessary for the production of each new module; production logistics; video release forms signed by all on-camera interviewees and talent; arrangement of on-camera interviews; location of the shoot, film crew, camera, lighting, audio equipment and travel expenses.
- Contractor shall utilize staff or employees of the University of California for videography services, or, if necessary, competitively select a private vendor.
- Prepare an ORC Course Module containing the module components approved in each approved Course Module Proposal.
- Produce the videos approved in the Video Presentation Plan, incorporating segments of existing videos when applicable.
 - Video footage will be formatted for Streaming Video (compressed video that can be put on the web for viewing).
 - Streaming Video quality: Codec, Frame Rate, Resolution and Bitrate will meet or exceed that of the videos in the existing Energy Code Online Training (www.energyvideos.com).
 - When existing videos will be used in the course module, the CAM will provide the source videos to the Contractor if needed for module production.
 - The Contractor will include post-production editing, formatted PowerPoint (PPT) files, introductions, and voice and text overlays.
- Develop video to meet the Americans with Disabilities Act (ADA) website requirements. If needed, the CAM will provide transcripts of existing videos to the Contractor.
- Develop and submit final video files and web content suitable for posting on the Energy Commission server (the Web pages where the online videos will be housed and accessible for maintenance).
- Catalogue the electronic files associated with Module components, including raw footage, by course or subject matter, and provide to the Energy Commission on external memory drive(s).

The CAM shall:

- Provide existing video and transcripts to the Contractor if needed for Module development.

- Provide IT-related formatting specifications to the Contractor prior to Module Proposal development.

Deliverables:

- Course Module Proposals
- ORC Course Modules with all components, including but not limited to
 - Video Presentation Plans
 - Draft and final scripts, quizzes, tests, PowerPoint presentations, and any other suggested resource links; submitted for approval prior to production.
 - Transcripts of all videos to Word files (for ADA compliance).
 - Final video files, raw footage, etc. on DVD or other media specified by the CAM.
- Final courses formatted for posting on the Energy Commission ORC Web Site.

Task 3: Web Site Content and Design Consulting – Optional Task

The goal of this optional task is to have the Contractor provide feedback about what components could be included in the ORC website and website design recommendations. This task will be performed only upon written direction of the CAM.

The Contractor shall:

- Prepare a *Website Content and Design Report*, provide suggestions to the CAM and Commission staff about the features of the Energy Commission ORC website design if requested to do so by the CAM. The report will include recommendations for site layout, site map, site navigation, location of web site content, and fact sheets.

Deliverables:

- *Website Content & Design Report.*

Task 4: Resource Materials

The goal of this task is to develop resource material for posting by the Energy Commission on the ORC web site. The materials will target the building department, designer, and builder audiences. Materials may include items such as fact sheets, samples of completed compliance forms, and links to other on-line resource tools. These materials are in addition to the training courses provided under Task 2.

The Contractor Shall:

- Collaborate with Energy Commission staff to inventory existing resource material that is available on the energyvideos.com, California Energy Commission, California Lighting Technology Center, and Energy Code Ace web sites.
- Prepare an inventory of existing resource materials.

- Identify the types of resource material that will need to be updated and the new materials that need to be developed to include on the ORC web site, in consultation with the CAM and other appropriate Energy Commission staff.
- Prepare a list of specific materials that need to be updated and/or developed and placed on the ORC website.
- Develop or update resource material for inclusion on the ORC web site upon written direction of the CAM.
- Refine final resource materials based on feedback from the CAM.

Deliverables:

- Inventory of Existing Resource Materials.
- Resource Materials that need to be Updated and/or Developed List.
- Drafts of Resource Materials.
- Final Resource Materials.

Task 5: Customized Technical Support

The goal of this task is to provide technical support for lighting-related portions of the Energy Standards and Appliance Standards.

Task 5.1 Technical Support for the Appliance Efficiency program (Title 20)

The Contractor may be directed by the CAM to conduct some or all of the following activities. Specific activities and deliverables will be conducted or provided upon email requests to the Contractor by the CAM.

The Contractor shall:

- Provide ongoing consulting services to Energy Commission staff to educate them about the technical issues related to LED, MR Lamps and other light sources, such as correlated color temperature (CCT), color rendering index (CRI), thermal performance of different light sources, dimmability, power factor, and other parameters. Each deliverable shall be provided in writing in the form of emails or meeting notes.
- Help staff prepare written responses to address technical stakeholder concerns.
- Provide technical support for the expansion and revisions of the Voluntary California Quality LED Lamp Specifications.
- Demonstrate lighting technologies to train Energy Commission staff. Demonstrate the performance of light sources so staff can distinguish the differences in the performance of high and low quality sources, including CRI, color temperature, dimming, etc.
- Facilitate semi-annual meetings between the Energy Commission and various stakeholders to resolve emerging lighting-related issues in the Appliance Standards. Contractor's work may include assisting the Energy Commission with lighting-related comments and questions before meetings. The Contractor's work also may include attendance at meetings to assist with presentations and questions from stakeholders. Contractor is responsible for all logistics, including meeting site.

Deliverables:

- Emails or meeting notes provided to the Energy Commission staff documenting the technical issues addressed by the Contractor.
- Electronic copies of the written responses provided to Energy Commission staff, addressing the technical stakeholder concerns
- Draft Specifications including an update of the Voluntary California Quality LED Lamp Specification.
- Lighting technology demonstrations (table top displays, mobile displays, and small interactive modules/components).
- Meeting facilitation documentation, including but not limited to, agenda and meeting minutes.

Task 5.2 Technical Support for the Building Standards Development program

The Contractor may be directed by the CAM to conduct some or all of the following activities. The specific activities and deliverables listed below will be conducted or provided in written format upon on email requests to the Contractor by the CAM.

The Contractor shall:

- Review ongoing staff and consultant efforts in support of the Commission's standards development process. Ensure that staff and consultants' work products are balanced, technically feasible, and support California's long-term energy efficiency goals.
- Assist staff and the CASE teams with development of Residential Compliance Manuals.
 - Develop language, graphics, and examples for the draft 2016 Residential Compliance Manual.
 - Assist staff with responses to stakeholder comments about the Manual.
- Assist staff in developing responses to stakeholder comments through the 2016 Standards rulemaking and adoption phases.
- Conduct Technology Evaluation Demonstrations and develop supporting educational materials.
 - Train staff and stakeholders about the technical issues related to LED and other light sources, such as CCT, CRI, thermal performance of different sources, dimmability, power factor, and other parameters.
- Respond to questions posed by staff about issues related to updating the 2016 *Joint Appendices, Appendix 8 – Qualification Requirements for Residential Luminaires using LED Light Source (JA-8)*.
 - Address light source efficacy, power factor, life test, thermal performance, dimming range, start time, color temperature, color rendering index, flicker, and lumen maintenance.

Deliverables:

- Written reviews of draft regulations and supporting documentation prepared by staff, the CASE team, or contractors.
- Draft sections of the Residential Compliance Manuals.

- Written draft responses to stakeholder comments about Compliance Manual content and 2016 regulations.
- Technology evaluation demonstrations and/or educational materials.
- Written responses to questions posed by Energy Commission staff about issues associated with the update of JA-8.

SCHEDULE OF DELIVERABLES AND DUE DATES

Task Number	Deliverable	Due Date
1	Agreement Management	
1.1	Draft and/or Final deliverables (data or documents) submitted in required file format	As directed by CAM
1.2	Kick-off Meeting Summary Report, updated Schedule of Deliverables	1 week after kick-off meeting
1.3	Quarterly Invoices submitted with quarterly Progress Report (see 1.5 below)	Quarterly, 15 th of the month
1.4	Copy of executed subcontract agreements	TBD (upon Agreement approval)
1.5	Quarterly Progress Reports	Quarterly, 15 th of the month
1.6	Draft Final Report Final Report	March 1, 2017
2	Training Course Development	
	Individual Course Module Proposals	14 working days after CAM direction for each Course Module Proposal.
	ORC Course Module (all components)	1 st Module completed by October 1, 2015; subsequent Modules per Revised Development Schedule
	Video Presentation Plan (for each new or revised video)	30 working days after each Course Module Proposal approval
	Draft Course Module components	30 working days after Proposal approval
	Final Course Module components ready for CEC posting	30 working days after draft versions are approved by the CAM
	Video Transcripts Catalogued raw footage and all electronic files	Due 7 days after each final video is approved by the CAM
	Draft and final "Course Module Final Production Report"	30 days after completion of final course module.
3	Website Technical Consulting	
	ORC Website Content and Design Report (optional)	30 days after CAM direction

4	Resource Materials	
	Inventory of all existing resource materials	September 11, 2015
	List of the specific resource material that needs to be placed on the ORC website including existing materials that require updates and new items	October 31, 2015
	Draft of new and/or updated resource materials	No more than 90 days after they are requested by the CAM
	Resource Materials - Finalize version	No more than 30 days after they are approved by the CAM
5	Customized Technical Support	
5.1	<i>Technical Support for Title 20 Program</i>	
5.1	Technical issue emails or meeting notes	As requested: 10 working days after CAM request
5.1	Copies of Written responses	As requested: 10 working days after CAM request
5.1	Draft lighting specifications	As requested: 10 working days after CAM request
5.1	Lighting Technology demonstrations	As requested: 10 working days after CAM request
5.1	Technical Reports/memos	As requested: 10 working days after CAM request
5.1	Meeting Facilitation documentation	As requested: 10 working days after CAM request
5.2	<i>Technical Support for Standards Development program</i>	
5.2	Written review of CASE or other efforts	As requested: 10 working days after CAM request
5.2	Draft sections of Residential Compliance Manual	As requested: 10 working days after CAM request
5.2	Responses to Stakeholder comments re: proposed regulations	As requested: 10 working days after CAM request
5.2	Responses to Stakeholder comments re: Compliance Manual issues	As requested: 10 working days after CAM request
5.2	Technology Evaluations Demonstrations and educational materials	As requested: 10 working days after CAM request
5.2	JA-8 update consulting services	As requested: 10 working days after CAM request

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: UNIVERSITY OF CALIFORNIA, DAVIS

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 400-14-005 with **The Regents of the University of California on behalf of the Davis campus's California Lighting Technology Center** for a **\$645,000** contract to develop video-based training courses and compliance resource materials about the lighting requirements of the Building Energy Efficiency Standards for the Online Resource Center, and to provide technical support for lighting efficiency standards; 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 June 10, 2015.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Harriet Kallemeyn,
Secretariat