

**CONTRACT REQUEST FORM (CRF)**A) New Agreement 400-18-002 (To be completed by CGL Office)

400 Efficiency Renewable Energy Division	Adrian Ownby	37	916-651-3008
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NORESCO, LLC	90-0453168
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Nonresidential Building Science Technical Support

10 / 1 / 2018	12 / 31 / 2021	\$ 3,750,000
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☐ 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 9 / 21 / 2018 ☐ Consent ☒ Discussion

Business Meeting Presenter Adrian Ownby Time Needed: 5 minutes

Please select one list serve. Efficiency

**Agenda Item Subject and Description**

NORESCO, LLC. Proposed resolution approving of Agreement 400-18-002 with NORESCO, LLC, for a \$3,750,000 agreement to provide technical support for the Nonresidential Building Energy Efficiency Standards process.. (ERPA funding and COIA funding) Contact: Adrian Ownby. (Staff presentation: 5 minutes)

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":

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because contract mostly involves engineering analysis and software development.

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☐ Negative Declaration☐ Mitigated Negative Declaration☐ Environmental Impact Report☐ Statement of Overriding Considerations

Legal Company Name:	Budget	SB	MB	DVBE
Hicks Professional Group	\$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
See attached list of all subcontractors	\$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	\$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Legal Company Name:

**CONTRACT REQUEST FORM (CRF)****J) Budget Information**

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
Funding Source			\$
Other	2018-2019	400.001	\$1,250,000
Other	2019-2020	400.001	\$1,250,000
Other	2020-2021	400.001	\$1,250,000
Funding Source			\$
R&D Program Area: Energy Efficiency			\$3,750,000
Explanation for "Other" selection	COIA and ERPA		
Reimbursement Contract #:	Federal Agreement #:		

Name:	NORESCO, LLC	Name:	Dimitri Contoyannis
Address:	475 Sansome Street, Suite 500	Address:	475 Sansome Street, Suite 500
City, State, Zip:	San Francisco, CA 94111	City, State, Zip:	San Francisco, CA 94111
Phone:	415-970-6521	Fax:	303-444-4304
E-Mail:	dcontoyannis@noresco.com	E-Mail:	dcontoyannis@noresco.com

☒ Solicitation RFQ Solicitation #: RFQ-17-401 # of Bids: 1 Low Bid? ☐ No ☐ Yes  
☐ Non Competitive Bid (Attach CEC 96)  
☐ Exempt Select Exemption (see instructions)

☒ 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)

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

☐ 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 architectural and engineering professional services technical support contract will provide the Energy Commission access to nonresidential building energy science experts that are not available within state service. The Contractor will work under the direction of the Energy Commission to complete engineering and econometric analyses as well as software tool development.

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

**CONTRACT REQUEST FORM (CRF)****q) Retention**

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

Rates were negotiated under the RFQ process based on a salary survey of comparable entities for like work

1. ☐ Exempt (Interagency/Other Government Entity)  
 2. ☒ Meets DVBE Requirements DVBE Amount:\$ \_\_\_\_\_ DVBE %: 3%  
     ☐ Contractor is Certified DVBE  
     ☒ Contractor is Subcontracting with a DVBE: Hicks Professional Group  
 3. ☐ Contractor selected through CMAS or MSA with no DVBE participation.  
 4. ☐ Requesting DVBE Exemption (attach CEC 95)

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  
     A multi-year contract is necessary to complete the software development, testing and deployment.

1. Exhibit A, Scope of Work ☐ N/A ☒ Attached  
 2. Exhibit B, Budget Detail ☐ N/A ☒ Attached  
 3. CEC 96, NCB Request ☒ N/A ☐ Attached  
 4. CEC 30, Survey of Prior Work ☒ N/A ☐ Attached  
 5. CEC 95, DVBE Exemption Request ☒ N/A ☐ Attached  
 6. CEQA Documentation ☒ N/A ☐ Attached  
 7. Resumes ☐ N/A ☒ Attached  
 8. CEC 105, Questionnaire for Identifying Conflicts ☒ Attached

\_\_\_\_\_  
 Agreement Manager

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Office Manager

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Deputy Director

\_\_\_\_\_  
 Date

#### **NORESCO Subcontractor List**

- **360 Analytics;**
- **Arup;**
- **Benya Burnett Consultancy;**
- **Big Ladder Software**
- **Energy and Environmental Economics, Inc. (E3);**
- **Gabel Energy LLC;**
- **Hicks Professional Group;**
- **Hitchcock Consulting;**
- **Lawrence Berkeley National Laboratory;**
- **L'Monte Information Services;**
- **National Renewable Energy Laboratory;**
- **RASENT Solutions LLC;**
- **SAC Software Solutions;**
- **Selby Energy, Inc.; and**
- **TRC Solutions**

## Exhibit A SCOPE OF WORK

### PURPOSE

The purpose of this agreement is to contract with a team of consultants for technical support to:

- Update the Standards for nonresidential buildings; and
- Update Compliance Tools and related materials to support the Standards for nonresidential buildings.

Work on this contract will focus on the 2019 and 2022 Standards updates, but may also involve implementation of the 2016 Standards update or preliminary work on later Standards updates (2025 and beyond).

### Acronyms/Glossary

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

<b>ACRONYMS &amp; TERMS</b>	<b>DEFINITION</b>
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
<i>CBECC-Com</i>	California Building Energy Code Compliance application for high-rise residential and nonresidential buildings
CO <sub>2</sub> e	Carbon Dioxide equivalent
Compliance Document	Any of the documents specified in Section 10-103(a) of the 2016 Standards that are used to demonstrate compliance with California Code of Regulations, Title 24, Part 6 (i.e., Certificate of Compliance, Certificate of Installation, Certificate of Acceptance, and Certificate of Verification).
Compliance Manual	The Nonresidential Compliance Manual developed by the Energy Commission, under Public Resources Code, Section 25402.1(e), to aid designers, builders, and contractors in meeting the energy efficiency requirements for nonresidential buildings.
CPUC	California Public Utilities Commission
Energy Commission	California State Energy Resources Conservation and Development Commission.
EUI	Energy Use Index, reported in units of kBtu per square feet
HERS	Home Energy Rating System, used in California Code of Regulations, Title 20, Section 1670 et seq.
HVAC	Heating, Ventilating and Air Conditioning
State	State of California
TDV	Time Dependent Valuation, used as the energy cost metric in the Standards

## **Exhibit A**

### **SCOPE OF WORK**

#### **RETAINER CONTRACT**

This agreement is a no-fee "retainer" contract. The Contractor will be held on retainer and will be assigned work via work authorizations. Work authorizations will be assigned by expertise, or project workload. The Energy Commission makes no guarantee that any or all of the funds will be assigned in any given year.

#### **WORK AUTHORIZATIONS**

This Agreement shall be conducted as a "Work Authorization" Agreement. No work shall be undertaken unless authorized by the CAM through a specific written document called a "work authorization."

The CAM will prepare and issue the written work authorizations and shall set a maximum price, budget, and schedule for the work to be performed. The CAM will work, in consultation with the Contractor, to assign work to either the Contractor or a subcontractor.

Quality Control Activities:

- In work authorization budgets, all quality control work must be specified by line item; and
- Review of subcontractor work shall be billed to the individual technical work authorizations.

#### **NO WORK GUARANTEE**

The Energy Commission does not guarantee any minimum or maximum amount of work to the prime Contractor or any Subcontractor under the Agreement.

#### **Workshops & Hearings**

All workshops and hearings are sponsored, organized, and facilitated by the Energy Commission. The Energy Commission is responsible for any costs associated with securing the location for a workshop or hearing. Contractor will provide labor only.

#### **Incidental Services**

Contractor shall provide incidental services to support the Building Standards technical tasks in the general topic areas listed below. Technical Tasks 2-8 provide more detailed task activities for these areas:

- Economic & Financial Analysis of the Building Standards Work
- Graphic Design/Document Support for reports and other deliverables
- Public Outreach & Communication/ Marketing/ Public Relations/ Program Development necessary to complete the goals of this agreement

#### **Application Use & Development**

All application developed under this contract will be subject to open source licensing requirements, as described in Exhibit D, paragraph 8, unless the Energy Commission directs different ownership and licensing requirements in a work authorization. No pre-existing proprietary applications will need to be modified in order to perform the tasks outlined in this Agreement. The Energy Commission owns or has open source license access to any application that the Contractor will modify under the terms of this Agreement.

#### **Draft and Final Deliverables/Reports**

The Contractor may be required to produce several iterations of draft deliverables in order to incorporate Energy Commission's comments and edits. A deliverable is considered final when the CAM indicates in writing that the deliverable is considered final. When creating reports, the

## **Exhibit A**

### **SCOPE OF WORK**

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

[http://www.energy.ca.gov/contracts/consultant\\_reports/index.html](http://www.energy.ca.gov/contracts/consultant_reports/index.html)

Each final hard copy deliverable shall be delivered as one original, reproducible, 8 ½" by 11", camera-ready master in black ink, unless otherwise directed. 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 application versions that will be required to review and approve all application 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.

#### **Primary Tasks**

The major categories of work are divided into the following tasks:

<b>TASK #</b>	<b>DESCRIPTION OF TASK</b>
1	Agreement Management
2	Standards Update Measure Identification and Analysis
3	Time Dependent Valuation of Energy Methodology for the Building Energy Efficiency Standards
4	Life Cycle Cost Methodology for the Building Energy Efficiency Standards
5	Nonresidential Building Energy Efficiency Standards Public Domain Compliance Application
6	Nonresidential Compliance Application Deployment
7	Streamline Nonresidential Compliance Documentation
8	Contingencies and Additional Topic Areas for Building Standards Technical Support

## **Exhibit A**

### **SCOPE OF WORK**

#### **TASK 1 – AGREEMENT MANAGEMENT**

Each Work Authorization will reflect the maximum that can be spent for Agreement Management for each fiscal year. A maximum of 12% of the total Agreement budget will be allocated for this task. The Contractor will be required to perform contract management and administrative duties to manage the Agreement.

The Contractor's responsibilities under this task include, but are not limited to the following:

##### **Task 1.1 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, the Contracts Agreement 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. The administrative and technical aspects of this Agreement will be discussed at the meeting.
- 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:**

- An Updated Schedule of Deliverables (if applicable)

##### **Task 1.2 Program Meetings and Briefings**

##### **The Contractor and subcontractor shall:**

- At the request of the Energy Commission's CAM, be available for meetings or to provide written or verbal program briefings to the Energy Commission's staff or others. The cost of meetings with local governments and public institutions will be included in each Work Authorization. The cost of meetings requested specifically by the Contractor shall be borne solely by the Contractor. The Energy Commission expects to hold no more than one (1) program briefing meeting per quarter.

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



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### **SCOPE OF WORK**

#### **Deliverables:**

- Invoices

#### **Task 1.4 Manage Subcontractors:**

The goal of this task is to manage subcontractors' quality control activities. Review of subcontractor work shall be billed to the individual Work Authorizations.

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

- At the direction of the CAM, review and prepare work authorization scopes and budgets
- Enter into subcontracts.
- Enforce subcontract provisions.
- In the event of subcontractor failure to perform, recommend solutions to resolve the problem.
- When new subcontractors are added, the contractor shall ensure that: 1) the new subcontractors 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.

#### **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 that 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 no later than 15 calendar days after the end of the reporting period. The CAM will provide the format for the progress reports.

#### **Deliverables:**

- Monthly Progress Reports

#### **Task 1.6 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.
- 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.

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### **SCOPE OF WORK**

#### **Deliverables:**

- Written documentation of meeting agreements
- Schedule for completing closeout activities
- Findings, conclusions, and recommendations

#### **TASK 2 – STANDARDS UPDATE MEASURE IDENTIFICATION AND ANALYSIS**

At the direction of the CAM, the Contractor shall identify energy and peak load savings opportunities (measures) for nonresidential buildings for updates to the Standards. The measures to be considered may include, but are not limited to, more energy efficient levels of the measures currently included in the Standards, measures for achieving California's zero net energy goals, measures that are options for compliance in the performance standards but are not required, and new measures proposed by stakeholders.

For each identified measure, this task will include development and documentation of plans for additional information about the measure required for completion of subsequent tasks.

Contractor will document the proposal for each measure in a draft Measure Proposal (see example at:

[http://www.energy.ca.gov/title24/2016standards/prerulemaking/documents/New\\_Measure\\_Proposal\\_Template.docx](http://www.energy.ca.gov/title24/2016standards/prerulemaking/documents/New_Measure_Proposal_Template.docx).

Contractor shall be prepared to complete the necessary research and analysis required by the appropriate Measure Proposal template. This draft will be submitted to the CAM for approval. Upon the CAM's approval of the draft, the CAM, in consultation with the Contractor, shall schedule the date and location for the workshop(s) for public review. The Contractor may be directed to present the measure(s) at the workshop and, working with Energy Commission staff and subject matter experts, address issues raised by stakeholders at the workshop and incorporate changes into a revised Measure Proposal. Additional workshop(s) to review the revised Measure Proposal will be held if the CAM deems it necessary. As directed, the Contractor will address additional measures or issues identified in later workshops or comments.

Work in this task may also include:

- Review of national or international energy conservation codes for their relevance to the Standards Update;
- Updates to the Compliance Manual; and
- Development, research, and analysis of proposed or potential measures to meet the requirements for inclusion in the Standards.

#### **Deliverables:**

- One or more Draft Measure Proposals
- One or more Final Measure Proposals
- Reports on research and analysis of proposed or potential measures, or other energy codes, as requested
- Compliance Manual updates
- Other deliverables to be defined as needed through Work Authorizations

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#### **TASK 3 – TIME DEPENDENT VALUATION OF ENERGY METHODOLOGY FOR THE BUILDING ENERGY EFFICIENCY STANDARDS**

Update the methodology used for the 2019 Standards to value the electricity, natural gas and propane energy savings that will be sought in the 2022 Standards update, including methods to value the cost of water used in buildings and the potential savings from water efficiency measures installed in buildings. The work in this task is expected to include, but not be limited to, the following:

- Review and revise the 2019 Time Dependent Valuation of Energy methodology, with the following considerations:
  - Current and projected costs of fuels and electricity based on state and national energy policies, including the potential cost impacts of high concentrations of renewable energy generation in California
  - Current and projected retail rate structures, including an analysis of what portion of these retail energy costs should be considered fixed versus volumetric (i.e. dependent on the amount of energy used)
  - Current and projected costs of carbon and other environmental impacts of energy use

#### **Deliverables:**

- Time Dependent Valuation of Energy Report
- Other deliverables to be defined as needed through work authorizations

#### **TASK 4 – LIFE CYCLE COST (LCC) METHODOLOGY FOR THE BUILDING ENERGY EFFICIENCY STANDARDS**

Update the methodology used for the 2019 Standards to assess the building life-cycle costs and savings for the energy efficiency measures to be considered in the 2022 Standards Update. The work in this task is expected to include, but not be limited to, the following:

- Review and revise the 2019 LCC methodology, with the following considerations:
  - Revisit assumption of building life, considering what is used in other states, nations and regions (e.g. the European Union uses 50-60 years for policy assumptions of building useful life, while the Energy Commission uses 30 years)
  - Review and revise the discount rate applied to energy cost savings over time, considering what is used in other states, nations and regions (e.g. the Massachusetts Department of Energy Resources uses 1%, while the Energy Commission uses 3%)
- Establish cost reduction curves for different classes of technology predicting reductions in costs due to adoption of mandatory efficiency measures. Analyze and incorporate measures as appropriate to leverage all applicable work on this topic completed by U.S. DOE for the federal appliance efficiency standards
- The Contractor shall identify, develop and implement a methodology for completing life cycle cost analyses to determine the cost effectiveness of measures for inclusion in the 2022 Standards. The methodology will build on the LCC Methodology done for the 2019 Standards. The methodology will evaluate the cost effectiveness of measures both incrementally and in combination as specified by the CAM. The methodology will

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document all economic assumptions, periods of analysis, and energy (e.g., electricity, natural gas, and propane) forecasts that are to be used. The methodology will also identify any sensitivity or scenario analyses on these and other parameters (e.g., measure performance, measure costs, useful lives, fuel costs, avoided costs of climate change, water costs, and emissions values)

#### **Deliverables:**

- LCC Analysis Report reflecting the above tasks
- Other deliverables to be defined as needed through work authorizations

#### **TASK 5 – NONRESIDENTIAL BUILDING ENERGY EFFICIENCY STANDARDS PUBLIC DOMAIN COMPLIANCE APPLICATION**

Update *CBECC-Com* to assist in developing the Standards and add additional user interfaces as necessary to translate building energy performance data and energy related building operational characteristics into an application that applies the performance standards requirements under consideration for the Standards to nonresidential building designs, calculating annual energy budgets and providing comparative results. The work in this task is expected to include but not be limited to the following:

- Develop a method of creating automatic modifications of rulesets used in *CBECC-Com* for use in parametric analyses
- Pilot and beta test new versions of the *CBECC-Com* internally, and with the Energy Commission and building industry stakeholders
- Model building design scenarios appropriate for zero net energy buildings to include at least the following systems:
  - Photovoltaic and fuel cell systems
  - Solar thermal systems
  - HVAC and water heating systems
  - Envelope modeling, including daylight modeling
- Prepare updated instructions for users that explain how the *CBECC-Com* application should be used to demonstrate compliance with the Standards
- Prepare documentation that explains all significant modifications made to the Standards Data Dictionary, the Standards compliance ruleset and the *CBECC-Com* application. Provide support for the current *CBECC-Com* application to ensure a successful transition to future versions of the *CBECC-Com* application
- Create or obtain for use a parametric run generator(s) that allows multiple *CBECC-Com* analyses to be launched and results summarized
  - Evaluate whether there is already a parametric run generator developed and available.
  - If already available, obtain parametric run generator on an open source basis. If there is a cost to obtain this, the contract budget will allow for it.
  - If not already available, provide parametric run generator.

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- Modify the *CBECC-Com* application as needed to work with a parametric run generator and to model existing and proposed efficiency technologies that need to be evaluated for the Nonresidential Building Energy Efficiency Standards updates
- Add or update modeling capabilities and compliance modeling rules for commercial refrigeration to *CBECC-Com*
- Develop an Energy Design Rating(s) for newly constructed and existing nonresidential buildings

#### **Deliverables:**

- Nonresidential Building Energy Efficiency Standards Development Analysis *CBECC-Com* Application Functional Requirements
- Nonresidential Building Energy Efficiency Standards Development Analysis Application Specifications
- Nonresidential Building Energy Efficiency Standards Development Analysis Application
- Nonresidential Building Energy Efficiency Standards Development Analysis Application Documentation
- Updates to the *CBECC-Com* application as needed
- Energy Design Rating(s) for newly constructed and existing nonresidential buildings
- Other deliverables to be defined as needed through Work Authorizations

#### **TASK 6 – NONRESIDENTIAL COMPLIANCE APPLICATION DEPLOYMENT**

Support the Energy Commission's deployment of the California Building Energy Code Compliance (*CBECC-Com*) Standards compliance application. The work in this task is expected to include, but not be limited to, the following:

- Identify, update and track issues identified through project team and stakeholder reviews of the compliance application
- Pilot and beta test new versions of the *CBECC-Com* application with building industry stakeholders to identify and improve issues prior to release
- Provide technical support to third-party application vendors for their integration of the *CBECC-Com* Application Programming Interface (API) into third-party application tools
  - Document all updates to the compliance application data model and rulesets
  - Develop solutions to vendor issues as directed
- Establish and maintain a public website and host the *CBECC-Com* open source application and include a bug reporting mechanism on this public website
- Establish procedures for the Energy Commission to assume responsibility for this public website at the conclusion of the Agreement

#### **Deliverables:**

- Updated versions of the *CBECC-Com application*, including updates to its documentation
- *CBECC-Com application* issue tracking reports

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- *CBECC-Com* Compliance application source code posted to open source on-line repository
- Other deliverables to be defined as needed through work authorizations

#### **TASK 7 – STREAMLINE NONRESIDENTIAL COMPLIANCE DOCUMENTATION**

As directed by the CAM, provide technical support to Energy Commission staff in their work to streamline nonresidential compliance documentation. This will involve the review and analysis of Energy Commission surveys of Compliance documentation use, with the ultimate outcome improved compliance through the revision, consolidation or elimination of under-utilized Compliance documentation. The work in this task may include reviewing Standards compliance documentation, the current Standards Data Dictionary used in the 2019 Nonresidential Compliance Application. The work in this task is expected to include, but not be limited to, the following:

- Review and analysis of surveys of Compliance documents
- Develop data dictionary

##### **Deliverables:**

- Reports of reviews and analysis of surveys of Compliance documents
- Nonresidential Standards Compliance Data Dictionary
- Other deliverables to be defined as needed through work authorizations

#### **TASK 8 – CONTINGENCIES AND ADDITIONAL TOPIC AREAS FOR BUILDING STANDARDS TECHNICAL SUPPORT**

The Contractor shall assist with work to develop program components beyond what is specifically described in Tasks 2-7. The work in this task is expected to include but not be limited to the following:

- Providing technical expertise to conduct unexpected research and analysis needed to develop program components as they arise throughout the agreement period.
- Attending Workshops and Hearings that support the Standards implementation and development.
- Zero net energy new nonresidential construction by 2030 strategic or action planning.

##### **Deliverables:**

- To be defined as needed through work authorizations

# Exhibit A SCOPE OF WORK

## DELIVERABLES

The following deliverables chart does not represent all deliverables necessary to complete the goals and objectives of this agreement. Additional deliverables will be outlined in work authorizations. For deliverables listed, work authorizations will specify exact due dates.

<b>TASK #</b>	<b>DELIVERABLES</b>	<b>TENTATIVE DUE DATES</b>
<b>1.1</b>	<b>Kick-off Meeting</b>	
	Updated schedule of deliverables (if applicable)	4 <sup>th</sup> quarter 2018
<b>1.3</b>	<b>Invoices</b>	
	Invoices	Monthly
<b>1.5</b>	<b>Progress Reports</b>	
	Monthly Progress Reports	Monthly
<b>1.6</b>	<b>Final Meeting</b>	
	Written documentation of meeting agreements	4 <sup>th</sup> quarter 2021
	Schedule for completing closeout activities	4 <sup>th</sup> quarter 2021
	Findings, conclusions, and recommendations	4 <sup>th</sup> quarter 2021
<b>2</b>	<b>Standards Update Measure Identification and Analysis</b>	
	One or more Draft Measure Proposals	1 <sup>st</sup> quarter 2020
	One or more Final measure Proposals	2 <sup>nd</sup> quarter 2020
	Reports on research and analysis of proposed or potential measures, or other energy codes, as requested	TBD per Work Authorization
	Compliance Manual updates	1 <sup>st</sup> quarter 2021
	Other deliverables to be defined as needed through Work Authorizations	TBD per Work Authorization
<b>3</b>	<b>Time Dependent Valuation of Energy Methodology for the Building Energy Efficiency Standards</b>	
	Time Dependent Valuation of Energy Report	3 <sup>rd</sup> quarter 2019
	Other deliverables to be defined as needed through Work Authorizations	TBD per Work Authorization

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<b>TASK #</b>	<b>DELIVERABLES</b>	<b>TENTATIVE DUE DATES</b>
<b>4</b>	<b>Life Cycle Cost (LCC) Methodology for the Building Energy Efficiency Standards</b>	
	Life Cycle Cost Analysis Report	3 <sup>rd</sup> quarter 2019
	Other deliverables to be defined as needed through Work Authorizations	TBD per Work Authorization
<b>5</b>	<b>Nonresidential Building Energy Efficiency Standards Public Domain Compliance Application</b>	
	Nonresidential Standards Development Analysis CBECC-Com Application Functional Requirements	1 <sup>st</sup> quarter 2021
	Nonresidential Standards Development Analysis Application Specifications	2 <sup>nd</sup> quarter 2020
	Nonresidential Standards Development Analysis Application	1 <sup>st</sup> quarter 2021
	Nonresidential Standards Development Analysis Application Documentation	1 <sup>st</sup> quarter 2021
	Updates to the CBECC-Com application as needed	TBD per Work Authorization
	Energy Design Rating(s) for newly constructed and existing nonresidential buildings	TBD per Work Authorization
	Other deliverables to be defined as needed through Work Authorizations	TBD per Work Authorization
<b>6</b>	<b>Nonresidential Compliance Application Deployment</b>	
	Updated versions of the CBECC-Com application, including updates to its documentation	TBD per Work Authorization
	CBECC-Com application issue tracking reports	First update 4 <sup>th</sup> quarter 2018. Future updates TBD per Work Authorization
	CBECC-Com Compliance application source code posted to open source on-line repository	TBD per Work Authorization
	Other deliverables to be defined as needed through work authorizations	TBD per Work Authorization



**Exhibit A**  
**SCOPE OF WORK**

<b>TASK #</b>	<b>DELIVERABLES</b>	<b>TENTATIVE DUE DATES</b>
<b>7</b>	<b>Streamline Nonresidential Compliance Documentation</b>	
	Reports of reviews and analysis of surveys of Compliance documents	TBD per Work Authorization
	Nonresidential Standards Compliance Data Dictionary	TBD per Work Authorization
	Other deliverables to be defined as needed through work authorizations	TBD per Work Authorization
<b>8</b>	<b>Contingencies And Additional Topic Areas For Building Standards Technical Support</b>	
	Other deliverables to be defined as needed through Work Authorizations	TBD per Work Authorization

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: NORESKO,LLC

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

**RESOLVED**, that the Energy Commission approves Agreement 400-18-002 with with NORESKO, LLC, for a \$3,750,000 agreement to provide technical support for the Nonresidential Building Energy Efficiency Standards process; 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 September 21, 2018.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

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Cody Goldthrite,  
Secretariat