

GRANTS/CONTINGENT AWARD REQUEST



To: Grants and Loans Office

Date: 2/27/2013

Project Manager: Rizaldo Aldas

Phone Number: 916-327-1417

Office: Energy Generation Research Office

Division: Energy Research and Development

MS- 43

Project Title: Plumas Energy Efficiency and Renewable Management Action Plan (PEER MAP)

Type of Request: (check one)

New Agreement: (include items A-F from below) Agreement Number: Assigned by G&L Office

Program: PIER E / Renewables

PON-12-502-16 (Community Scale Renewable Energy Development,
Solicitation Name and/or Number: Deployment and Integration)

Legal Name of Recipient: Sierra Institute for Community and Environment

Recipient's Full Mailing Address: P.O. BOX 11
TAYLORSVILLE, CA 95983-0011

Recipient's Project Officer: Jonathan Kusel Phone Number: 907.284.1022

Agreement Start Date: 6/19/2013 Agreement End Date: 3/31/2015

Amendment: (Check all that apply) Agreement Number: _____

Term Extension – New End Date: _____

Work Statement Revision (include Item A from below)

Budget Revision (include Item B from below)

Change of Scope (include Items A – F as applicable from below)

Other: _____

ITEMS TO ATTACH WITH REQUEST:

- A. Work Statement
- B. Budget
- C. Recipient Resolution, if applicable. (Resolution may be requested in Special Conditions if not currently available.)
- D. Special Conditions, if applicable.
- E. CEQA Compliance Form
- F. Other Documents as applicable
 - Copy of Score Sheets
 - Copy of Pre-Award Correspondence
 - Copy of All Other Relevant Documents

California Environmental Quality Act (CEQA)

CEC finds, based on recipient's documentation in compliance with CEQA:

Project exempt: 14 CCR section 15306 NOE filed: _____

Environmental Document prepared: _____ NOD filed: _____

Other: _____

CEC has made CEQA finding described in CEC-280, attached

Funding Information:

*Source #1: PIER-E Amount: \$ 300,000.00 Statute: 11- FY: 12-13 Budget List #: 501.027J

*Source #2: _____ Amount: \$ _____ Statute: _____ FY: _____ Budget List #: _____

*Source #3: _____ Amount: \$ _____ Statute: _____ FY: _____ Budget List #: _____

If federally funded, specify federal agreement number: _____

* Source Examples include [ERPA](#), [PIER-E](#), [PIER-NG](#), [FED](#), [GRDA](#), [ARFVT](#), [OTHER](#).

Business Meeting Approval: (refer to Business Meeting Schedule)

Proposed Business Meeting Date: 5/8/2013 Consent Discussion

Business Meeting Participant: Rizaldo Aldas Time Needed: 5 minutes

Agenda Notice Statement: (state purpose in layperson terms)

Possible approval of a Grant / Contingent Award to...
SIERRA INSTITUTE FOR COMMUNITY AND ENVIRONMENT. Possible approval of this Agreement with the Sierra Institute for Community and Environment in the amount of \$300,000 to develop an integrated renewable energy and energy efficiency action plan centered on integrating woody biomass and other renewable energy into existing infrastructure, and to reduce the use of fossil fuels across Plumas County. (PIER electricity funding)
Contact: Rizaldo Aldas. (5 minutes)

Project Manager _____ Date _____ Office Manager _____ Date _____ Deputy Director _____ Date _____

GRANTS/CONTINGENT AWARD REQUEST



Exhibit A WORK STATEMENT

TECHNICAL TASK LIST

| Task # | CPR | Task Name |
|--------|-----|--|
| 1 | N/A | Administration |
| 2 | | Identify Stakeholders and Advisory Body |
| 3 | | Develop Energy Vision |
| 4 | X | Identify Near-Term Technical Actions |
| 5 | | Facilitate Regulatory, Policy, and Institutional Innovation |
| 6 | X | Develop Plumas Energy Efficiency and Renewable Management Action Plan (PEER MAP) |
| 7 | | Identify Pathways To PEER MAP Implementation |
| 8 | | Dissemination of Project Results |

KEY NAME LIST

| Task # | Key Personnel | Key Subcontractor(s) | Key Partner(s) |
|--------|----------------|-----------------------------------|----------------|
| 1 | Jonathan Kusel | | |
| 2 | | | Plumas County |
| 3 | | | |
| 4 | | Wisewood, Inc. | |
| 5 | | | Plumas County |
| 6 | | William Stewart | |
| 7 | | Greg O'Sullivan Wisewood, Inc. | |
| 8 | | | |

GLOSSARY

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

| Term/ Acronym | Definition |
|------------------|---|
| CEQA | California Environmental Quality Act |
| CHP | Combined Heat and Power |
| CPM | Commission Project Manager |
| CPR | Critical Project Review |
| PEER MAP | Plumas Energy Efficiency and Renewable Management Action Plan |
| PG&E | Pacific Gas and Electric |
| PIER | Public Interest Energy Research |
| PV | Photovoltaic |
| Sierra Institute | Sierra Institute for Community and Environment |

Problem Statement:

The growing recognition of the benefits of biomass as a renewable energy source has encouraged many groups to explore the possibilities of using woody biomass from the

forest as a renewable energy source. However, growing interest has been stymied by a combination of technological, market, and institutional challenges.

There is a limited track record for successful biomass utilization technology in California, particularly at smaller scales. Smaller markets in rural communities pose a challenge for biomass energy production. Recently, some biomass plants have reduced production or closed due to low wholesale power rates. Biomass utilization based on electricity generation is typically cost prohibitive due to the cost of moving biomass from the woods to the utilization site relative to the rate received for electricity production. California's existing energy infrastructure and regulatory framework was developed to engage, support, and regulate large-scale utilities providing services to many customers across a wide area, not smaller-scale, woody biomass facilities. In many rural areas there is rarely a single entity that links energy efficiency and renewables management across jurisdictions.

This project addresses barriers to woody biomass utilization, paving the way for other communities to develop community energy plans that integrate biomass utilization with other more commonly implemented renewables such as solar.

Goals of the Agreement:

The goal of this Agreement is to create an integrated renewable energy action plan across Plumas County, California. Through development of the Plumas Energy Efficiency and Renewables Management Action Plan (PEER MAP), this project will reduce the use of high-cost fossil fuels at public institutions by integrating woody biomass and other renewable energy into existing infrastructure in Plumas County.

Objectives of the Agreement:

The objectives of this Agreement are to develop institutional partnerships, management solutions, and site-specific plans to promote the use of woody biomass for thermal energy and to reduce the use of fossil fuels for heat by large institutional users such as hospitals and schools. The Recipient will use a networked approach that allows communities to reach economies of scale while maintaining the integrity of a community-based approach that ensures the sustainability of supply and demand. The Recipient will explore the use of combined heat and power (CHP) biomass-powered units, but will not rely on them because of their pre-commercial status.

TASK 1 ADMINISTRATION

Instructions for Submitting Electronic Files and Developing Software

Electronic File Format

The Recipient will deliver an electronic copy (CD ROM or memory stick or as otherwise specified by the Commission Project Manager (CPM) of the full text of any Agreement products 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 products and establishes the computer platforms, operating systems, and software versions that will be required to review and approve all software deliverables.

- Data sets will be in Microsoft (MS) Access or MS Excel file format.
- PC-based text documents will be in MS Word file format.
- Documents intended for public distribution will be in PDF file format, with the native file format provided as well.
- Project management documents will 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, the Recipient will use 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 Electronic File Format requirements above must be approved in writing by the Energy Commission's Information Technology Services Branch.

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 Recipient shall:

- Attend a “Kick-Off” meeting with the CPM, the Grants Officer, and a representative of the Accounting Office. The Recipient shall bring its Project Manager, Agreement Administrator, Accounting Officer, and others designated by the CPM to this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting. Prior to the kick-off meeting, the CPM will provide an agenda to all potential meeting participants.

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

- Discussion of the terms and conditions of the Agreement
- Discussion of Critical Project Review (Task 1.2)
- Match fund documentation (Task 1.6) *No work may be performed until this documentation is in place.*
- Permit documentation (Task 1.7)
- Discussion of subcontracts needed to carry out project (Task 1.8)

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

- The CPM’s expectations for accomplishing tasks described in the Scope of Work
- An updated Schedule of Products
- Discussion of Progress Reports (Task 1.4)
- Discussion of Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
- Discussion of the Final Report (Task 1.5)

The CPM shall designate the date and location of this meeting.

- Submit an updated Schedule of Products, List of Match Funds, and List of Permits to the CPM.

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

Commission Project Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (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 to identify any needed modifications to the tasks, products, schedule, or budget.

CPRs provide the opportunity for frank discussions between the CPM and the Recipient. The CPM may schedule CPRs as necessary, and CPR costs will be borne by the Recipient.

Participants include the CPM and the Recipient, and may include the Commission Grants Officer, the Energy Research and Development Division technical lead, other Energy Commission staff and Management, and any other individuals selected by the CPM to provide support to the Energy Commission.

The Commission Project Manager shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the Energy Commission, but they may take place at another location or may be conducted via electronic conferencing (e.g., WebEx), as determined by the Commission Project Manager.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion of 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 so whether modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. If the CPM concludes that satisfactory progress is not being made, this conclusion will be referred to the Deputy Director of the Energy Research and Development Division.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more products that were included in the CPR.

The Recipient 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 on the project. This report shall be submitted along with any other products identified in this Scope of Work. The Recipient shall submit these documents to the CPM 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.

Commission Project Manager Products:

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to close out this Agreement.

The Recipient shall:

- Meet with Energy Commission staff to present the project 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 Recipient, the Commission Grants Office Officer, and the CPM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the discretion of the CPM.

The technical portion of the meeting shall involve the presentation of an assessment of the degree to which project and task goals and objectives were achieved, in addition to findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CPM will determine the appropriate meeting participants.

The administrative portion of the meeting shall involve a discussion with the CPM and the Grants Officer about the following Agreement closeout items:

- Disposition of any equipment purchased with Energy Commission funds
- Energy Commission's request for specific "generated" data (not already provided in Agreement products)
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare written documentation of any agreements made between the Recipient and Commission staff during the meeting.
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

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

Task 1.4 Monthly 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 on time and within budget.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

The Recipient shall:

- Prepare a Monthly Progress Report that summarizes all Agreement activities conducted by the Recipient 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 CPM within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in the Terms and Conditions of this Agreement.
- In each Monthly Progress Report and invoice, document and verify:
 - Energy Commission funds received by California-Based Entities (CBEs);
 - Energy Commission funds spent in California; and Match fund expenditures
 - Provide synopsis of project progress.

Product:

- Monthly Progress Reports

Task 1.5 Final Report

The goal of the Final Report is to assess the project's success in achieving its goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission and will also prepare a confidential version of the Final Report, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

The Recipient shall:

- Prepare an Outline of the Final Report.
- Prepare a Final Report following the approved outline and the latest version of the Final Report guidelines which will be provided by the CPM. The CPM shall provide written comments on the Draft Final Report within 15 working days of receipt. The Final Report must be completed at least 90 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

Products:

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

Task 1.6 Identify and Obtain Match Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained 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. Although the Energy Commission budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of Energy Commission funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CPM at least 2 working days prior to the kick-off meeting. 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. 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, 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 Recipient shall identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
- Provide 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. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are 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 a letter including the appropriate information to the CPM if during the course of the Agreement additional match funds are received.
- Provide a letter to the CPM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR.

Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

Task 1.7 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 not reimbursable under this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient shall budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CPM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. 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
- The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule, and copies of the permits. 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, provide an updated list of permits (including the appropriate information on each permit) and an updated schedule to the CPM.
- As permits are obtained, send a copy of each approved permit to the CPM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CPM within 5 working days. Either of these events may trigger an additional CPR.

Products:

- Letter documenting the permits or stating that no permits are required
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each approved permit (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontracts required to carry out the tasks under this Agreement consistent with the terms and conditions of this Agreement and the Recipient's own procurement policies and procedures. This task will also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the Commission Agreement Manager for review.
- Submit a final copy of the executed subcontract.

- If the Recipient decides to add new subcontractors, it shall notify the Commission Agreement Manager.

Products:

- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS

TASK 2 IDENTIFY STAKEHOLDERS AND ADVISORY BODY

TASK 2.1 CONDUCT STAKEHOLDER INTERVIEWS

The goal of this task is to identify and interview stakeholders to involve in the development of the Plumas Energy Efficiency and Renewable Management Action Plan (PEER MAP), and individuals to serve on the Advisory Body for the project. These individuals will help guide the development of a plan that utilizes locally available renewable energy resources to advance renewable end-use energy efficiency, energy system integration, and energy technology.

The Recipient shall:

- Identify key stakeholders and leaders of public institutions and obtain agreements to interview them and their facility managers.
- Interview leaders of major public institutions in Plumas County such as government agencies, the school district, health care districts, and Feather River College. Also interview local small business and officials or staff from the U.S. Forest Service.
- Identify other “key informant” stakeholders.
- Prepare a *Roster of Key Stakeholders*.
- Develop a *Summary of Key findings From Stakeholder Interviews*.

Products:

- Roster of Key Stakeholders
- Summary of Key Findings from Stakeholder Interviews

TASK 2.2 CONVENE PROSPECTIVE ADVISORY BODY

The goal of this task is to ensure that the PEER MAP is reflective of the community’s diversity, values, goals, and interests.

The Recipient shall:

- Convene a prospective Advisory Body, by approximately week eight of the project. The composition of the Advisory Body will be partially based on results from key informant interviews described in Task 2.1. The body will

represent multiple perspectives and will have between five and 15 members.

- Prepare an *Advisory Body Contact List* that includes participant names and contact information.
- Prepare *Advisory Body meeting notes and summaries*.
- Develop a *Report on Preliminary Key Advisory Body Issues, Challenges, and Opportunities*.

Products:

- Advisory Body Contact List
- Advisory Body Meeting Notes and Summaries
- Report on Preliminary Key Advisory Body Issues, Challenges, and Opportunities

TASK 2.3 ESTABLISH ADVISORY BODY

The goal of this task is to describe the roles and responsibilities of all participating individuals and organizational representatives.

The Recipient shall:

- Facilitate and manage a group of participants interested in increasing their use of local renewable sources, decreasing fossil fuel reliance, and acting as advisors for development of a PEER MAP and implementation of renewable projects.
- Prepare a *Memorandum of Agreement for the Advisory Body* and submit a signed memorandum to the CPM.

Products:

- Signed Memorandum of Agreement for the Advisory Body

TASK 3 DEVELOP ENERGY VISION

Task 3.1 ENGAGE ADVISORY BODY IN VISION DEVELOPMENT

The goal of this task is to determine common goals and identify key, locally-available resources to be utilized in the PEER MAP.

The Recipient shall:

- Incorporate Advisory Body member recommendations into the draft PEER MAP energy vision.
- Submit a *Draft PEER MAP Energy Vision Notification Letter* to the CPM on the draft energy vision developed by the Recipient and the Advisory Body.

Products:

- Draft PEER MAP Energy Vision Notification Letter

Task 3.2 SOLICIT COMMUNITY INPUT FOR VISION DEVELOPMENT

The goal of this task is to present a draft PEER MAP energy vision to the general public.

The Recipient shall:

- Review existing energy plans that apply to Plumas County, including the County General Plan.
- Work with a subgroup of Advisory Body members to conduct at least two public meetings in the county during approximately month five.
- Draft a *Report on the PEER MAP Energy Vision* that integrates comments and recommendations from public meetings and revisions suggested by the Advisory Body.
- Circulate the report to the Advisory Body for final revision.
- Submit a *Final PEER MAP Energy Vision Notification Letter* to the CPM documenting completion of the Final PEER MAP Energy Vision.

Products:

- Report on the PEER MAP Energy Vision
- Final PEER MAP Energy Vision Notification Letter

TASK 4 IDENTIFY NEAR-TERM TECHNICAL ACTIONS

TASK 4.1 DETERMINE SITE VIABILITY FOR HEAT AND ENERGY EFFICIENCIES

The goals of this task are to evaluate opportunities for implementing energy efficient, renewable technologies and to identify sites for further evaluation.

The Recipient shall:

- Determine the viability of renewable energy integration at partner facilities consistent with optimal energy saving and economic factors, with a focus on institutional heat and electricity use. Focusing on large institutional energy users in Plumas County, develop the PEER MAP by examining the following entities and sites:
 - Plumas Unified School District (5-7 potential sites)
 - Plumas County Office of Education (1 potential site)
 - Plumas County (1-3 potential sites)
 - Eastern Plumas Healthcare District (2 potential sites)
 - USDA Forest Service, Plumas National Forest (2 to 3 potential sites)
 - Indian Valley Community Services District (1 potential site)
 - Feather River College (1 potential site)

- Assess biomass boiler opportunities by entity and site. The initial review will examine the opportunities for woody biomass utilization at facilities owned or operated by large institutional energy users throughout Plumas County. It will include the following, at a minimum: preliminary site visits to institutional facilities to assess the potential for utilizing thermal energy from woody biomass, a simple fuel and cost comparison analysis, and exploration of institutional interest.
- Identify two sites for which financial feasibility statement (pro forma) will be completed. Criteria for the selection process will include but not be limited to:
 - Institutional need;
 - Volume of renewables used and costs savings (based on initial review);
 - Institutional commitment; and
 - Opportunities to advance understanding of biomass utilization for thermal energy.
- Prepare a *List of Sites and Technologies* for the PEER MAP and for further biomass boiler analysis.
- Prepare a *Report on Site Viability for Heat and Energy Efficiency* that summarizes the results of the assessment of site viability for heat and energy efficiency.

Products:

- List of Sites and Technologies
- Report on Site Viability for Heat and Energy Efficiency

Task 4.2 OBTAIN PARTNER COMMITMENTS

The goal of this task is to obtain partner commitments from the entities with facilities to be assessed for biomass boiler installation.

The Recipient shall:

- Identify facilities in which renewable upgrades will be examined and pursued, and obtain related partner commitments for inclusion in vision plan development and the PEER MAP.
- Identify specific partner commitments for site analysis and follow-up. Project partners are those who are directly involved in infrastructure development, securing or contributing capital, or providing real estate where near-term technical actions will be advanced.
- Provide the CPM with a *Notification Letter on Partner Commitments*. The letter must include a summary of the facilities that will be assessed for installation.

Products:

- Notification Letter on Partner Commitments

TASK 4.3 ASSESS BIOMASS UTILIZATION THROUGH FURTHER ANALYSIS

The goal of this task is to understand the technical and financial constraints and opportunities for sites selected in Task 4.1.

The Recipient shall:

- Produce site-specific *Pro Forma Financial Statements* for two biomass sites. Each statement must include an evaluation of the renewable energy technologies that will yield the best performance for the facility.
- Complete an *Engineering and Architectural Plan* for the proposed renewable energy generation technology. The plan must be detailed, construction-ready, and based on results from completed financial statements and a combination of other factors including institutional interest and Advisory Body input. The plan must include but not be limited to:
 - Detailed site plans with topographical data
 - Detailed design of boiler equipment and fuel handling systems
 - Mechanical system design
 - Detailed drawings for utilities, piping, and electrical systems
 - Detailed building and equipment foundations
 - All environmental and land use permit applications required by jurisdictions having authority (complete in conjunction with Task 5)
 - An evaluation of the pros and cons of pellets vs. wood chips
 - Consideration of sensitive receptors, Best Available Control Technology, and other air quality issues.
- Prepare *Fuel Supply, Operation, and Maintenance Guides* for the potential biomass thermal boiler network sites, as identified in Task 4.1.
- Prepare a *Biomass District Heating Opportunity Assessment* that evaluates the opportunity for biomass district heating in Plumas County.

Products:

- Pro Forma Financial Statements
- Engineering and Architectural Plan
- Fuel Supply, Operation, and Maintenance Guides
- Biomass District Heating Opportunity Assessment

TASK 4.4 EVALUATE POTENTIAL FOR WOODY BIOMASS PROCESSING FACILITY

The goal of this task is to assess woody biomass processing facility development opportunities.

The Recipient shall:

- Assess the feasibility of constructing a woody biomass processing facility, including but not limited to: (1) determining the costs of developing a biomass processing facility; (2) identifying needed equipment, construction

design, and related costs; (3) researching land tenure arrangements at potential sites.

- Identify one or more sites and conduct necessary site analysis based on identified needs.
- Prepare a *White Paper on Woody Biomass Processing Facility Development* that includes at least the assessment and analysis results from Tasks 4.3 and 4.4.

Products:

- White Paper on Woody Biomass Processing Facility Development

TASK 4.5 ASSESS OPPORTUNITIES FOR SOLAR PV AND OTHER RENEWABLE TECHNOLOGIES

The goal of this task is to evaluate the potential for Solar photovoltaic (PV) and other renewable technologies to meet energy needs.

The Recipient shall:

- Determine the feasibility of Solar PV technology in conjunction with biomass boiler and other existing energy technologies for identified sites in Plumas County.
- Prepare a *Solar PV Feasibility Report* that details the results of the solar PV feasibility analysis.

Products:

- Solar PV Feasibility Report

TASK 5 FACILITATE REGULATORY, POLICY, AND INSTITUTIONAL INNOVATION

TASK 5.1 ENGAGE RELEVANT AGENCIES AND INSTITUTIONS

The goal of this task is to engage regulatory agencies in discussions about biomass boiler technology, and to contact local agencies relevant to site development.

The Recipient shall:

- Identify and contact federal, state, and local agencies with potential jurisdiction over of the project.
- Share project information and discuss biomass boiler technology with public facilities with key agencies in approximately month five.
- Determine the lead agency for California Environmental Quality Act (CEQA) compliance.¹

¹ Communication with the Plumas County Planning Director has already been initiated, as this department will be the likely CEQA lead for the project. Further analysis of the site described in Task 4.4 will include zoning, compliance with other local plans, and utility installation.

- Initiate communication with PG&E to discuss the PEER MAP process, likely technologies to be integrated, and any project concerns.
- Develop a *Regulatory Issues and Barriers Report* that: (1) assesses likely barriers identified by permitting agencies; (2) classifies barriers into one of three categories: technological, social, and economic; and (3) includes a plan for addressing the barriers, including the identification of potential mitigation actions.

Products:

- Regulatory Issues and Barriers Report

TASK 5.2 PREPARE SUCCESSFUL PERMITTING PATHWAYS

The goal of this task is to ensure that regulatory requirements are effectively met.

The Recipient shall:

- Identify critical information needed to guide biomass boiler permitting and construction.
- Develop a *CEQA Checklist* for CEQA compliance, which includes all information needed by agencies that issue permits, a methodology for providing this information, and a flow chart of decisions and timeline for a signed CEQA document.

Products:

- CEQA Checklist

TASK 6 DEVELOP PLUMAS ENERGY EFFICIENCY AND RENEWABLE MANAGEMENT ACTION PLAN (PEER MAP)

TASK 6.1 INTEGRATE ENERGY VISION WITH FINDINGS

The goal of this task is to develop a draft and final PEER MAP.

The Recipient shall:

- Integrate the energy vision with findings developed in prior tasks to produce a Draft PEER MAP that engages the largest institutional energy users in Plumas County, with focus on biomass boilers. The MAP will include solar PV and other renewable technologies.
- Share the Draft PEER MAP with Advisory Body members and other key stakeholders for comment.
- Revise the Draft PEER MAP and share it with the public for review.
- Incorporate feedback, ensure the plan is tied to local renewable resources, and produce a Draft Final PEER MAP.
- Produce a *Summary of Written and Oral Comments on the Draft PEER MAP*.
- Submit a *Draft Final PEER MAP* to the Advisory Body for review.

- Integrate comments and recommendations provided to develop and publish the *Final PEER MAP* by approximately month 16.

Products:

- Summary of Written and Oral Comments on the Draft PEER MAP
- Draft Final PEER MAP
- Final PEER MAP

TASK 6.2 EVALUATE ECONOMIC AND ENVIRONMENTAL IMPLICATIONS OF PEER MAP AND IDENTIFY RESEARCH GAPS

The goal of this task is to understand the economic and environmental implications of the PEER MAP.

The Recipient shall:

- Assess the environmental and economic impacts of the PEER MAP, both local/statewide and actual/potential.
- Identify and prioritize knowledge gaps related to the project that warrant further research and investigation.
- Summarize the findings above in a *Summary of Findings on the Environmental and Economic Impacts of the PEER MAP*.

Products:

- Summary of Findings on the Environmental and Economic Impacts of the PEER MAP

TASK 6.3 IDENTIFY POLICY IMPLICATIONS AND DEVELOP RECOMENDATIONS

The goal of this task is to review the policy implications of the PEER MAP.

The Recipient shall:

- Identify legislative or regulatory policies that inadequately address or inhibit utilization of renewable technologies in rural areas, with a focus on woody biomass.
- Evaluate policies that apply to renewable energy integration, identify gaps between existing and needed policies, and assess the PEER MAP's interaction with relevant policies and institutional processes.
- Prepare a *Summary of Policy Recommendations for the Promotion of Community-Scale Renewable Integration*.

Products:

- Summary of Policy Recommendations for the Promotion of Community-Scale Renewable Integration

TASK 7 IDENTIFY PATHWAYS TO PEER MAP IMPLEMENTATION

Task 7.1 RESEARCH OWNERSHIP AND BUSINESS MODELS

The goal of this task is to identify potential ownership structures and networking opportunities for biomass boilers, fuel supply, and the woody biomass processing facility.

The Recipient shall:

- Explore varying business models for biomass boilers, fuel supply, and the potential woody biomass processing facility.
- Produce a *Summary of Ownership Structure, Network Opportunities, and Recommended Models*.

Products:

- Summary of Ownership Structures and Network Opportunities, and Recommended Models

Task 7.2 SELECT AND IMPLEMENT OWNERSHIP MODELS FOR THERMAL BIOMASS NETWORK COMPONENTS

The goal of this task is to identify next steps to implement the biomass boiler network component of the PEER MAP.

The Recipient shall:

- Identify and select appropriate ownership models.
- Confirm the interest and capacity of partners to advance the project beyond the exploration phase.
- Outline duties of responsible parties and develop contracts as needed.
- Develop a *Fueling, Operations, and Maintenance Plan for the Biomass Boiler Network* that is based on the ownership models identified as best fits for each institution, and that includes the following protocols for individual components:
 - A detailed schedule and method of delivery for fuel supply;
 - An outline of a routine operation management plan; and
 - A program of regular maintenance and identification of capacity for addressing any irregular issues that may arise.
- Prepare a *Biomass Boiler Network Implementation Timeline*.

Products:

- Fueling, Operations, and Maintenance Plan for the Biomass Boiler Network
- Biomass Boiler Network Implementation Timeline

TASK 7.3 EXPLORE COMBINED HEAT AND POWER FACILITY AND OTHER VALUE-ADDED CO-LOCATION OPPORTUNITIES

The goal of this task is to research ways to leverage the woody biomass processing facility through co-location opportunities that stimulate additional local economic activity.

The Recipient shall:

- Engage in CHP discussions with concerned institutions and utilities to assess the viability of co-locating a CHP facility with the woody biomass processing facility.
- Prepare a *Report on CHP Opportunities and Challenges*.
- Examine opportunities to attract businesses interested in co-locating on the site of a woody biomass processing facility to inform site selection and development of the facility itself.
- Prepare a *Summary of Co-location Possibilities and Recommended Next Steps*.

Products:

- Report on CHP Opportunities and Challenges
- Summary of Co-location Possibilities and Recommended Next Steps

Task 8 DISSEMINATION OF PROJECT RESULTS

Task 8.1 TECHNOLOGY TRANSFER

The goal of this task is to develop a plan to make the knowledge gained, experimental results and lessons learned available to key decision-makers, and provide guidance and support to similar communities in California.

The Recipient shall:

- Create a *Technology Transfer Plan* to share materials with other community groups in forested, rural California.
- Compare project performance and expectations provided in the proposal to actual project performance and accomplishments.

Products:

- Draft Technology Transfer Plan
- Final Technology Transfer Plan

Task 8.2 PRODUCTION READINESS PLAN

The goals of this task are to create a report on the project that includes data for economic and environmental impacts, and to determine the steps that will lead to the replicability of this project.

The Recipient shall:

- Prepare a *Production Readiness Plan*. As appropriate, the plan will include but not be limited to a discussion of the following:
 - Critical production processes, equipment, facilities, personnel resources, and support systems needed to produce a commercially viable product
 - Internal manufacturing facilities, supplier technologies, capacity constraints imposed by the design under consideration, design-critical elements, and the use of hazardous or non-recyclable materials. The product manufacturing effort may include “proof of production processes”
 - A projected “should cost” for the product when in production
 - The expected investment threshold to launch the commercial product
 - An implementation plan to ramp up to full production

Products:

- Draft Production Readiness Plan
- Final Production Readiness Plan



Award Number: PON-12-502-16

Date: 03 / 01 / 2013

Note: The Energy Commission Project Managers Manual includes detailed instructions on how to complete this section, with examples of grants that are “Projects” and are not “Projects”. When the Project Manager is completing this section, if questions arise as to the appropriate answers to the questions below, please consult with the Energy Commission attorney assigned to review grants or loans for your division.

1. Is grant/loan considered a “Project” under CEQA? Yes (skip to question #2) No (continue with question #1)

Please complete the following: *[Public Resources Code (PRC) 21065 and 14 California Code of Regulations (CCR) 15378]:*

Explain why the grant/loan is **not** considered a “Project”? The grant/loan will not cause a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because grant/loan involves:

2. If grant/loan is considered a “Project” under CEQA: (choose either **IS** or **IS NOT**)

Grant/loan **IS** exempt:

Statutory Exemption: (List PRC and/or CCR section numbers) _____

Categorical Exemption: (List CCR section number) 14 CCR 15306

Common Sense Exemption. (14 CCR 15061(b)(3))

Explain reason why the grant/loan is exempt under the above section:

The project involves the development of a county-wide renewable energy and energy efficiency action plan.

Please attach draft Notice of Exemption (NOE). Consult with the Energy Commission attorney assigned to your division for instructions on how to complete the NOE.

Grant/loan **IS NOT** exempt. The Project Manager needs to consult with the Energy Commission attorney assigned to your division and the Siting Office regarding a possible initial study.