

**Exhibit A
SCOPE OF WORK**

TECHNICAL TASK LIST

Task #	CPR	Task Name
1	N/A	Administration
2		Update and Assist in Revising (Energy and Environmental Analysis, Inc.) (EEA) CHP Database
3		Participate in State Agency CHP Working Groups
4		Analyze CHP System Economics of Performance-Based SGIP Incentive Structures and California Feed-In Tariffs
5		Energy Utilization Statistics
6		Perform Energy Utilization Analysis and Comparisons
7		CHP Equipment Sizing/Performance Assessment

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	T. Lipman, PhD V. McDonell, PhD	UC Irvine	ICF
2	T. Lipman	N/A	ICF
3	T. Lipman	N/A	None
4	T. Lipman	N/A	Berkeley Lab
5	V. McDonell	UC Irvine	None
6	V. McDonell	UC Irvine	None
7	V. McDonell	UC Irvine	None

GLOSSARY

Acronym	Definition
AB 1613	Assembly Bill 1613 – The Waste Heat and Carbon Emissions Reduction Act
AB 32	Assembly Bill 32 - the Global Warming Solutions Act
CEUS	Commercial End-Use Survey
CHP	Combined Heat and Power
CEAC	Clean Energy Application Center
CPR	Critical Project Review
CPUC	California Public Utilities Commission
DG	Distributed power generation
Energy Commission	California Energy Commission
DER-CAM	Distributed Energy Resource – Customer Adoption Model
EEA	Energy and Environmental Analysis, Inc.
GHG	Greenhouse gas
GW	Gigawatt
ICF	ICF International, Inc.

Acronym	Definition
IEPR	Integrated Energy Policy Report
PCEAC	U.S. DOE Pacific Region Clean Energy Application Center
PIER	Public Interest Energy Research
RAC	Regional Application Center
SDSU	San Diego State University
SFSU	San Francisco State University
SGIP	Self-Generation Incentive Program
UC	University of California
U.S. DOE	United States Department of Energy

Problem Statement

The United States Department of Energy (U.S. DOE) awarded a \$2.1 million grant for FY 2009-2013 to a group of California Universities to operate the U.S. DOE Pacific Clean Energy Application Center (PCEAC). The PCEAC is expected to undertake a range of activities to promote the further use of combined heat and power (CHP), waste-heat-to-power, and district energy in the Pacific Region of California, Nevada, and Hawaii.

The PCEAC effort is being led by the University of California (UC Berkeley and UC Irvine campuses), with support from San Diego State University (SDSU) and San Francisco State University (SFSU). The PCEAC builds on previous efforts of the Pacific Region Combined Heat and Power Application Center (PRAC) that has been operated by UC Berkeley, UC Irvine, and SDSU from 2004 through 2009 as a U.S. DOE “State Special Energy Project” through the California Energy Commission (Energy Commission). The current FY 2009-2013 PCEAC award requires a 20% cost match share from non-federal sources or about \$500,000 over the four-year period. This cost match has been committed over the four-year award period by the Energy Commission, the UC Berkeley Energy Biosciences Institute, Sempra Utilities, and the University of California.

California has a strong recent interest in CHP in regard to meeting the goals of Assembly Bill 32 - the Global Warming Solutions Act (AB 32). Based on the levels of greenhouse gas emission reductions needed to meet the goals of AB 32, needs for an additional 4 gigawatts (GWs) of CHP in California by 2020 have been identified. This compares with approximately 9 GW of CHP at present, but with much of this at large industrial settings included for enhanced oil recovery in the California central valley. The tasks proposed here are intended to help to achieve the AB 32 scoping plan goals, but much additional efforts will be required as the current CHP market is developing slowly due to regulatory uncertainty about incentives and “feed in tariffs” among other factors.

Key planned PCEAC activities include an extensive website with information on CHP/district energy and links to other sites, organizing and hosting workshops and conferences targeted to CHP “end user” groups, conduct of facility energy audits and “level 2” CHP screenings, preparation of state assessment and policy reports, preparation of project profile case studies, responses to inquiries for information from potential end users and other parties, project management, and other miscellaneous activities.

Goals of the Agreement

The goals of the proposed project are to generate additional information, analysis, and recommendations to support California’s efforts to increase the role of CHP in meeting the state’s energy demands. These include outputs of efforts to update and maintain state CHP installation databases, conduct and support CHP state policy activities, generate CHP utilization statistics, perform CHP energy utilization comparisons, and perform sample CHP equipment sizing and performance assessments.

Objectives of the Agreement

The objectives of the proposed activities, consistent with the mission of the other DOE Regional Application Centers (RACs) more generally, are to reduce the perceived barriers and knowledge gaps to help promote great CHP and district energy solutions in the marketplace. The goals of these efforts are multiple, but primarily relate to the ability of CHP systems to deliver electrical and thermal energy services to end-use customers with lower primary input than from central generation coupled with onsite boilers and chillers. CHP does not work in all cases, but does where there is a good balance of electrical and thermal loads and a sufficient quantity of both to make CHP “interesting” as a potential energy use reduction strategy.

Additional technical and economic objectives of the proposed work include further studying and reporting the field performance of CHP systems, better understanding the installed base of CHP in California, and helping to stimulate the CHP market more generally wherever possible through the project and broader PCEAC efforts.

TASK 1.0 ADMINISTRATION

MEETINGS

Task 1.1 Attend 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 Commission Contract Manager, the Contracts Officer, and a representative of the Accounting Office. The Contractor shall bring their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the Commission Contract Manager to this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting. Prior to the kick-off meeting, the Commission Contract Manager will provide an agenda to all potential meeting participants.

The administrative portion of the meeting shall include, but not be limited to, the following:

- Terms and conditions of the Agreement
- CPRs (Task 1.2)
- Match fund documentation (Task 1.7)
- Permit documentation (Task 1.8)

The technical portion of the meeting shall include, but not be limited to, the following:

- The Commission Contract Manager’s expectations for accomplishing tasks described in the Scope of Work;
- An updated Schedule of Deliverables
- Progress Reports (Task 1.4)
- Technical Deliverables (Task 1.5)
- Final Report (Task 1.6)

The Commission Contract Manager shall designate the date and location of this meeting.

Contractor Deliverables:

- An Updated Schedule of Deliverables
- An Updated List of Match Funds
- An Updated List of Permits

Commission Contract Manager Deliverables:

- Final Report Instructions

Task 1.2 CPR Meetings

The goal of this task is to determine if the project should continue to receive Energy Commission funding to complete this Agreement and if it should, are there any modifications that need to be made to the tasks, deliverables, schedule or budget.

CPRs provide the opportunity for frank discussions between the Energy Commission and the Contractor. CPRs generally take place at key, predetermined points in the Agreement, as determined by the Commission Contract Manager and as shown in the Technical Task List above and in the Schedule of Deliverables. However, the Commission Contract Manager may schedule additional CPRs as necessary, and, if necessary, the budget will be reallocated to cover the additional costs borne by the Contractor, but the overall contract amount will not increase.

Participants include the Commission Contract Manager and the Contractor, and may include the Commission Contracts Officer, the PIER Program Team Lead, other Energy Commission staff and Management as well as other individuals selected by the Commission Contract Manager to provide support to the Energy Commission.

The Commission Contract Manager shall:

- Determine the location, date and time of each CPR meeting with the Contractor. These meetings generally take place at the Energy Commission, but they may take place at another location.
- Send the Contractor the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. One of the outcomes of this meeting will be a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not to modify the tasks, schedule, deliverables and budget for the remainder of the Agreement, including not proceeding with one or more tasks. If the Commission Contract Manager concludes that the project needs a formal amendment or that satisfactory progress is not being made and the project needs to be ended, these conclusions will be referred to the Commission's Research, Development and Demonstration Policy Committee for its concurrence.
- Provide the Contractor with a written determination in accordance with the schedule. The written response may include a requirement for the Contractor to revise one or more deliverable(s) that were included in the CPR.

The Contractor shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other deliverables identified in this Scope of Work. Submit these documents to the Commission Contract Manager and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

Contractor Deliverables:

- CPR Report(s)
- CPR deliverables identified in the Scope of Work

Commission Contract Manager Deliverables:

- Agenda and a List of Expected Participants
- Schedule for Written Determination
- Written Determination

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Contractor shall:

- Meet with the Energy Commission to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Contractor, the Commission Contracts Officer, and the Commission Contract Manager. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the Commission Contract Manager.

The technical portion of the meeting shall present findings, conclusions, and recommended next steps (if any) for the Agreement. The Commission Contract Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Contract Manager and the Contracts Officer about the following Agreement closeout items:

- What to do with any state-owned equipment (Options)
 - Need to file UCC.1 form re: Energy Commission's interest in patented technology
 - Energy Commission's request for specific "generated" data (not already provided in Agreement deliverables)
 - Need to document Contractor's disclosure of "subject inventions" developed under the Agreement
 - "Surviving" Agreement provisions, such as repayment provisions and confidential deliverables
 - Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

Deliverables:

- Written documentation of meeting agreements and all pertinent information
- Schedule for completing closeout activities

REPORTING

See Exhibit D, Reports/Deliverables/Records.

Task 1.4 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the research 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 to the Commission Contract Manager within 10 working days after the end of the reporting period. Attachment A-2, Progress Report Format, provides the recommended specifications.

Deliverables:

- Quarterly Progress Reports

Task 1.5 Test Plans, Technical Reports and Interim Deliverables

The goal of this task is to set forth the general requirements for submitting test plans, technical reports and other interim deliverables, unless described differently in the Technical Tasks. When creating these deliverables, the Contractor shall use and follow, unless otherwise instructed in writing by the Commission Contract Manager, the latest version of the PIER Style Manual published on the Energy Commission's web site:

<http://www.energy.ca.gov/contracts/pier/contractors/index.html>

The Contractor shall:

- Unless otherwise directed in this Scope of Work, submit a draft of each deliverable listed in the Technical Tasks to the Commission Contract Manager for review and comment in accordance with the approved Schedule of Deliverables. The Commission Contract Manager will provide written comments back to the Contractor on the draft deliverable within 10 working days of receipt. Once agreement has been reached on the draft, the Contractor shall submit the final deliverable to the Commission Contract Manager. The Commission Contract Manager shall provide written approval of the final deliverable within 5 working days of receipt. Key elements from this deliverable shall be included in the Final Report for this project.

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 done under this Agreement. The Commission Contract Manager will review and approve the Final Report. The Final Report must be completed on or before the termination date of the Agreement. When creating these deliverables, the Contractor shall use and follow, unless otherwise instructed in writing by the Commission Contract Manager, the latest version of the PIER Style Manual published on the Energy Commission's web site:

<http://www.energy.ca.gov/contracts/pier/contractors/index.html>

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

Task 1.6.1 Final Report Outline

The Contractor shall:

- Prepare a draft outline of the Final Report.
- Submit the draft outline of Final Report to the Commission Contract Manager for review and approval. The Commission Contract Manager will provide written comments back to the Contractor on the draft outline within 10 working days of receipt. Once agreement has been reached on the draft, the Contractor shall submit the final outline to the Commission Contract Manager. The Commission Contract Manager shall provide written approval of the final outline within 5 working days of receipt.

Deliverables:

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

Task 1.6.2 Final Report

The Contractor shall:

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

- Submit the draft Final Report to the Commission Contract Manager for review and comment. The Commission Contract Manager will provide written comments within 10 working days of receipt.

Once agreement on the draft Final Report has been reached, the Commission Contract Manager shall forward the electronic version of this report for Energy Commission internal approval. Once the approval is given, the Commission Contract Manager shall provide written approval to the Contractor within 5 working days.

- Submit one bound copy of the Final Report with the final invoice.

Deliverables:

- Draft Final Report
- Final Report

MATCH FUNDS, PERMITS, AND ELECTRONIC FILE FORMAT

Task 1.7 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. While the PIER budget for this task will be zero dollars, the Contractor may utilize match funds for this task. Match funds shall be spent concurrently or in advance of PIER funds during the term of this Agreement. Match funds must be identified in writing, and the associated commitments obtained before the Contractor can incur any costs for which the Contractor will request reimbursement.

The Contractor shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the Commission Contract Manager at least 2 working days prior to the kick-off meeting:
 1. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter.
 2. If match funds were a part of the proposal that led to the Energy Commission awarding this Agreement, then provide in the letter:
 - A list of the match funds that identifies the:
 - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.

- Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Contractor shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- A copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured.
- Discuss match funds and the implications to the Agreement if they are significantly reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the Commission Contract Manager if during the course of the Agreement additional match funds are received.
- Notify the Commission Contract Manager within 10 working days if during the course of the Agreement existing match funds are reduced. Reduction in match funds may trigger an additional CPR.

Deliverables:

- A letter regarding Match Funds or stating that no Match Funds are provided
- Letter(s) for New Match Funds
- A copy of each Match Fund commitment letter
- Letter that Match Funds were Reduced (if applicable)

Task 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are reimbursable under this Agreement. Permits must be identified in writing before the Contractor can incur any costs related to the use of the permit(s) for which the Contractor will request reimbursement.

The Contractor shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the Commission Contract Manager at least 2 working days prior to the kick-off meeting:

1. If there are no permits required at the start of this Agreement, then state such in the letter.
2. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or lead agencies
 - Schedule the Contractor will follow in applying for and obtaining these permits.
- The list of permits and the schedule for obtaining them will be discussed at the kick-off meeting, and a timetable for submitting the updated list, schedule and the copies of the permits will be developed. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the progress reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, then provide the appropriate information on each permit and an updated schedule to the Commission Contract Manager.
- As permits are obtained, send a copy of each approved permit to the Commission Contract Manager.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the Commission Contract Manager within 5 working days. Either of these events may trigger an additional CPR.

Deliverables:

- A letter documenting the Permits or stating that no Permits are required
- Updated list of Permits as they change during the Term of the Agreement
- Updated schedule for acquiring Permits as it changes during the Term of the Agreement
- A copy of each approved Permit

Task 1.9 Electronic File Format

The goal of this task is to unify the formats of electronic data and documents provided to the Energy Commission as contract deliverables. Another goal is to establish the computer platforms, operating systems and software that will be required to review and approve all software deliverables.

The Contractor shall:

- Deliver documents to the Commission Contract Manager in the following formats:
 - 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.
- Request exemptions to the electronic file format in writing at least 90 days before the deliverable is submitted.

Deliverables:

- A letter requesting exemption from the Electronic File Format (if applicable)

TECHNICAL TASKS

The Contractor shall prepare all deliverables in accordance with the requirements in Task 1.5. Deliverables not requiring a draft version are indicated by marking “(no draft)” after the deliverable name.

Task 2 Update and Assist in Revising (Energy and Environmental Analysis, Inc.) (EEA) CHP Database

The goal of this task is to provide input to efforts to periodically update the CHP database for the Pacific region. This task would allow the PCEAC to work more actively in this regard, both in terms of adding new installations and updating the status of older installations. These metrics are critical to understanding the installed base of CHP in California and the Pacific Region, and the ability to add additional CHP capacity to meet the goals of the AB 32 scoping plan (i.e., the targeted additional 4 GW by 2020 to meet the emission reduction goals that have been targeted).

The Contractor shall:

- Gather information on the latest Pacific Region CHP installations to meet the requirements of key “data fields” in the ICF database
- Assess the data with regard to the current version of the database
- Provide data updates to the DOE/ICF effort
- Prepare an electronic copy of the annual CHP database update in Excel format

Deliverables:

- Annual CHP database update (Excel file on CD) (no draft)

Task 3 Participate in State Agency CHP Working Groups

The goal of this task is to assist in key state efforts to promote CHP as a strategy for reducing emissions of climate-changing greenhouse gases (GHGs). The California Air Resources Board has recently convened a CHP working group, and the Energy Commission and the California Public Utilities Commission (CPUC) have similar efforts underway. Under this task PCEAC researchers would become more directly involved in these activities, helping to guide the development of CHP policy in California. PCEAC resources will be used to help inform these activities, both in terms of expertise internal to the PCEAC and the ability to network with the other regional Clean Energy Application Centers (CEACs) to compare notes and “lessons learned” as they may be useful for the operations of the California working groups.

The Contractor shall:

- Become aware of the latest status of state agency working groups for CHP and district energy
- Engage the relevant working groups and share knowledge and information generated by or accessible to the PCEAC
- Promote strategic initiatives developed by the working groups within the Pacific region and through the larger RAC network
- Prepare meeting materials including handouts and presentation

Deliverables:

- Meeting materials including handouts and presentations (no draft)

Task 4 Analyze CHP System Economics of Performance-Based SGIP Incentive Structures and California Feed-In Tariffs

The goal of this task is to assist in state efforts to analyze the impacts on system economics of the recently proposed “performance-based” SGIP program as well as they recently enacted “feed-in tariff” program under Assembly Bill 1613. The feed-in tariff program is just starting to be made available, and a recent California Public Utilities Commission staff report has proposed “performance-based” incentives, following a 2007 California Energy Commission Integrated Energy Policy Report (IEPR) suggestion that revisions to the California Self-Generation Incentive Program (SGIP) be considered that would structure the program in a more performance-based direction (rather than being based merely on system installation, irrespective of performance).

The Commission concluded that:

“The CPUC’s self-generation program incentives should be based upon overall efficiency and performance of systems, regardless of fuel type.” (2007 California Energy Commission IEPR)

In order to explore this concept further, PCEAC proposes to collaborate with researchers at the U.S. DOE Lawrence Berkeley National Lab (Berkeley Lab) to examine the potential effects on CHP system economics of:

- 1) SGIP incentive levels that are tied to system operational efficiencies, irrespective of specific technology type; and

- 2) SGIP incentives that are pro-rated over time in various ways, versus being paid out entirely at the start of the project (e.g., 40% / 15% / 15% / 15% / 15% over five years)
- 3) Feed-in tariffs that vary with the “market price referent” of natural gas, by utility service territory, and by time of day when the power is sold to the grid

Various incentive structures and feed-in tariff levels will be examined, and the effects on system economics explored, through the use of the Berkeley Lab Distributed Energy Resources Customer Adoption Model (DER-CAM).

The Contractor shall:

- Analyze the incentive structures proposed by the CPUC in its recent staff report
- Analyze feed-in tariff program and rates
- Develop incentive characterizations for various CHP technologies
- Assess the impacts of the proposed incentives and feed-in tariffs on example CHP system installations
- Document task activities and findings
- Prepare a Performance Analysis Report

Deliverables:

- Performance Analysis Report

Task 5 Energy Utilization Statistics

The goal of this task is to develop key energy utilization statistics to aid in efforts to analyze and assess CHP potential in key Pacific region market segments. UC Irvine is gathering time resolved (15 minute or better resolution) from ~60 buildings in California. The buildings are from 6 specific market sectors: (1) Commercial Office Buildings, (2) Hospitals, (3) College/University, (4) Jail/Prison, (5) Hotels, and (6) Grocery Stores. Data for 12-month periods have been gathered or are in the process of being gathered. Some of the sites have CHP systems installed and operating. The data are being standardized and consolidated into an SQL database. In this task, the data obtained will be analyzed to provide “typical” electricity and thermal demand profiles for the market sectors. The results will be presented in various formats to illustrate seasonal variation, variation amongst specific buildings within each market sector. These data will then be utilized in subsequent PCEAC analysis under Task 5.

The Contractor shall:

- Analyze annual dataset of energy use from commercial buildings
- Develop seasonal and sectoral energy usage/load characterizations
- Extract information from the dataset to facilitate comparison with CEUS data and for use in/comparison with building energy models such as eQUEST and DER-CAM
- Document task activities and report findings
- Prepare a report on the utilization statistics and CHP potential in key Pacific region market segments

Deliverables:

- Utilization Statistics and CHP potential Report

Task 6 Perform Energy Utilization Analysis and Comparisons

The goal of this task is to perform energy utilization analysis and comparisons using the dataset and seasonal load characterizations described in Task 5. Using the measured load profiles and energy utilization from the database mentioned in the Task 5 description, this task will involve carrying out simulations of building demand using eQUEST and comparing the predicted and measured load profiles. In addition, the measured and predicted data can be compared against results from the California End Use Survey (CEUS) database for commercial buildings. In this task 5 to 7 specific sites will be used.

The Contractor shall:

- Carry out simulations of building demand using eQUEST
- Compare predicted and measured load profiles
- Compare measured load profiles with CEUS data
- Document task activities and findings
- Prepare a Performance Analysis Report

Deliverables:

- Performance Analysis Report

Task 7 CHP Equipment Sizing/Performance Assessment

The goal of this task is to perform a CHP equipment sizing and performance assessment, building on the outcomes of other project tasks. Using the database analysis from Task 5, this Task will assess the match with selected equipment that was installed and consider the selection relative to other options that may seem more optimum for 3-4 sites with existing CHP/DG. This analysis will also include discussion regarding the broader database established for buildings within the market sector that do not currently have DG/CHP installed. The combination of (1) measured versus projected performance, (2) analysis of the appropriateness of the installed CHP/DG systems for the sector and (3) the general assessment of optimum CHP/DG systems for the sector in general will provide guidance on identifying the best match of CHP/DG with the demand profiles obtained.

The Contractor shall:

- Assess long term performance of installed CHP systems at 3-4 sites
- Compare the performance with ongoing U.S. Department of Energy technology performance characteristics
- Assess the installed system size and performance compared with potential “optimum” solutions based on simulation modeling
- Document task activities and findings
- Prepare a report on CHP sizing/performance results

Deliverables:

- CHP Sizing/Performance Report