



**CONTRACT REQUEST FORM (CRF)**

CEC-94 (Revised 01/13)

CALIFORNIA ENERGY COMMISSION

**J) Budget Information**

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
State - ERPA	2014-15		\$150,000
ERPA- SEP	2015-16		\$150,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
R&D Program Area: <input type="text"/> Select Program Area <input type="text"/>		TOTAL:	\$300,000
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:	Lorena Villezar-Clelo			Name:	David Roland-Holst		
Address:	University of California, Berkeley Rm. 40 Giannini Hall,			Address:	University of California, Berkeley 207 Giannini Hall		
City, State, Zip:	Berkeley, CA 94720			City, State, Zip:	Berkeley, CA 94720		
Phone:	510-642-2928	Fax:	- -	Phone:	510-220-4567	Fax:	- -
E-Mail:	dwrh@berkeley.edu			E-Mail:	lorenav@berkeley.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:****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**

In order to complete the required tasks within the allocated timeframe, it has been determined that the services of 1 PI (faculty member) and 4 graduate students will be required. Rates are pre-negotiated and are determined by UC Berkeley policies.

**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  
     CEC staff anticipate additional rulemakings in 2016-2017 that will require economic analysis services.

**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 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"/> Attached |

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

**Exhibit A  
SCOPE OF WORK**

**TASK LIST**

<b>Task #</b>	<b>Task Name</b>
1	Agreement Management
2	Review of Standardized Regulatory Impact Assessments (SRIAs)
3	Produce SRIA Reports for Major Rulemakings
4	Economic Analysis Services for the Efficiency Division

**ACRONYMS/GLOSSARY**

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

<b>Acronym</b>	<b>Definition</b>
BEAR	Berkeley Energy And Resources
CAM	Commission Agreement Manager
DOF	Department of Finance
GHG	Greenhouse Gas
REMI	Regional Economic Models, Inc.
SRIA	Standardized Regulatory Impact Assessment

**BACKGROUND/PROBLEM STATEMENT**

Since 1975, the California Energy Commission has been responsible for reducing the state's electricity, natural gas, and water demand primarily by adopting new Building and Appliance Energy Efficiency Standards that have contributed to keeping California's per capita electricity consumption relatively flat. These standards – coupled with the Energy Commission's programs to reduce energy consumption in existing buildings – are saving consumers money, reducing energy use and greenhouse gas (GHG) emissions and creating clean energy jobs in California.

Senate Bill 617 (Chapter 496, Statutes of 2011) and the Department of Finance's implementing regulations (Cal. Code Regs., tit. 1, §§ 2000-2004), require state agencies to perform a Standardized Regulatory Impact Assessment (SRIA) for "major" regulations, which are regulations that have a potential impact of \$50 million or more. The SRIA requires a complex, macroeconomic analysis of the proposed regulation's statewide impact on jobs, businesses, competitive advantages and disadvantages of doing business in the state, investments in the state, incentives for innovation, and the benefits of the regulation. The Energy Commission periodically adopts appliance efficiency standards to reduce the wasteful energy or water consumption of appliances in the state. These standards nearly always result in statewide energy savings exceeding \$50 million per year when fully implemented, thereby requiring a SRIA to be completed before adopting each regulation.

In addition to efficiency standards rulemakings, the Energy Commission reports on the economic benefits of its investments in energy efficiency in its biennial Integrated Energy Policy Report, its Tracking Progress website, and similar Energy Commission reports.

## **OBJECTIVES OF THE AGREEMENT**

The Contractor will conduct and support complex macroeconomic analyses to assess the statewide impacts of various energy efficiency standards, measures, and programs. The analytical findings will be utilized to produce SRIA Reports on upcoming appliance efficiency rulemakings by the Energy Commission, which may include, but are not limited to, rulemakings on light-emitting diode (LED) lamps and small-diameter directional lamps; computers and displays; and pool pump motors. The Energy Commission Agreement Manager (CAM) will direct the Contractor on which rulemakings to begin analyzing and preparing an SRIA. The Contractor will provide additional economic analysis consultation services as required by the Energy Commission Efficiency Division.

## **FORMAT/REPORTING REQUIREMENTS**

### **Deliverables/Reports**

When creating reports, the Contractor shall use and follow, unless otherwise instructed in writing by the 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](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.

## **TASK 1 - AGREEMENT MANAGEMENT**

### **Task 1.1 Kick-off Meeting**

The goal of this task is to establish lines of communication, establish a common understanding of Contractor capabilities and resources, and review the procedures for implementing this Agreement.

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

- Attend a kick-off meeting with the CAM, the Contracts Officer, and a representative of the Accounting Office. The meeting will be held in Sacramento, CA and the CAM will designate the specific location. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. Contractor administrative staff can participate remotely. The administrative and technical aspects of this Agreement will be discussed at the meeting, as well as an overview of Contractor capabilities and resources available to support this Agreement.
- 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 date and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

#### **Deliverables:**

- Summary of Contractor capabilities and resources in support of this Agreement
- An Updated Schedule of Deliverables (if applicable)

### **Task 1.2 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 1.3). Invoices must be submitted to the Energy Commission's Accounting Office.

#### **Deliverables:**

- Invoices

### **Task 1.3 Progress Reports**

The purpose 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 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 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 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.

**Task 1.4.1 Final Report Outline****The Contractor shall:**

- Prepare and submit a draft outline of the Final Report 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 issues with the recommended changes with the CAM.
- Prepare and submit the final outline of the Final Report, incorporating CAM comments.

**Deliverables:**

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

**Task 1.4.2 Final Report****The Contractor shall:**

- Prepare the draft Final Report for this Agreement in accordance with the approved outline.
- Submit the draft Final Report 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
- Final Report

### **Task 1.5 Final Meeting**

The goal of this task is to discuss closeout of this Agreement and review the project.

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

- Meet with Energy Commission staff prior to the term end date of this Agreement. The meeting will be held in Sacramento, CA and the CAM will designate the specific location. This meeting will be attended by the Contractor Project Manager and the CAM. The CAM will determine any additional appropriate meeting participants. The administrative and technical aspects of Agreement closeout will be discussed at the meeting.
- 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 within the meeting.

#### **Deliverables:**

- Written documentation of meeting agreements
- Schedule for completing closeout activities

## **TASK 2- REVIEW OF STANDARDIZED REGULATORY IMPACT ASSESSMENTS**

The goal of this task is to understand the analytical and reporting requirements for new appliance efficiency regulations in California. The Contractor will review a selection of existing SRIAs and provide guidance on economic impact assessment methodologies and technical approaches to assess impacts of future appliance efficiency regulations.

### **Task 2.1 Review DOF reporting requirements for new regulations and existing SRIAs**

The goal of this task is for the Contractor to become familiar with SRIA requirements and historical submissions to the DOF. This will enable the Contractor to meet the DOF expectations for SRIA's. The Contractor will review DOF requirements for new regulations and summarize methods used in a select set of existing SRIAs, in coordination with the CAM.

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

- Review DOF regulations and guidance for preparation of SRIAs
- Review Energy Commission SRIA on water efficient appliances and DOF comments on that SRIA
- Review other state agency SRIA reports in coordination with CAM
- Prepare a short summary of DOF requirements and comparison of approaches, analyses, and methods used in other state agency SRIAs.

#### **Deliverables:**

- Summary of DOF requirements and approaches used in existing SRIAs

## **Task 2.2 Prepare baseline forecast for California's economy**

The goal of this task is to prepare a baseline forecast for the BEAR Model that is consistent with analyses and forecasts of the DOF and Energy Commission.

### **The Contractor shall:**

- Review current analyses and forecasts of the DOF and Energy Commission relevant to a baseline forecast within the BEAR Model.
- Prepare a baseline forecast of California's economy using information from DOF and Energy Commission

### **Deliverables:**

- Report on baseline forecast for California's economy

## **Task 2.3 Prepare written guidance to CAM on approaches to SRIA analyses and reports**

The goal of this task is to evaluate and provide recommendations on the range of options available to the Energy Commission for the conduct of SRIAs of appliance efficiency regulations.

### **The Contractor shall:**

- Based upon the results of Task 2.1, evaluate the range of options available to the Energy Commission for conduct of SRIAs
- Prepare written guidance to the CAM on recommended approaches for preparation of SRIAs of appliance regulations promulgated by the Energy Commission

### **Deliverables:**

- Guidance document for preparation of Energy Commission SRIA reports

## **TASK 3 – PRODUCE SRIA REPORTS FOR MAJOR RULEMAKINGS**

The goal of this task is to develop a specific methodological approach to and conduct of economic analyses of expected impacts resulting from new Energy Commission appliance efficiency regulations. This task includes collecting and analyzing data for specific appliance types as directed by the CAM, reporting results of the analyses, obtaining appropriate reviews of analyses (upon CAM written request), and producing draft and final SRIA reports for each rulemaking.

Contractor shall use the REMI model as a basis for comparison with the BEAR model for the first SRIA report. After six months the Contractor shall use the BEAR model.

### **3.1 Prepare methodological approach specific to new regulations**

The goal of this task is to develop specific methodological approaches for the conduct of SRIAs for specific Energy Commission appliance rulemakings. These approaches will be prepared in consultation with the CAM for each rulemaking.

**The Contractor shall:**

- Prepare draft methodological approaches for specific appliance rulemakings identified by the CAM
- Consider input provided by the CAM and DOF
- Provide final recommendations on approaches to SRIAs for specific appliance rulemakings

**Deliverables:**

- Draft methodological approaches for rulemakings
- Final recommendations on approaches to SRIAs for rulemakings

**3.2 Obtain information and data, conduct analyses of impacts of regulations**

One goal of this task is to obtain information and data relevant to regulations from a range of sources including literature reviews, staff reports, workshops, stakeholder submissions and other appropriate sources. A second goal of this task is to conduct analyses of expected economic impacts of appliance efficiency regulations, based upon final recommendations of Task 3.1 and information obtained within this task.

**The Contractor shall:**

- Obtain information and data relevant to regulations identified by the CAM
- Conduct analyses of expected economic impacts based upon recommended approach, information, and data obtained
- Prepare a summary of information and data obtained and results of analyses of expected economic impacts of regulations

**Deliverables:**

- Summaries of information, data sources, and analyses of economic impacts of regulations

**3.3 Prepare draft and final SRIA reports**

The goal of this task is to prepare draft SRIA reports for specific appliance efficiency rulemakings, obtain comments from stakeholders, expert peer reviews (upon CAM request), respond to comments, and prepare final SRIA reports.

**The Contractor shall:**

- Prepare detailed outlines for draft SRIA reports for CAM review and comment
- Prepare draft SRIA reports for regulations
- Upon CAM request, obtain expert peer review of draft SRIA reports
- Obtain and provide responses to comments on draft SRIA reports from the Energy Commission, and expert peer reviews
- Prepare and deliver final SRIA reports that are responsive to comments
- Prepare and deliver revised final SRIA in response to DOF comments

**Deliverables:**

- Detailed outlines for SRIA reports
- Draft SRIA reports
- Responses to comments on draft SRIA reports
- Final SRIA reports

- Revised Final SRIA reports

#### **TASK 4 – ECONOMIC ANALYSIS SERVICES FOR THE EFFICIENCY DIVISION**

The goal of this task is to provide the Energy Commission with expert advice, analyses and reports, explanation and interpretation of results of both SRIAs and other economic impact assessments of regulations, policies, programs or projects. Services include guidance on potential ways to improve methods of assessing economic impacts and staff training on those methods of assessment. These services will be provided in a range of formats including communications at meetings, consultations by memos or e-mails, reports and presentations on economic analyses performed. Provision of these services will enable Energy Commission Efficiency Division staff and other stakeholders to obtain sufficient understanding of and ability to evaluate analytical results provided on economic impacts of regulations, policies, programs or projects.

This task will be performed upon written request by CAM for specific services described below.

##### **4.1 Provide assistance and analytical consultation services**

The goal of this task is to provide the Energy Commission with expert advice and analytical services for assessments of economic impacts associated with implementation of regulations, policies, programs or projects.

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

- Provide assistance and analytical consultation services, as necessary for evaluations of economic impacts of regulations, policies, programs or projects, identified by the CAM

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

- Economic analysis consultation services
- Analytical results via meetings, memos, e-mails, reports, and presentations

##### **4.2 Provide guidance and training on methods of assessing economic impacts**

The goal of this task is to provide expert guidance to and training of Energy Commission staff on methods of assessing economic impacts of regulations, policies, programs or projects.

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

- Provide expert guidance on methods of assessing economic impacts of regulations, policies, programs, or projects
- Provide training services to Energy Commission staff on methods of assessing economic impacts, including ways to improve current methods of assessment

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

- Guidance on methods of assessing economic impacts
- Training on current and potential improvements to methods of economic impact assessment

## SCHEDULE OF DELIVERABLES AND DUE DATES

<b>Task Number</b>	<b>Deliverable</b>	<b>Due Date</b>
<b>1</b>		
1.1	Summary of Contractor capabilities and resources in support of this Agreement	30 days after Kickoff Meeting
1.1	An Updated Schedule of Deliverables	If applicable
1.2	Invoices	With Progress Report
1.3	Quarterly Progress Reports	Quarterly
1.4.1	Draft Outline of the Final Report	May 1, 2017
1.4.1	Final Outline of the Final Report	May 15, 2017
1.4.2	Draft Final Report	June 1, 2017
1.4.2	Final Report	June 15, 2017
1.5	Written documentation of meeting agreements	June 15, 2017
1.5	Schedule for completing closeout activities	June 15, 2017
<b>2</b>		
2.1	Summary review of DOF documents and approaches used in existing SRIAs	July 8, 2017
2.2	Report on baseline forecast for California's economy	July 8, 2017
2.3	Guidance document for preparation of Energy Commission SRIA reports	July 15, 2017
<b>3</b>	For each rulemaking, Contractor will prepare deliverables in task 3 using the following due dates for the specific deliverables.	
3.1	Draft methodological approaches to rulemakings	5 business days after receiving direction from CAM on which regulations to prepare SRIA.
3.1	Final recommendations on approaches to SRIAs for rulemakings	5 business days after each draft methodological approaches is complete.
3.2	Summaries of information, data sources, and analyses of economic impacts of regulations	15 business days after final recommendations on approaches to each SRIA.
3.3	Detailed outlines for SRIA reports	10 business days after Task 3.2 is complete.
3.3	Draft SRIA reports	20 business days after detailed SRIA outlines.
3.3	Responses to comments on draft SRIA reports	5 business days after receiving comments from CAM.

3.3	Final SRIA reports	15 business days after responding to comments.
3.3	Revised Final SRIA reports	15 days after receiving comments from DOF
4		
4.1	Economic analysis consultation services	5 business days after receiving written request from CAM
4.1	Analytical results via meetings, memos, e-mails, reports, and presentations	5 business days after receiving written request from CAM
4.2	Guidance on methods of assessing economic impacts	5 business days after receiving written request from CAM
4.2	Training on current and potential improvements to methods of economic impact assessment	5 business days after receiving written request from CAM

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: UNIVERSITY OF CALIFORNIA, BERKELEY

**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 400-14-006 with **The Regents of the University of California on behalf of the Berkeley Campus** for a **\$300,000** contract to conduct complex macroeconomic analyses to assess statewide impacts of appliance efficiency regulations. The analytical findings will be utilized to produce Standardized Regulatory Impact Assessment Reports. The Contractor will provide additional economic analysis consultation services as required by the Energy Commission; 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]

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Harriet Kallemeyn,  
Secretariat