



Global Energy Partners, LLC

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In Partnership With



The California Certified Organic Farmers Foundation

Offer the Following New, Energy-Efficiency Program

Certified Organic Farmer Energy Efficiency Program

Confirmation Number: _____

Submitted by:

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Other programs proposed by The California Certified organic Farmer Foundation: No others proposed

Other programs proposed by Global Energy Partners, LLC:

Energy Efficiency Program for California's Food Processors in PG&E's Service Area
Energy Efficiency Program for California's Food Processors in SCE's Service Area
Expansion of Energy Efficiency Services for Oil Production into the PG&E Service Area
Continuation of Energy Efficiency Services for Oil Production in the SCE Service Area
Energy Efficiency Program for Orange County's Hard-to-Reach Agencies

September 23, 2003

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I. Program Overview

Global Energy Partners, LLC (Global) and the California Certified Organic Farmers (CCOF) Foundation are pleased to submit this turnkey proposal to the California Public Utilities Commission (CPUC) for its consideration under the CPUC's third-party program initiative for 2004-2005. Our proposed program, the Certified Organic Farmers Energy Efficiency Program, has the following expected objectives:

- Net annual electric energy savings: 3,735,662 kWh
- Net annual gas energy savings: 258,960 Therms
- Net coincident peak demand reduction: 1,017 kW
- Cost-effectiveness ratios: TRC = 2.07; PT = 7.67.

This proposal builds on Global's successful implementation experiences with three programs for the CPUC, California Energy Commission (CEC), and the California Independent System Operator (ISO). Global is currently implementing a program to serve the needs of the small, hard-to-reach on-shore oil producers in Southern California. In that program, Global has successfully implemented the required systems through marketing, recruitment, installation, technical analysis, and information technology to develop and implement successful programs.

The California Certified Organic Farmers Foundation (CCOF Foundation) is very pleased to offer this Program with Global Energy Partners. CCOF, formed in 1973, is the largest statewide organization of organic farmers in California. CCOF offers a variety of services and programs to its members (clients). The CCOF offers a premier national and international organic certification program for growers, processors, handlers, vineyards and retailers. The CCOF represents over 1,200 "certified organic" farmers and processors throughout California. Through the CCOF Foundation, CCOF offers programs to increase awareness of and demand for certified organic products and to expand public support for organic agriculture.

A. Program Concept

This proposal describes the innovative Certified Organic Farmer Energy Efficiency (COFEE) Program, a prescriptive hardware/incentive program that would assist rural, Northern California certified organic farmers in becoming more energy-efficient and productive. The COFEE Program would serve hard-to-reach customers within the agricultural market segment. The COFEE Program will achieve cost-effective, long-term energy savings and peak demand savings. These savings would be realized through a series of on-site energy audits on qualified, hard-to-reach, rural, certified organic farms, and subsequent energy-efficient hardware installations. Expected nonresidential/agricultural energy efficiency measures to be installed through the COFEE Program include:

- Exterior and interior lighting
- Motors
- Refrigeration

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- Fans
- Pumping Systems
- Heating Ventilation Air Conditioning (HVAC) – air-conditioning, tune-up and ventilation systems
- Food Processing

B. Program Rationale

We believe certified organic farmers are worthy of the programmatic focus for this non-utility energy-efficiency program. As discussed below, there are three principal reasons for justifying this focus:

- Agriculture is one of the most important sectors in the California economy;
- Certified organic agricultural products are the fastest growing segment of California's (and the nation's) agriculture; and
- Certified organic farmers in California have been significantly underserved with respect to energy-efficiency programs, are hard-to-reach, and are interested in learning how to be more energy efficient.

The State of California is the most important and largest producer of agricultural products in the U.S. In 2000, the latest year data are available, California produced well over \$27 billion worth of agricultural products. The energy used to produce this wealth of agricultural products is also significant. In 2001, according to United States Department of Agriculture (USDA) and California statistics, California farmers purchased \$818 million of electricity and \$121 million of natural gas.

Certified organic (CO) products are the fastest growing type of agricultural output in California and the nation. Retail sales of CO food products have grown 20% or more annually since 1990; from \$1 billion in 1990 to between \$12 and 13 billion in 2003. This sales growth is expected to continue. California has the nation's largest amount of CO crop acreage (not including pastureland) – representing over 10 percent of the nation's total certified organic cropland – over 148,000 crop acres in 2001. California's CO farmers are very geographically dispersed throughout rural areas.

We are not aware of *any* previous or on-going non-water-based (e.g., irrigation pumping) EE programmatic efforts targeted towards rural, agricultural customers (including certified organic farms) in California. Because of these and other attributes described in Section III, we believe certified organic farmers are properly characterized as a “hard-to-reach” customer segment within the CPUC's categorization and very appropriate for the programmatic focus of this EE hardware/incentive program.

Hispanic growers and processors are an important and growing segment within the certified organic farmers in California. Therefore, their participation in the COFEE Program will be encouraged. As will be described in Section II.B., the Marketing Plan, marketing materials for

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the COFEE Program will be printed in both English and Spanish. In addition, several Global staff members are fluent in Spanish.

C. Program Objectives

The projected accomplishments of the 2004-05 Global/CCOF Foundation COFEE Program include creating long-term electricity energy savings and demand reduction through the installation of more efficient, motors, motor controls, lighting, fans, heating cooling air-conditioning (HVAC), pumping and refrigeration systems and food processing operations systems for certified organic farmers, processors/handlers and vineyards (referred to collectively as CO “producers”) in Northern California. These objectives will be attained in a cost-effective manner. Global and the CCOF Foundation will be working first to educate farmers on the benefits of modifying their energy consumption behavior and the value of the use of financing alternatives to make wise energy-efficient modifications to their operations. This will lead to sustainable energy savings and peak demand reductions. Our expected objectives for the COFEE Program are:

- Net annual electric energy savings: 3,735,662 kWh
- Net annual gas energy savings: 258,960 Therms
- Net coincident peak demand reduction: 1,017 kW
- Cost-effectiveness ratios: TRC = 2.07; PT = 7.67.

The basis for the above objectives is presented below in Section IV.

II. Program Process

A. Program Implementation

Global’s broad experience in developing and managing successful energy efficiency programs and the CCOF Foundation’s similarly vast experience gained from developing the premier certified organic program in California will lend themselves to the successful implementation of the COFEE Program. We will develop the following program delivery strategies and mechanisms to meet our goals and objectives for the COFEE Program.

Develop Customer Recruitment and Marketing Plan

Global and the CCOF Foundation will develop a plan to identify potential Program participants and then market the COFEE Program towards these customers. The highlights of the Marketing Plan are presented below in Section II.B.

The Marketing Plan will also address the needs and wants of the participants—including the development of Spanish language materials—during the customer recruitment phase and then incorporate that information into the recruitment of participants. This activity can also include the development of the Program tracking database to collect customer recruitment, technical, and financial analysis results.

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Develop Qualification and Enrollment Process

Global and the CCOF Foundation will develop the participant qualification and enrollment process based on our experience with other programs, to qualify and survey participants once they have been recruited into the Program. This activity includes the following steps:

- Determine eligibility of participant,
- Perform initial phone survey,
- Qualify the participant, and
- Prioritize the participant opportunities.

Develop On-Site Energy Auditing Process

Global will develop an on-site energy auditing process to catalog site-specific energy-usage and energy efficiency opportunities for the Program. This process will be founded on utilizing knowledgeable agricultural auditors. The plan describing this process will identify the delivery mechanism for performing energy audits and technical and economic analyses of the qualified participants' opportunities. Global will expand its relationships with key trade allies and equipment vendors to help identify and capture valuable opportunities.

Develop Training and Outreach Plan

Global and the CCOF Foundation will develop a training and outreach plan targeted at certified organic producers to promote ongoing interest and participation in the COFEE Program and help ensure Program sustainability. Based on our other program experiences, we realize training and outreach can play an important role in the long-term effectiveness of the energy efficiency program for the producers. Our plan will include the use of best practices and case studies to reduce producers' reluctance to install energy efficient equipment. Descriptions of these best practices and case studies will be available through the Program's materials and the Global and CCOF Websites. All program materials, whether electronic or printed, will be available in both English and Spanish versions.

Develop Certification and Verification Process

Global will develop the process to certify the proper installation of any recommended measures before rebates are issued to the individual participants. Rebates will be issued based on verification of savings for the successful installations. Global will also develop the process to transfer the results of the certification as well as any related data to the independent third-party evaluator.

Develop Reporting Requirements

Global will develop reporting formats and requirements that contain information on program budgets and expenditures; projects, measures, and/or activities that were funded; the amount of energy savings and peak demand reductions associated with the program expenditures; and other information necessary to monitor compliance with CPUC's *Energy Policy Manual* and related

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guidelines. We expect to provide quarterly progress reports and a draft and final Program Report.

Coordination with Existing Utility Programs

Global and the CCOF Foundation will establish a matrix of relevant PG&E and CEC financing and energy efficiency programs that apply to the COFEE Program participants for energy efficiency measures to be implemented under this program.

At this time, we are aware that PG&E agricultural customers can participate in the Express Efficiency Program, the Standard Performance Contract (SPC) Program, and the Nonresidential New Construction “Savings by Design” Program. These 2003 PG&E programs are open to nonresidential customers. Agricultural energy customers are considered nonresidential customers. However, very few agricultural customers participate in these PG&E programs; most program participants are commercial and industrial customers. At this time, PG&E operates no energy efficiency programs exclusively for agricultural customers. Fresno State University administers a Statewide irrigation pump efficiency program. We will coordinate the COFEE Program with this program, to ensure the Fresno State program and ours does not unduly overlap. [The overlap should be minimized since the pumps that COFEE Program will be addressing are expected to be smaller ones, likely less than 35HP. The Fresno State program usually focuses on larger pumps.] Thus, we anticipate little overlap between the COFEE Program and existing state-sponsored energy efficiency programs. Nevertheless, we will carefully coordinate the COFEE Program with these and other agricultural energy efficiency programs.

Global will work to assure consistency between the incentive amounts available from these programs and related programs to avoid confusing participants. Complimentary rebate information will be reported in the economic analysis of the project to the individual participants, as requested.

B. Marketing Plan

The Marketing Plan for the COFEE Program will be designed to educate certified organic producers and to make them aware of the Program’s energy efficiency measures. Global and the CCOF Foundation will use a variety of marketing methods to target potential program participants. These methods include direct mail, print articles, E- campaigns, and promotion of partner/affiliate marketing. The Program’s marketing collateral will make full use of Global’s partnership with the CCOF Foundation. We will also use the Internet to increase awareness and participation and explain the financial benefits of program participation. We will develop specific Program collateral material that explains the benefits of the proposed Program and the savings the participant can anticipate as a direct result of implementing a comprehensive energy efficiency measures.

CCOF has thirty (30) years’ of experience working with and providing services to certified organic farmers in California. Thus, CCOF and the CCOF Foundation have well-developed and current mechanisms for distributing information to farmers and encouraging them to participate in beneficial activities. These mechanisms include:

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- The Chapter Resource Coordinators, who communicate directly with CCOF clients and indirectly through the CCOF chapter leaders,
- CCOF publications including the *CCOF Magazine*,
- E-mail announcements to clients, and
- The CCOF Website [www.ccof.org].

The CCOF Foundation and Global will develop marketing materials to be distributed to CCOF members and other CO producers, as well as to other trade allies in California organic agriculture, including:

- The Ecological Farming Association to spread the word through the EFA's regional workshops and annual Eco-Farm Conference,
- The Community Alliance with Family Farmers' Lighthouse Farm Network, and
- The Davis, CA office of the USDA's Appropriate Technology Transfer for Rural Areas (ATTRA) program.

All marketing materials for the COFEE Program will be developed in both English and Spanish. Since Hispanic growers are one of the faster growing groups of certified organic producers, creating bilingual Program materials will serve to incorporate in the Program an agricultural population that has been previously overlooked. An example of how bilingual materials will be an integral part of the Program's marketing efforts is the following proposed disclosure language that will be included in the Program promotional material in English and Spanish:

Global Energy Partners (Global), in partnership with the California Certified organic Farmers (CCOF) Foundation, is offering certified organic producers the opportunity to participate in an energy efficiency program funded by California ratepayers under the auspices of the California Public Utilities Commission. Program participants are in no way obligated to purchase any other service from Global in order to receive the full benefits of the program.

Global Energy Partners (Global), en sociedad con Granjeros Orgánicos Certificados de California (CCOF por sus siglas en inglés), ofrece a los productores orgánicos certificados la oportunidad de participar en un programa de eficiencia energética financiado por los contribuyentes de California, auspiciado por la California Public Utilities Commission. Las entidades que decidan participar en el programa no están obligadas de ninguna manera a comprar ningún otro servicio prestado por Global para obtener todos los beneficios del programa.

In addition to the bilingual aspect of the marketing materials, Global employs several staff members who are fluent in both Spanish and English. These staff members will be used not only to create the Spanish marketing materials, but also to communicate directly with customers whose preferred language is Spanish.

C. Customer Enrollment

To enroll qualified certified organic producers in this program, Global will develop and implement a plan for recruiting customers, collecting on-site characteristics, historical energy use, and customer preferences. Global and the CCOF Foundation will work closely to identify and qualify potential participants for this program. Global and the CCOF Foundation will identify certified organic producers in the PG&E service area and then identify the producers within each county. This approach will provide a comprehensive listing of potential participants. Once potential participants have been identified, the Global Team will work together to establish a method to identify potential certified organic producers, based on available energy consumption information and operations characteristics. We will then conduct an initial telephone survey with the likely participants to identify energy savings opportunities that meet technical and economic analysis requirements.

D. Materials

For the COFEE Program, Global and the CCOF Foundation propose to rely on the customer and the services of the trade allies and equipment vendors in the procurement, delivery, and installation of equipment for certified organic producers. Global will utilize and build upon its existing relationships with energy-efficient equipment vendors and installers for this Program. It has been Global's experience that there is a wide variety of equipment that can be used to improve energy efficiency in any market segment. We do not propose to pre-specify qualifying equipment. Instead, we will utilize the energy auditing process to ensure that potential participants' projects and equipment produce energy savings for the certified organic producer.

E. Payment of Incentives

Global will be responsible for the CCOF Program's incentive payments. Global will provide incentives for qualifying projects on a first-come, first-serve basis. Our experience on other programs has been that 50/50 cost-sharing for energy-efficiency measures has worked very well. We propose this incentive structure for the COFEE Program as well. Global will not provide incentive payments that exceed a participant's project cost under any circumstances. Additionally, a single program facility or participant shall receive no more than 15 percent of the total funds allocated from the CPUC to the program administrator. Global will be responsible for the certification of the proper installation of any recommended measure before a rebate is issued. We will build upon and enhance the payment process we have utilized quite successfully in the 2002-03 Oil Producers Program for this effort.

F. Staff and Subcontractor Responsibilities

As stated above, Global will be partnering with the CCOF Foundation to achieve success in the COFEE Program. Both organizations will be involved in each of the Program's activities. The CCOF Foundation will have principal responsibility for the Program's Participant Recruitment and Marketing activities (Task 2 in the Work Plan) and will share responsibility with Global in the Program's Participant Qualification and Enrollment activities (Task 3).

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Global Energy Partners will be the Prime Contractor and Program Administrator for the proposed COFEE Program. The CCOF Foundation will be Global's subcontractor.

Mr. Richard Milward will serve as Global's Program Manager interfacing directly with the CPUC and PG&E Program Manager and maintain overall responsibility for the Program and all of its components. Dr. Bruce A Smith will serve as Principal Advisor on the Program for Global. Dr. Charles Sopher will serve as Associate Advisor. Dr. Smith and Dr. Sopher will assist Mr. Milward where their program management, agricultural energy efficiency, and agricultural technology expertise will be beneficial.

Ms. Jessica Hamburger will serve as the CCOF Foundation's Project Manager and have responsibility for the CCOF Foundation's activities on the COFEE program. She will closely interact with Mr. Milward throughout the Program.

Mr. Chainuwat (Joe) Priyjanonda with Global will assist in the necessary research and coordination of information and will be performing the Survey and Qualification of participants. Mr. Priyjanonda will be responsible for managing and coordinating the energy audits as well as the performance and review of the technical and economic analysis. Mr. Priyjanonda will also be responsible for the ongoing program management and quarterly reporting and will supervise the auditors.

Other Global staff who will be active in the Program's marketing and enrollment activities include Ms. Patricia Hurtado, Ms. Ingrid Bran, and Mr. Russ Goold. All three are bi-lingual (English and Spanish) and will be responsible for creating the Spanish marketing materials and providing simultaneous Spanish translation at the Program Outreach Workshops, as needed.

G. Work Plan and Timeline for Program Implementation

Program Work Plan

The Program Work Plan consists of eight distinct tasks.

Task 1: Program Implementation Plan

This task will develop the guidelines and parameters by which this Program will be implemented. To that end, Global and the CCOF Foundation will define the program objectives, develop a detailed Project Work Plan based on this proposal, and conduct a project kickoff meeting. The Program Implementation Plan will incorporate each of the major activities described above in Sections II.A, B, and C., including the Recruitment and Marketing Process, the Qualification and Enrollment Process, the Audit Process, the Training and Outreach Process, the Installation Process, the Certification and Verification Process, and the EM&V Process. The Program Implementation Plan will be revised once, at the end of the first program year, to incorporate knowledge and insights gained during the first year. The project kickoff meeting will be held at a time mutually convenient with all involved parties, upon award of the contract.

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Task 2: Customer Recruitment and Marketing

This task will develop a systematic recruitment and marketing plan to educate, inform, and recruit Northern California certified organic producers of this Program, and their opportunity to participate and benefit. Highlights have been described above in Section II.B.

Global will develop a plan for recruiting customers, collecting data on site characteristics, historical energy use, and customer preferences and maintaining positive relationships with the customers participating in this effort. An existing Customer Relationship Management (CRM) database package will be modified and used to collect, store, and sort the information obtained during the Program.

One of the first areas of focus is recruitment of program participants and defining their eligibility requirements. We have presented our proposed qualification criteria below in Section III.

The recruitment activities will present what types of energy efficiency measures will be offered to customers to induce their participation in the Program. For example, cash flow or simple payback analyses for different types of customers may need to be developed. The recruitment process to be described in the Plan will include developing customer education materials, a customer participation agreement, customer education regarding the Program and their roles and opportunities to save resources through energy and demand saving measures, and CRM database administration.

We have had great success in our current California program with a simple three-step approach for recruitment:

- Initial phone contact to develop relationship and determine interest,
- E-mail follow-up with educational packet explaining the details of the Program and the benefits to the participants, and
- Phone follow-up to set up a phone survey with the appropriate contact person.

Global and the CCOF Foundation will use a variety of marketing methods to identify potential Program participants. As described above, these methods include direct mail, meetings, e-mail campaigns, and promotions through partner/affiliate marketing. The collateral material will make full use of industry associations and conferences as well as the Internet to increase awareness and participation, and explain the energy benefits of COFEE Program participation.

Task 3: Customer Qualification and Enrollment

Global will recruit qualified customers based on the above-described plan to enroll them in the Program. Information to be collected will include on-site characteristics, historical energy use, and customer preferences.

We will develop bilingual enrollment procedures that serve two purposes: to interest qualified customers in participating in the Program, and to make their enrollment as straightforward as possible. Enrolled customers will be tracked in the Program CRM, so that Program information

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is provided to the customer in a timely manner, and so we receive all required information about their status and participation activities on schedule.

Task 4: Technical and Economic Evaluation of Potential Participants and On-Site Audits

Global has designed a process to evaluate potential participants. This method includes the following steps: determine customer eligibility, conduct initial phone survey, and qualify and prioritize the opportunities. Once an eligible customer qualifies for the Program, the site visit for the energy audit is scheduled. The steps are outlined in below.

Determine Customer Eligibility. The producer must be (1) a customer of PG&E who has paid Public Goods Charge (PGC) funds through his/her utility bill, who (2) operates a certified organic farm or production facility, and (3) is located in a rural area. These eligibility criteria will be reviewed as part of finalizing the Program Implementation Plan. Once finalized, the criteria will be used in the initial phone survey.

Conduct Initial Phone Survey. The initial survey to qualify a customer will be performed over the telephone. The purpose of the survey is to determine whether the customer has adequate technical and financial opportunities for energy savings to meet the Program criteria. The initial survey will achieve the following objectives:

- Determine the customer's preferred language.
- Collect operational data to pre-qualify participant for an energy audit.
- Gather historical energy use data. Obtain up to 12 months of the customer's electric bills or get written permission and account number from the customer to obtain information directly from PG&E.
- Determine if the participant is willing to share the cost of purchasing and installing energy efficiency measures.
- Determine what the technical and financial considerations of the producer are, what retrofits or modifications they will consider, and what financial hurdles they have to meet, such as simple payback or cash flow analysis.
- Determine if the customer is willing to sign a document stating they are not participating in similar programs to obtain rebates or financing for the installation, as well as a Letter of Understanding once the preliminary opportunities have been identified.
- Determine if the customer has previously participated in other utility or non-utility energy efficiency programs, and if he/she has, which programs.
- Obtain baseline information on the producer's energy-using equipment for the last two years (e.g., motors, fans, pumps, exterior and interior lighting, processing equipment, refrigeration, HVAC).

Qualify and Prioritize Opportunities. Once a customer has been surveyed, the results of the survey will be reviewed and the opportunities qualified and prioritized. The telephone survey data is entered into the Program CRM and analyzed to determine his or her qualification for the Program. Once the opportunity has been qualified and prioritized, the next step is to schedule an

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on-site energy audit once the customer's Letter of Understanding is signed and delivered to Global.

The results of the audit will determine the initial potential savings of the customer's facilities and operations. A portion of this initial data will also provide the basis for the baseline energy consumption and demand conditions for the subsequent Program EM&V activities.

After the on-site audit data are entered into the Program CRM, the customer's opportunities are prioritized for further evaluation and the results are reported to the customer. The brief customer report will include a Letter of Understanding for the customer's signature to ensure their commitment to move forward in the Program once the opportunities are identified and meet the established technical and financial considerations of the owner.

Global will include a requirement to minimize potential double-dipping by program participants into more than one ratepayer- or taxpayer-funded public purpose program. The risk of such abuse can be minimized through careful participant tracking and coordination among programs. Customers accepting financial incentives through any program approved by the CPUC will be required to acknowledge the source of funds by signing a statement declaring that they have received no funds for the same activity from another program or source.

Global has designed a delivery mechanism to perform energy audits, which includes technical and economic analysis of the qualified participants' opportunities in such a manner to reach as many producer operations and identify feasible solutions. The energy audits for certified organic producers will focus on the assessment eligible energy efficiency measures, including motors, fans, pumps, exterior and interior lighting, processing equipment, refrigeration, and HVAC equipment, specifically identifying those running below available high-efficiencies.

For the COFEE Program, we will adopt a "systems approach" improving the qualified producers' processes, within the scope of these non-utility programs. This type of on-site assessment can capture greater savings than is possible by simply replacing individual components with more efficient alternatives. A systems approach, which can include better matching of components (e.g., motors, blowers, fans, compressors, pumps, drives), appropriate application of variable speed drives, and appropriate matching of operational regimens and system performance to loads, help provide a greater degree of savings.

The interpretation of data collected during the audit will begin with energy utilization analysis of historical electrical consumption and demand information and then focus on evaluation of eligible measures under the Program.

Once the technical analysis has been completed, an economic analysis will be performed. Global will perform the economic analyses including cash flows and simple paybacks. Global will also provide a summary of financing alternatives for the specified solutions. The goal of this activity will be to educate the producers on alternate ways to continue investing in financially and technically sound energy-efficiency measures, even after the Program's completion.

Global and the CCOF Foundation will provide a plan of action in the form of a brief report to the prospective participant that will outline the steps the participants need to take in order to install the measures identified at their site with the specific program procedures for installation, and

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potential financing options. The following items could be included in the report for the customer:

- Measures' descriptions
- Estimated project installation cost
- Equipment specifications and available vendors
- Estimated energy savings resulting from project
- Cost-effectiveness analysis
- Cash flow/payback
- Guidelines for available financing
- Steps needed to be taken to implement project and obtain rebate, which includes recommended vendors and contractors

The report will be reviewed first to insure the suggested solutions meet the technical and financial criteria of the Program. Global will then contact the customer with the report results and will discuss implementation, funding, and schedule.

Task 5: Outreach and Education of Prospects and Participants

Global and the CCOF Foundation will also provide training and outreach to participants to promote ongoing interest in the Program and help insure the sustainability of the program and its savings. Training and outreach can play a large role in determining the long-term effectiveness of the energy conservation program for the producers. The following highlights Global's and the CCOF Foundation's strategy for an innovative training and outreach program. We will work with certified organic producers to create this outreach approach.

Global and the CCOF Foundation will work to overcome barriers that are preventing widespread adoption of these practices. Global and the CCOF Foundation will provide "in the field training" by working alongside participating producers to provide training on the use of the installed energy-efficient equipment. We will also educate operators in the basics of energy efficiency in the agricultural field through the distribution of a "Best Practices" publication. A listing of "Best Practices" will be gathered from available sources, including EPRI, USDA, CEC, DOE, and other organizations.

The Global Team will also conduct a Program Outreach Workshop for training and outreach purposes. One additional program workshop will be conducted each year at a geographically separate location as part of CCOF's on-going member outreach services. The Program will be announced and discussed at CCOF's Annual Member Meeting, usually held in the springtime. Finally, the Program will be presented at CCOF's periodic Chapter Meetings. The Program Outreach Workshop will be digitally recorded and distributed via DVD and Global's Website, so the Workshop experience can be easily received by a wide audience of potential users. The workshops will focus on outreach, sharing the Program's focus, progress, and getting participants involved. The workshops will also focus on Program results to provide nonparticipating producers with Program information to increase their comfort with energy-

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efficient technologies and encourage them to invest in energy efficient systems. The workshops will be one-half day in duration. Invitations will be sent to certified organic producers in the PG&E service area. To include as many certified organic producers as possible, Spanish materials and simultaneous Spanish translation will be available at each workshop. Should there be sufficient demand, one of the above-discussed workshops would be conducted in Spanish.

Task 6: Commissioning and Certification of Equipment Installations

Global will be responsible for the commissioning and certification of the proper installation of any recommended measures before rebates are issued to the individual participants. Rebates will be issued based on verification of savings for the successful installations. The commissioning of the installations will be performed by contractors qualified by Global.

The COFEE Program incentives and rebates will be available on a first-come, first-serve basis to qualified participants with 50/50 cost sharing for energy efficiency measures installed. Global's experience has been that this cost sharing split is high enough to motivate customers, but requires customers to provide "real" investment to make the measure "theirs." No incentive payment will exceed a participant's project cost under any circumstance. We propose that the project installation cost must be approved by Global before the work can begin to ensure the estimated project costs and actual costs are within a reasonable range. We will be responsible for the certification of the proper installation of any recommended measure before a rebate is issued. The rebate will be issued based on verification of actual savings and Global's receipt of invoice funds from the PG&E contract manager.

Task 7: Coordinate with Evaluation, Measurement and Verification (EM&V) Contractor

As part of the requirements of the COFEE Program, we will develop monitoring and verification procedures to properly track the activities of the customers because of their participation in the Program. We have described above how we will collect certain information and data to facilitate the Program's EM&V activities. Through the Programs' activities, we will coordinate our efforts with the selected independent EM&V contractor. We present in Section VI below our suggested ideas for conducting the EM&V activities.

The process of measurement and verification (M&V) of the Program results begins during the prospects' initial survey process. Our proposed M&V procedures include the following:

- Audits of existing operating conditions before any change of operation or installation of any equipment is performed,
- Baseline energy use of the equipment from existing sources, and
- Verification of the installation of the energy-efficient equipment.

The following is a summary of information collected for each energy efficiency measure installed at all COFEE Program participants. This information will be in the Program CRM and will be available to the EM&V contractor.

- Measure description
- Physical location of measure

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- Utility account number(s) of the participant
- Date of equipment installation, commissioning, and certification
- Annual baseline (pre-installation) energy usage (kWh and Therms) of affected system from existing sources
- Annual estimated post-installation energy usage (kWh and Therms) of affected system from existing sources
- Summer season estimated baseline coincident peak (kW) demand of equipment system from existing sources
- Summer season estimated post-installation baseline coincident peak (kW) demand of equipment system from existing sources
- Incremental cost of the installed measure
- Useful life of the installed measure

Task 8: Quarterly and Final Reports and Project Management

The success of the COFEE Program depends on both the Program Implementation Plan and its implementation. We believe Global and the CCOF Foundation will need to be flexible, efficient, and effective in executing the Program Implementation Plan and addressing unexpected issues as they arise. We believe our collective knowledge, experience, and expertise in project and program management can assure the CPUC that the COFEE Program will be successful. This task will encompass all strategic, budgetary, program administration, and reporting elements of this program.

The Global Program Manager will perform many important duties, three of which include:

- (1) Develop and update quarterly a project plan showing all tasks, team members' roles and deliverables, budget requirements, and timelines.
- (2) Institute quality control procedures and frequently check progress with respect to deliverable schedule and quality.
- (3) Be the key interface with the CPUC and the PG&E program manager, and provide updates regarding progress.

Budget management will be handled by the Global Program Manager to ensure the effective and efficient expenditure of funds, and that such expenditures are in line with technical progress and within the limits set in the project plan. Program administration functions like day-to-day coordination of project team member activities, exception handling, contracting, personnel matters, and invoicing will be handled by the Program Manager. The project plan is a road map that will be used to guide Global and the CCOF Foundation through the necessary steps. As with every project, we expect the plan will be modified as the project proceeds to address any requirements that are not clearly identified (or known) at the start of the project. Still, the methods for making such changes and for reporting the status of the project should be clear, as well as the mechanisms for approving any changes to the plan. Progress monitoring of the project is done through status reports and weekly team meetings and discussions. This approach

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facilitates the resolution of issues and ensures that implementation efforts are conforming to the plans outlined in the planning documents.

Global's management goal is to achieve all target dates in the timeline and in the requirements of the Program implementation. If the Program is delayed unexpectedly, the PG&E contract manager will be consulted to evaluate the priorities in order to move the project forward in a positive manner.

Program Timeline

We are proposing to conduct the COFEE Program over a two-year period beginning on January 1, 2004 and concluding December 31, 2005. Global Energy Partners is experienced and successful in managing projects on schedule and within budget requirements.

The following schedule of deliverables is proposed, based on a contract signature date no later than December 15, 2003:

- Deliverable 1—Refined Program Implementation PlanJanuary 31, 2004
- Deliverable 2—Customer Recruitment PlanFebruary 13, 2004
- Deliverable 3—Quarterly Status Reports (11 total).....Starting April 15, 2004
- Deliverable 4—Program Draft Report.....November 21, 2005
- Deliverable 5—Program Final ReportDecember 19, 2005

The following proposed task schedule is based on a contract signature date no later than December 15, 2003.

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| Task | Schedule |
|--|--|
| Task 1: Program Implementation Plan | Jan 1 – Jan 31, 2004 & Jan 1 – Jan 31, 2005 |
| Task 2: Customer Recruitment and Marketing | Jan 1 – Apr 1, 2004 & Jan 1 – Apr 1, 2005 |
| Task 3: Customer Qualification and Enrollment | Mar 15 – May 1, 2004 & Mar 15 – May 1, 2005 |
| Task 4: Technical and Economic Evaluation of Potential Participants and On-Site Audits | Apr 15 – Jul 15, 2004 & Apr 15 – Jul 15, 2005 |
| Task 5: Outreach and Education of Prospects and Participants | May 1 – Nov 1, 2004 & May 1 – Nov 30, 2005 |
| Task 6: Commissioning and Certification of Equipment Installations | Jun 1 – Dec 18, 2004 & Jun 1 – Nov 30, 2005 |
| Task 7: Coordinate with Evaluation, Measurement and Verification (EM&V) Contractor | Apr 1 – Dec 18, 2004 & Apr 1 – Dec 19, 2005 |
| Task 8: Quarterly and Final Reports and Project Management | Jan 1 2004 – Dec 31, 2005 |

III. Customer Description

A. Customer Description

The customers targeted for the COFEE Program will be hard-to-reach, rural agricultural customers operating in the PG&E service territory who are certified organic producers. Hard-to-reach in this context means customers who:

- Reside in rural areas of PG&E's service territory;
- May speak only Spanish,
- Lack information about the benefits and value of high-efficiency measures;
- Lack sufficient financial resources to fully pay for appropriate energy efficiency measures; and
- Because of their location or size, may be underserved by existing energy efficiency programs.¹

¹ Based on PG&E's Web site and conversations with PG&E staff, agricultural customers of PG&E can participate in the Express Efficiency Program, the Standard Performance Contract (SPC) Program, and the Nonresidential New Construction "Savings by Design" Program. These 2003 programs are open to nonresidential customers. As such, most of the participants in these programs are not agricultural customers. PG&E's (as well as SCE's and SDGE's) irrigation pumping program has been taken over by Fresno State University. At this time, PG&E operates no energy efficiency programs exclusively for agricultural customers.

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Several market barriers will be addressed and overcome due to this Program's focus on such rural, certified organic customers. Based on preliminary discussions with potential participants, these customers appear to lack consumer information about the benefits of adopting energy efficient measures. Through the Program's recruitment and marketing activities, we fully expect to provide useful information about these benefits to the target customers. (See Section II for a description of these activities.) Through the Program's incentive payments, qualified customers who lack financing for high-efficiency measures will be provided up to fifty (50) percent of the cost of the measure(s). In addition, a growing number of certified organic farmers' preferred language is Spanish and, therefore, will respond better to materials printed in Spanish and Program representatives who speak Spanish.

B. Customer Eligibility

Customers eligible to participate in the COFEE Program will have the following characteristics:

- Certified organic producer, according to United States Department of Agriculture guidelines.
- A customer of PG&E located in a rural area that has paid PGC funds through their utility bills to the State of California.

C. Customer Complaint Resolution

All COFEE Program participants (customers) will have access to the Global Program Manager's phone number, email address, and fax number to contact Global with any questions or complaints. Ms. Ingrid Bran, Senior Associate at Global, will be available to answer questions and resolve complaints from Spanish-speaking customers. Ms. Bran is fluent in Spanish and has long experience in simultaneous translation in the U.S. and in Central and South America. Global will do its best to resolve any disputes as they arise. If there is a situation that Global is having difficulty resolving, we will contact our assigned PG&E contract manager to discuss alternatives.

D. Geographic Area

The COFEE Program will target qualified customers in PG&E's geographic service territory in Northern California.

IV. Measure and Activity Descriptions

A. Energy Savings Assumptions

Global's experience with other state's agricultural programs has provided actual cost and demand and energy savings data to be utilized as our energy savings assumptions. Table 1 provides a summary of the calculations of estimated energy savings and demand reductions for the initial list of targeted retrofits. The list in Table 1 is not final, as we will review additional

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energy efficiency measures for economic and technical feasibility as the opportunity and/or need arises.

Table 1: Estimated Energy Savings for Targeted Retrofits

| Measure | Gross Incremental Measure Cost | Gross Annual Energy Savings per Unit | Gross Coincident Peak Demand Reduction (kW) | Estimated Number of Units Installed |
|--|---------------------------------------|---|--|--|
| CFL Retrofits | \$20 | 289 kWh | 0.09 | 964 |
| T-8 Retrofits | \$114 | 55 kWh | 0.03 | 1,380 |
| High-Pressure Sodium Lamp Retrofits | \$165 | 680 kWh | 0.2 | 275 |
| High-Efficiency Ventilation Fans | \$450 | 5,040 kWh | 0.3 | 81 |
| High-Efficiency Commercial Refrigerators | \$2,700 | 2,555 kWh | 0.65 | 28 |
| Variable Speed Drives | \$3,600 | 2,725 kWh | – | 94 |
| High-Efficiency Motors | \$650 | 416 kWh | 0.1 | 246 |
| High-Efficiency Pumps | \$200 | 720 | 0.9 | 206 |
| Food Processing | \$24,000 | 120,000 kWh 12,000 Therms | 32 | 26 |

B. Deviations in Standard Cost-Effectiveness Values

Net to Gross Ratio

Global is using a net to gross ratio of 0.75 for the energy efficiency measures as indicated in the *Energy Efficiency Policy Manual* for Agricultural and Dairy Incentives. The exception is a net-to-gross ratio of 0.83 used in the bundled food processing measures.

Effective Useful Life

The EUL is 15 years for high efficiency motors, variable frequency drives, and system controls. For this proposed program, Global is using a EUL of 15 years to maintain a conservative estimate. The exception is the CFL retrofit measure, where an effective useful life of 16 years was used.

Incremental Measure Cost

The measures implemented at each facility will vary on a case-by-case basis. Global’s experience is that producers usually bundle projects together that may include the replacement of

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equipment and measures that may be eligible for an incentive. In order to be conservative Global is using the full estimated cost of the measure for the incremental measure cost.

C. Rebate Amounts

As described previously, participants will be provided on a first-come, first-serve basis to qualified participants with a maximum of one-half the cost of the energy efficiency measure. Global's experience has been that this cost sharing split is high enough to motivate customers, but requires customers to provide "real" investment to make the measure "theirs." No incentive payment will exceed a participant's project cost under any circumstance.

D. Activities Descriptions

The proposed Program Implementation Plan includes activities that are not directly expected to produce measurable energy savings. The activities include customer recruitment, energy audits, customer outreach and training, installation certification, and EM&V activities. While these activities do not directly result in energy savings, the proposed program will not achieve the proposed goals without these activities. Our goals are based on reaching 5 percent of the certified organic farmers in the PG&E territory. These numbers were provided from CCOF based on members in PG&E counties.

V. Goals

Goals for the 2004-05 COFEE Program are summarized in Table 2, below.

Table 2: Estimated Energy Savings for Targeted Customers

| Goals | 2004 – 2005 |
|--|--------------------|
| Certified Organic Farmers in Northern California | 937 |
| Workshops | 2 |
| Survey/Qualification | 140 |
| Energy Audits | 73 |
| Certify Installations | 73 |
| Demand Savings (kW) | 1,017 |
| Electric Energy Savings (kWh) | 3,7335,662 |
| Gas Energy Savings (Therms) | 258,960 |

The numbers used to determine the performance goals are estimated based on Global's engineering and actual field experience. The number of facilities affected and the savings per facility will vary depending on the exact retrofit implemented. We estimate only a portion will make it to the survey/qualification phase and fewer of those facilities will participate in the

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audits and implementation. Global has used conservative numbers for the purpose of the determining the performance goals and the evaluation of the Program cost effectiveness.

VI. Program Evaluation, Measurement, and Verification (EM&V)

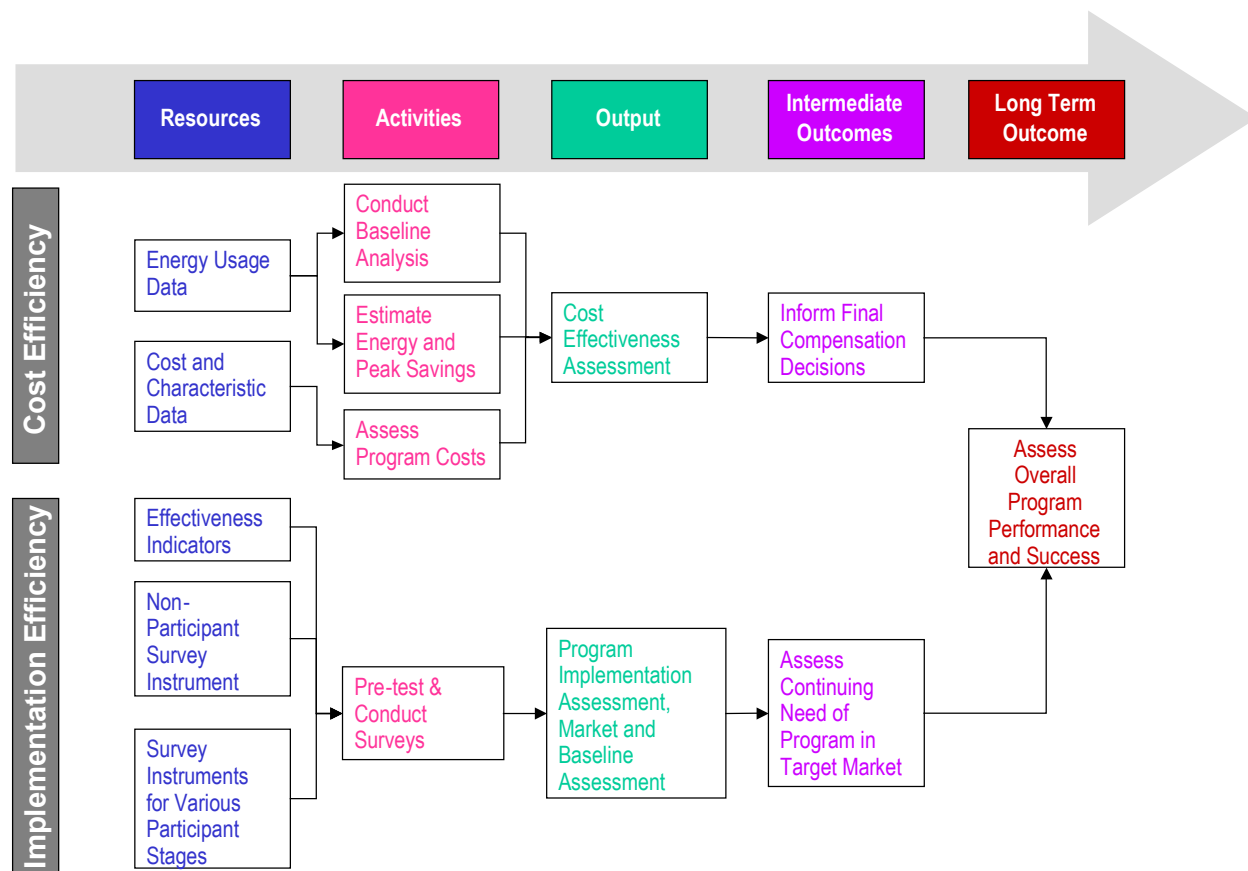
This Program's evaluation, measurement and verification (EM&V) activities will be undertaken by an independent contractor that has demonstrated experience in performing objective, defensible evaluation of energy efficiency programs in California. The Final EM&V Plan for this Program will be developed by the selected contractor, and will be based on the CPUC's *Energy Efficiency Policy Manual*, Version 2 and consistent with the guidelines in the International Performance Measurement and Verification Protocol. We provide below a summary of our suggested approach for evaluating the COFEE Program.

A. Suggested EM&V Approach

The COFEE Program will be a prescriptive hardware/incentive program targeting hard-to-reach rural, agricultural customers who are certified organic Farmers.

The primary goal of this EM&V effort is to provide an objective assessment of the level of performance and success of the certified organic Farmer Energy Efficiency Program. Performance will be achieved through two activity areas: cost efficiency and implementation efficiency. Global's proposed methodology is based on satisfying the EM&V requirements specified by the CPUC. Figure 1, shown below, describes the relationships among program evaluation elements and shows how the various pieces – resources, activities, output, intermediate outcomes, and long-term outcomes – fit together. The actual scope of the selected EM&V contractor's activities will also depend on the available schedule and budget for the COFEE Program EM&V activities. Figure 1 includes the requirements outlined in Section 6 of the CPUC's *Energy Efficiency Policy Manual*, Version 2.

Figure 1: COFEE Program EM&V Approach



For the cost effectiveness analysis, the EM&V contractor should conduct tasks such as the following:

- *Evaluate Methodology of Calculating Energy Savings.* Conduct an initial review, or audit, of Global’s energy savings estimation methodology.
- *Provide Interim Energy Savings Estimates for Participants.* Once a critical mass of participant’s data have been collected, the EM&V contractor will review Global’s energy savings calculations, according to Option B of the International Performance Measurement and Verification Protocol (IPMVP) Manual. Global anticipates that data from five to ten participants will be a sufficient to conduct this review.
- *Conduct Cost-Effectiveness Analysis.* At the end of the Program, the EM&V contractor will determine the Program’s cost effectiveness using the relevant tests articulated in the *California Standard Practices Manual (SPM): Economic Analysis of Demand-Side Management Programs*.
- *Provide Regular Progress Reports.* On a monthly and quarterly basis, coordinated with Global’s reporting schedule, the EM&V contractor will provide memos documenting our progress and findings to date. The EM&V contractor will report overall findings in a final report delivered at the end of the evaluation.

To complete these tasks, the EM&V contractor should use the following resources:

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- Energy Usage Data. Energy usage data will be provided by Global and will include pre- and post-implementation operating conditions, energy, and demand characteristics (depending on the measure implemented) for each participant.
- Participant Characteristic Data. Participant characteristic data will be provided by Global and will include:
 - Verification, description, and location of installed energy-saving equipment,
 - Characteristics of existing equipment removed from the participant's site as part of the Program, and
 - Any impact on productive capabilities (if available).
- Cost Data. Global will provide the following cost data:
 - Costs associated with measures,
 - Program administration costs, and
 - Costs paid by the certified organic farmer.
- Utility Avoided Cost Data. To conduct the cost-effectiveness analysis, the EM&V contractor will obtain avoided costs for PG&E. If this information is not readily available, the EM&V contractor can use general avoided costs from the workbook.
- Load Data. As available from other, existing public sources including California utilities and the CPUC, the EM&V contractor will determine the load impacts of the energy efficiency measures installed. If load data are not available from such sources, load impacts can be estimated from data provided by equipment manufacturers and other reasonable methodologies including utilization of appropriate coincidence factors of the measures. We do not expect on-site load data monitoring to be performed, given the nature of the measures to be implemented.

To complete the evaluation of energy savings calculations and interim energy savings estimate tasks, the EM&V contractor will conduct the following activities:

- Conduct Baseline Analysis. A market baseline will be created for all COFEE Program participants, using the pre-implementation operating conditions, demand, and energy usage for each measure type. Global will assist in providing some of these data.
- Evaluate Savings Calculation Methodology. One of the primary goals of this evaluation is to assess the energy and demand impacts of the Program. The EM&V contractor will review Global's calculation methodologies and relevant data. The EM&V contractor will also review the appropriateness of the methodologies. This review can be commenced prior to the estimation of the first set of participants' savings, if feasible.
- Estimate Level of Energy and Peak Demand Savings Achieved. Based on the data provided by Global, the EM&V contractor will estimate the energy savings and peak demand impact of the Program in accordance with CPUC mandates. Utilizing the baseline and post-installation data collected, the EM&V contractor will estimate the energy savings achieved by the installation of energy-efficiency measures. Depending on

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the degree of data manipulation, it may be necessary for the EM&V contractor to use a sampling approach to determine energy impacts.

For the implementation efficiency analysis, the EM&V contractor will conduct tasks such as the following:

- Design Surveys. The EM&V contractor will design surveys for participants and non-participants.
- Conduct First Surveys. During the fourth quarter of 2004 (assuming a January 2004 start date of the Program), the EM&V contractor will survey an agreed-upon number of participants. Given the hard-to-reach nature of these rural customers, the EM&V contractor may interview several key industry stakeholders such as vendors and market actors as well.
- Memorandum of Findings. After conducting the first surveys, the EM&V contractor will write a memorandum on the preliminary findings. This memo will contain preliminary recommendations for implementation improvements by Global.
- Conduct Remaining Surveys. During the third quarter of 2005, the EM&V contractor will survey remaining participants and, if useful, other market actors.
- Memorandum of Findings. After conducting the remaining surveys in 2005, the EM&V contractor will write a memorandum on the preliminary findings. This memo will contain findings regarding the Program implementation by Global.
- Report on Findings. On a quarterly basis, coordinated with Global's reporting schedule, the EM&V contractor will provide memoranda documenting the implementation efficiency progress and findings to date. The EM&V contractor will report overall findings in a final report delivered at the end of the Program's EM&V activities and coincident with the submission of Global's and the CCOF Foundation's Final Report.

To complete these tasks, the EM&V contractor will develop the following tools:

- Effectiveness Indicators. Before designing survey instruments, the EM&V contractor will create indicators of effectiveness that can be utilized in both participant and non-participant surveys, including satisfaction with marketing materials, recruiting process, and rebate levels. Specifically, the EM&V contractor will design the surveys so that they indicate whether the target market will participate in the Program in the future and which incentives were the primary motivators for participation.
- Non-Participant Survey Instrument. The EM&V contractor will work with Global to design a survey instrument for certified organic farmers who were informed about the Program, but who either have not yet chosen to participate or have decided to not participate. The EM&V contractor will obtain from Global a list of organizations that were targeted in the customer recruitment process. The survey instrument can include topics such as:
 - How the farmer heard about the Program
 - What were the more and less effective areas of the recruiting process

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- How the farmer assessed the initial and final workshops (if attended)
- Which Program features interested the farmer
- Whether the farmer has chosen to not participate or is still undecided and why
- What level and type of incentive would have led the farmer to participate or would be likely to lead the farmer to future participation
- What energy efficiency measures the farmer has implemented since hearing about the Program and, if any, whether the decision to do so was influenced by the Program
- What equipment did the farmer have prior to hearing about the Program
- Whether the farmer has any suggestions for future Program improvement
- Participant Survey Instrument. The EM&V contractor will design and implement a survey instrument to measure Program participants' satisfaction with both the process and the installed energy-efficiency measures. Questions to be asked should include:
 - How the participant heard about the Program
 - What were the more and less effective areas of the recruiting process
 - How the participant assessed the initial and final workshops (if attended)
 - Which Program features interested the participant
 - What ultimately made the participant decide to participate
 - Whether the participant has implemented any other energy efficiency measures since hearing about the Program
 - What energy efficiency measures did the participant have before installing the equipment
 - How satisfied the participant is with the installed equipment
 - Whether the participant has any suggestions for future Program improvement
- As part of the participant surveys, and to verify installations, the EM&V contractor will ask what measures were installed under the Program and confirm that those stated are the same ones in the documentation provided by Global.

To complete these tasks, the EM&V contractor will conduct a series of surveys. Survey contacts will be selected from participants lists provided by Global and other industry sources. The EM&V contractor can select a random sample of non-participants for these interviews. The EM&V contractor can conduct phone surveys whenever possible, but email submission will be accepted if that is the participant's preference. The number of surveys conducted by the EM&V contractor will be consistent with the California and International Performance Measurement and Verification Protocols.

B. Suggested EM&V Contractors

We suggest the CPUC consider the following four (4) firms for performing the EM&V activities on the COFEE Program. We believe these firms can objectively evaluate the COFEE Program's success.

Equipoise Consulting, Inc. Oakland, CA.

(Equipoise Consulting provided the following information regarding their EM&V qualifications.)

The Equipoise Team proposed for this evaluation is made up of the most knowledgeable people in the State on the evaluation of energy efficiency in the agricultural sector. Equipoise Consulting leads the Equipoise Team, which consists of itself, Ridge & Associates, and California AgQuest Consulting. Ridge & Associates is very experienced in program theory and energy evaluations of all kinds, and has teamed with Equipoise on four prior California agriculture sector evaluations. California AgQuest Consulting is a premier agricultural consulting firm that has a thorough understanding of all facets of the agricultural market and has worked with Equipoise staff on agriculture sector evaluations since 1994. Together, Equipoise and California AgQuest have conducted five program years of impact evaluations, a market needs assessment, and a market effects study, two retention studies, and one process evaluation. Taken together, the Equipoise Team has the knowledge and expertise to provide the best possible evaluation of the COFEE Program.

The following studies are examples of agriculture sector evaluations the Equipoise Team has conducted that are relevant to the COFEE Program.

California Irrigation Technology Agricultural Pumping Efficiency Program Evaluation.

Equipoise Consulting is performing a process and impact evaluation of the Agricultural Pumping Efficiency Program, a third party program. This ongoing evaluation will measure and verify the measures installed under the Program, measure the impact of the information portion of the Program, and provide an overall assessment of the Program implementation activities.

Evaluation of the Pre-1998 Agricultural Programs for Pacific Gas & Electric. Equipoise Consulting conducted the impact evaluation of PG&E's Pre-1998 Agricultural Energy Efficiency Incentive Programs. The programs included the prescriptive agricultural Retrofit Express Program and Advanced Performance Options measures. The evaluation focused on conducting post installation pump tests to establish actual changes in efficiency due to pump repairs. This information was then leveraged to the population based on pump horsepower. The evaluation also assessed impacts for oversized condensers within crop packaging plants and micro-irrigation conversions.

Market Effects Study of 1997 Agricultural Energy Efficiency Incentives Program Pumping End-Use for PG&E. Equipoise Consulting conducted a market effects study to assess the affect of PG&E's Energy Efficiency Incentives (EEI) program on reducing the market barriers in the pumping end-use. The study, which evolved from the CADMAC waiver process, surveyed customers exposed and unexposed to PG&E programs. It used discrete choice modeling to assess the market effects. It was restricted to the PG&E service territory due to scope,

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accessibility, and time restrictions. As such, it complemented other studies being conducted in the California agricultural sector.

Evaluation of 1996 Agricultural Programs for Pacific Gas & Electric. Equipoise Consulting conducted an integrated impact evaluation of PG&E's 1996 Agricultural Programs. Programs included the Energy Efficiency Incentive (EEI) programs and Energy Management Services (EMS) programs. The EEI programs included the prescriptive agricultural Retrofit Express Program, measures from the 1994 Customized Incentive Program (custom measures), and measures from the Advanced Performance Options program.

Quantum Consulting, Inc. Berkeley, CA.

[Quantum Consulting provided the following information regarding their EM&V qualifications.]

Quantum Consulting (QC) has provided evaluation, monitoring and verification, and market assessment consulting services to the energy industry since 1985, primarily to electric and gas utilities and related public and private sector institutions. QC is one of the leading statewide evaluation contractors, being involved in numerous 2002 California statewide program evaluations, including the Express Efficiency, Standard Performance Contract, Nonresidential Audits, Single-Family Rebates, Residential Lighting, and Residential Audits programs, in addition to conducting the current Best Practices Study. QC is also experienced in conducting EM&V studies for non-utility local programs under the guidelines of the CPUC's current *Energy Policy Manual*.

Perhaps QC's most relevant project work for the COFEE Program EM&V has been its evaluation of PG&E's 1994 and 1995 Agricultural Programs. For these studies, QC assisted PG&E in an integrated impact and process evaluation of its prescriptive agricultural Retrofit Express, Retrofit Efficiency Options, and Customized Incentives Programs. The evaluations covered a comprehensive list of agricultural measures including pump retrofits, low-pressure sprinkler nozzles, and agricultural lighting, among others. QC also has significant experience in conducting other CADMAC protocol-compliant impact evaluations, including PG&E's 1994-1998 Commercial and 1994 Industrial Energy Efficiency Incentives programs, covering various lighting, HVAC, refrigeration, and process measures.

Finally, QC is currently involved in the evaluation of CPUC third-party programs including the Food Service and Technology Center, the Independent Grocer program and the Residential Duct Services program.

Two other suggested EM&V contractors are:

Quantec Consulting. Portland, OR.

Quantec is currently the approved EM&V subcontractor for Global's current CPUC non-utility program involved with small on-shore oil producers.

Nexant, Inc. San Francisco, CA.

Nexant provided EM&V services to the CEC Peak Load Reduction Program. Nexant also performed EM&V work on many of the CEC program elements funded under AB970, SB5X, and AB29X.

VII. Qualifications

A. Primary Implementer

The primary implementer for the COFEE Program is Global Energy Partners, LLC.

Company History

Global Energy Partners combines the forces of two of the nation's leading energy organizations—the Electric Power Research Institute (EPRI) and DMJM H+N. Known throughout the world as cutting-edge science and technology consortia, EPRI has partnered with DMJM H+N to play a major role in the energy industry. In addition, Global recently acquired NEOS Corporation, a California-based consulting firm with over 17 years' experience and a recognized leader in the development and application of energy-related strategies and technologies.

EPRI brings world-class expertise in energy efficiency technology research and development, utility system operations, technology applications analysis, cost benefit/economic analyses, and market transformation studies. DMJM H+N, one of the world's premier engineering management and construction companies, adds critical expertise in managing major public and private energy-related programs. Global provides in-depth project management, program design, development, administration, and performance assessment experience. Combining these exceptional capabilities with experience related to large energy-efficiency projects and in the commercialization of energy technology, results in an integrated team of unparalleled capabilities.

Global is headquartered in Lafayette California, with affiliate offices nationwide.

Qualifications

Over the past 17 years, the Global Team has attained an international reputation for its work in the energy efficiency, renewable energy and distributed generation fields. Global employs professionals trained in engineering, economics, planning, environmental science, computer science, business administration, marketing, and the physical and social sciences.

A thorough understanding of both public and private sector operations enables Global to focus on workable solutions and implementation. This means not merely studying a client's problems, but offering innovative and technically sound solutions, and assistance in implementing those solutions. Global brings a fresh approach to the restructured energy industry – an approach that focuses on overcoming market barriers and making efficient technology attractive to energy users.

Global has extensive expertise in the following areas:

- Managing and Administrating Programs
- Developing strategic and tactical marketing and management plans
- Transforming the energy marketplace

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- Performing quality engineering and economic analyses
- Solving large energy consumers’ challenges
- Minimizing environmental impacts of energy use
- Supporting energy education and training
- Providing technical regulatory assistance

Global has a proven, long-term record of successful management, implementation and administration of large energy related programs. Table 3 includes brief synopses of Global’s most relevant projects for this proposal.

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|--|--|--|
| Program Management and Implementation | California Public Utilities Commission/ Energy Efficiency Program for Oil Producers in Southern California/ (2002 - present) | <p>Global was selected by the CPUC to manage a rebate program targeted toward small to medium size onshore producers who are willing to optimize their pumping equipment and reduce electric consumption. The incentive program covers up to half of the investment required to make corrective actions. Global’s team of field specialists is helping interested producers reduce their electricity consumption and lower their operation expenses. Global is estimating that at least 100 wells may qualify for this rebate program. The program is targeting energy efficiency measures including:</p> <ul style="list-style-type: none"> • Well pumping optimization through pump-off controllers • Load balancing on rod pumps • Proper sizing of water injection pumps • Variable frequency prime movers <p>Global’s program is designed to achieve a minimum of 1.76 MW in electric peak demand savings through the implementation of these energy efficiency measures.</p> |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|--|---|--|
| Demand Response Program and Evaluation Assessment | California Energy Commission/ Peak Load Reduction Program/ (2001 - 2002) | Global implemented and evaluated a program throughout the state of California that delivered demand curtailments in response to curtailment calls initiated by the state’s electrical grid authority. Global developed the program around its Power-pact brand name and associated website www.power-pact.com . The program addressed strategies that reduce power demand attributable to air conditioners, lights, motors, and other electrical loads from commercial, manufacturing and state/local government facilities. Measurement and verification of savings was accomplished through the assessment of online utility meter data, and engineering simulation models were run to validate the demand-response impacts. An automated notification platform was developed using web-based applications and telecommunication devices that activated both voluntary and automatic curtailments during peak demand periods. Global’s system also provided pricing signals to customers in support of the State’s pilot real-time pricing program. The program was funded through a grant from the California Energy Commission per Assembly Bill 970 and Senate Bill 5X. |
| Project Administration and Operation | San Diego Regional Energy Office (SDREO)/ Demand Reduction Program/ (2002 - 2003) | Under subcontract, Global supported the implementation of SDREO’s 2002 Energy Management Program for the California Energy Commission. In support of SDREO’s 8 MW demand reduction goal, Global’s responsibilities included marketing and customer recruitment, engineering analysis, IT infrastructure development, customer hardware and software, equipment design and installation, customer training, testing and verification, and ongoing support. |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|---|--|---|
| Project Administration and Operation | California Independent System Operator (ISO)/ Demand Reduction Initiative/ (2001) | Global served as a load reduction aggregator for the California ISO in their Demand Relief Program (DRP) for Summer 2001. Global reserved 15 MW of demand relief for the DRP, relying on three major customer bases in the commercial, industrial, and institutional sectors. Global established itself as a load aggregator under the auspices of the CEC demand response program. Since many of the customers participating in the CEC program were also interested in receiving financial incentives in exchange for their voluntary curtailments, their inclusion in the ISO DRP program was a natural extension of the overall demand relief initiatives in California during 2001. |
| Energy Auditing | Department of Energy (DOE)/ Federal Energy Management Program (FEMP)/ (2000 – present) | Global was selected by the Department of Energy (DOE) to work with Federal Agencies to identify cost-effective energy efficiency, water conservation, and renewable energy measures that could be undertaken and developed into projects. Global provides SAVEnergy survey services in four of the six DOE regions and has provided these services to a variety of different federal agencies. Under the SAVEnergy program, Global provides comprehensive building energy surveys, water conservation surveys, renewable energy screening, and analyses of other specific energy consuming systems such as HVAC, lighting, heat pumps, motors, and boilers. Global also provides energy engineering and economic analysis, identification of energy efficiency measures, life cycle cost analysis, and project cost estimating of recommended measures. |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|--|--|---|
| <p>Program Marketing and Management</p> | <p>Electric Power Research Institute/ Technology Application Centers/ (2001 - present)</p> | <p>Global manages, operates, and provides technical direction for seven key EPRI end-use technology application centers throughout the United States. They are:</p> <ul style="list-style-type: none"> • Agriculture and Food Technology Alliance (AFTA) • Healthcare • Manufacturing Industries • Municipal and Industrial Water & Wastewater • Process Industries • Commercial and Residential Markets • Market-Driven Demand Response <p>The AFTA develops products and services to facilitate the introduction of innovative electrotechnologies in the Agri-Food industries. It advances solutions to the challenges that these industries face, including low operating margins, the need for enhanced product quality, environmental concerns, and increasing regulatory demands. The center has conducted extensive research on and demonstrations of energy efficient technologies for food processing facilities, including the landmark “Food Industry 2000: Food Processing Opportunities, Challenges, and New Technology Applications.”</p> |
| <p>Program Assessment</p> | <p>CALMAC/ Summary Study of California 2001 Energy Efficiency Programs/ (2002 - 2003)</p> | <p>Global conducted an assessment of the program impacts, budgets, cost effectiveness and savings persistence across all programs offered by various entities within California during the program year 2001. The Summary Study was funded by the California Measurement Advisory Council (CALMAC). Broad-based and comprehensive, it covers all programs funded by various sources during the 2001 program year, including the public goods charge, AB 970 and SB 1 5X.</p> |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|---|--|--|
| Integrated Resource Plan | Great River Energy/ Assessment of Energy and Capacity Savings Potential/ (2003 - present) | Global is conducting a comprehensive assessment of energy efficiency potential for this generation and transmission cooperative utility serving most of rural Minnesota. In addition, Global’s economic analysis will provide direct input to Great River’s integrated resource plan that it is filing with the Minnesota Department of Commerce. The assessment also includes development of avoided capacity and energy costs, using various production costing models. |
| Energy Efficiency Potential | Hawaiian Electric Company (representing the 3 investor-owned utilities in Hawaii)/ Assessment of Energy Efficiency Potential/ (2003 - present) | Global is conducting an assessment of energy efficiency and demand response resource potential for Hawaii. The assessment is a prelude for integrated resource plans (IRP) that will be developed by each of the utilities per regulatory requirements. |
| Potential Assessment | Alliant Energy/Interstate Power & Light (IPL)/ IPL Energy Efficiency Plan Filing/ (2002 - present) | Global prepared a long-range energy efficiency plan for the IPL subsidiary of Alliant Energy as part of their regulatory requirements for the Iowa Utilities Board (IUB). The project involved developing estimates of long-term energy efficiency program savings for all customer segments, including residential, commercial, industrial and agricultural. Savings potential forecasts included technical, economic and achievable for these customer segments. Included in the assessment was a detailed specification of the program designs, a comprehensive cost-effectiveness analysis, and generation of savings goals and programmatic budgets. Project support currently entails regulatory tasks related to completion of data requests from the IUB and the various intervener groups, as well as expert testimony by principal Global staff. |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|---|--|--|
| Energy Efficiency Program Evaluation | New York Energy Research and Development Authority (NYSERDA)/ Market Characterization, Assessment and Causality Project/ (2003 - present) | <p>Global is part of a consulting team headed by Summit Blue Consulting under contract to NYSERDA. The market characterization, market assessment and attribution/causality (MCAC) work effort is designed to contribute to the extensive evaluation effort that is being undertaken for NYSERDA’s New York Energy Smartsm program portfolio, which includes 42 energy efficiency programs covering all sectors and end-use markets. The Market Characterization (MC) work focuses on characterizing energy markets and providing the background information required to define programs, delivery concepts, and target markets, and potential for different types of programs. The Market Assessment (MA) work tracks changes in markets with a specific focus on market indicators that might be impacted by program offers; as such, this effort can be used to track program progress. The Attribution/Causality (AC) work focuses on identifying the impacts of the program interventions beyond what would have happened without the program. Often termed measurement of “net impacts,” this information is useful in making program decisions, including further investment, program exit decisions, and other policy and funding decisions.</p> |
| Technology Assessment and Screening | Iowa’s Investor-Owned Utilities (Alliant, UtiliCorp, MidAmerican, United Cities Gas)/ Assessment of Energy and Capacity Savings Potential in Iowa/ (2001 - 2002) | Global conducted this collaborative study in order to enable each of the four sponsoring utilities to have the necessary foundation that would allow for them to develop individual energy efficiency plans, consistent with each company’s goals and objectives. The assessment involved analysis of over 400 energy efficiency measures, spanning the residential, commercial and industrial sectors. |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|--|--|---|
| Program Review and Benchmarking | Alliant Energy, Wisconsin Power & Light Company (WPL)/ WPL Shared Savings Program Review/ (2002 - present) | Global conducted a review of Alliant Energy’s Wisconsin Shared Savings program. The program provided commercial, industrial and agricultural customers with a turnkey performance contracting service. Customers enjoyed the benefits of energy saving investments with the proceeds of the savings used to pay back the capital cost of the investments. In the review, Global conducted a benchmarking assessment, comparing Alliant’s program efforts to similar offerings from utilities around the country. In addition, Global conducted an economic analysis of the program using cost-effectiveness software tools. The project culminated in the development and delivery of expert testimony by Global principal staff during the November 2002 rate hearings before the Wisconsin Public Service Commission. |
| Potential Study | Keystone Institute/ Assessment of Energy Efficiency Potential/ (2001 - 2002) | Global conducted an assessment for the non-profit Keystone Institute of the role of demand-side management (DSM) in reducing US greenhouse gas (GHG) emissions. The primary objective of this study was to estimate the likely changes in GHG emissions that would occur with the implementation and full operation of DSM programs and initiatives nationwide. The study also assessed the impact of policies that impose a carbon tax. To offset the inherent uncertainty of future energy use projections, the study developed multiple scenarios. |
| Measure Assessment and Screening Assessment of Program Delivery | Geothermal Heat Pump Consortium/ GEO Merit Program Support/ (1996) | Global provided on-call marketing assistance to the Geothermal Heat Pump Consortium (GHPC) and its members in accelerating the market development of geothermal heat pumps. Assignments included proposal review for utility geothermal program demonstrations and working with individual utilities to help develop new programs and initiatives to increase the market for geothermal heat pumps. |

Table 3: Global Energy Partners, LLC – Project Summaries

| Energy Efficiency Study Category | Client Name/ Name of Study/ Timeframe | Project Description |
|---|--|--|
| Assessment of Program Delivery | Sempra Energy Solutions/ Segmentation Studies and Market Planning/ (1997-98) | Global supported Sempra on various market transformation studies that helped shape the marketing strategies for this new energy service company. The studies focused on assessing market and customer-specific data on energy consumption, customer needs and issues, and decision-making processes. Work also involved the development of pricing and risk management strategies. Global also developed a software tool for Sempra that simplified the application of the DOE-2 engineering simulation model. The tool is being used to assess the cost-feasibility of various energy efficiency products and services. |

B. Subcontractors

On this Program, Global will be working closely with our partner, the California Certified Organic Farmers (CCOF) Foundation.

Qualifications of the CCOF Organizations

California Certified Organic Farmers (CCOF) was founded in 1973 as a mutual assistance and certification organization for organic farmers. Its major accomplishments include creating a premier certification program, building consumer confidence in organic food, enhancing the reputation of organic agriculture among policymakers, and gaining respect for organic practices from conventional farmers and agricultural researchers. CCOF’s organic standards became the basis of the California Organic Food Acts of 1990, which was then largely incorporated into the federal Organic Foods Production Act of 1990.

The implementation of the National Organic Program in 2002 has presented CCOF with an opportunity to redefine itself. Two new entities have been created: CCOF Certification Services, a limited liability corporation which offers premier organic certification services, and the CCOF Foundation, a non-profit education and outreach organization. The original CCOF organization has become a trade association, known as CCOF, Inc., which advocates for government policies that encourage and protect organic agriculture and food. The mission of the CCOF Foundation is to enhance human health and protect the environment by promoting the production and consumption of nutritious organic food.

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Programs and Activities of the CCOF Foundation and CCOF, Inc.

The CCOF Foundation's programs support organic farmers in saving energy and conserving biodiversity, accelerate the transition to organic agriculture, and educate consumers about the benefits of organic food and farming. These programs include:

- The *Sustainable Energy Project* helps organic farmers improve their energy efficiency and adopt renewable energy technologies.
- The *Farm & Wildlife Project* is a partnership between the CCOF Foundation and Salmon-Safe, Inc., which provides third-party certification of salmon and water quality protection to the California organic farming community.
- The *Going Organic* program provides farmer-to-farmer mentoring and develops policy recommendations for overcoming systemic barriers to organic conversion.
- The *Organic Choice* program educates consumers about the health and environmental benefits of organic food.

The CCOF Foundation's Program Director, Ms. Jessica Hamburger, will work with CCOF Inc.'s Chapter Resource Coordinator to encourage CCOF client participation in our proposed Certified Organic Farmer Energy Efficiency program. CCOF, Inc. and the CCOF Foundation will also disseminate information about the Program to members through the *CCOF Magazine* and the CCOF Website.

CCOF Certification Services' on-going certification program has certified 1,200 organic growers, handlers, and processors, about 70 percent of the certified organic clients in California. Almost all CCOF certified clients opt to become members of CCOF, Inc. Membership in trade association is free of charge to certified clients and gives them a voice in setting the direction of the organization.

The Chapter Resource Coordinator of CCOF Inc., who acts as a liaison between the fourteen (14) regional chapters and the main CCOF office in Santa Cruz, helps chapter leaders to coordinate events and involve members in grassroots advocacy activities. He also communicates directly with members via email and by attending some chapter meetings, which generally draw 15-60 farmers.

C. Resumes or Description of Experience

Qualifications of Global Staff

Bruce A. Smith, Principal Advisor. Mr. Smith has over 30 years experience successfully working with electric and gas utilities and other organizations in the energy industry. His expertise includes retail electricity markets, agricultural energy usage, energy efficiency program design, planning and evaluation, and customer research. Mr. Smith is assisting Global Energy Partners on a variety of assignments, including market assessment and development, competitive positioning and project supervision.

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Mr. Smith was a staff economist at the Federal Power Commission and a Program Manager at the U.S. National Science Foundation. He has taught courses on customer program design, the evaluation of customer programs, load research, and forecasting methods. He has published many articles and reports concerning the utility industry as well as providing expert testimony before State regulatory commissions and the Federal Energy Regulatory Commission.

He has been active in a number of industry organizations including, the Institute of Electrical and Electronics Engineers/Power Engineering Society, where he chaired the Load Forecasting Working Group; the American Marketing Association; and the Association of Energy Services Professionals, where he served on the Board of Directors and chaired the Technology Committee.

Mr. Smith was born and raised in Philadelphia, PA. He received the B.A. degree in Economics from Denison University, Granville, OH and the Ph.D. in Economics from Indiana University, Bloomington, IN. He has resided in Berkeley, CA since 1977.

He has been an energy consultant at a number of firms since 1977. He has provided senior project management in the areas of retail market analysis, agricultural energy usage, customer services assessment and product planning; program evaluation; market research; technology assessment; energy efficiency analysis, load research; and forecasting.

Among the many projects he has participated in, Mr. Smith supervised the evaluation of several Agricultural sector energy efficiency programs in California. He also managed the development and application of the Agricultural End-Use Forecasting Model (AGEND) Model, which forecasts the energy (electric and gas) usage and peak load of alternative irrigation and dairy technologies by season, crop and region.

Charles D. Sopher, Senior Associate. As Principal Associate with Global, Dr. Sopher manages EPRI's Agriculture and Food Technology Research Program. He brings over thirty years of experience in agricultural production and food processing research, including management and operations of peanut, vegetable, spice, and soybean seed facilities. He has a strong background in the management of research programs in variety development, variety screening, biotechnology, biological pest control, pest management, post-harvest physiology, and environmental regulation.

Dr. Sopher has managed production facilities for vegetable, agronomic, essential oil and spice crops in Europe, Asia, and South America, as well as in the United States, Mexico, and Canada. Prior to working with major international corporations, he spent ten years engaged in university teaching, research, and extension at North Carolina State University, Raleigh. In addition, he is the author of 30 research and extension publications as well as editor and/or author of approximately 350 proprietary research reports. He has led a research team in the development of 45 plant variety protection patents in vegetable and spice crops. Most recently, he edited and published approximately 70 research reports for EPRI and continues to edit newsletters and popular research articles for the EPRI Agriculture and Food Technology Research Program.

Dr. Sopher has advanced degrees in Agronomy with emphasis on Biological Statistics, Economics, and Management Systems, having graduated with a Ph.D. in Soil Science with

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minors in Statistics and Economics from North Carolina State University at Raleigh. He received his M.S. in Agronomy with a minor in Economics from the University of Illinois, Urbana.

Richard Milward, Program Manager. Mr. Milward is a Senior Associate at Global Energy Partners, where he provides project management and analysis for energy-related technical assistance efforts conducted for public and private entities. With his twelve years of experience in the field of economic research and analysis, his expertise addresses such contemporary industry topics as integrated resource planning, market and technical analyses, load forecasting, demand- and supply-side resource benefit/cost analyses, and the application of electrotechnologies in the healthcare field.

Mr. Milward is currently managing the EPRI/Global Healthcare Program. Member electric utilities fund this program, which develops product and service bundles to help utility account managers and marketing professionals add value to their healthcare accounts. The Healthcare Program recently published the *Simplified Guide to Energy Efficiency in Hospitals*, which is gaining recognition as a valuable and essential tool for all hospital O&M staff. Mr. Milward also edits the quarterly “Power Prescription for Healthcare” and “Commercial & Residential Power Tools” newsletters.

Prior to working for Global, Mr. Milward worked for PG&E Energy Services as a Load Modeling and Forecasting analyst, where he analyzed the characteristics and patterns of electricity demand and consumption of commercial and industrial customers to implement and maintain Energy Services’ electric load forecasting system. Mr. Milward worked for NEOS Corporation as a staff analyst for seven years before his tenure at Energy Services. With NEOS, Mr. Milward examined the economic and technical feasibility of renewable and alternative energy resources including wind energy, biomass, and hydropower.

For the past three years, Mr. Milward has also taught statistics, algebra, and quantitative research methods for the Northern California Campus of the University of Phoenix.

Mr. Milward holds a B.A. in Economics from San Diego State University and an M.S. in Agricultural Economics with emphasis in Quantitative Analysis from the University of California, Davis.

Chainuwat (Joe) Prijyanonda. Mr. Prijyanonda has seven years of experience in the field of energy efficiency, particularly in the area of commercial and residential energy end-use. In his assignments for Global, he conducts energy efficiency and demand curtailment assessments, building analysis, and engineering modeling. He is Global’s resident expert in using the DOE-2 model, and has been the principal developer of Global’s own Building Energy Simulation Tool (BEST).

In the food and agriculture field, Mr. Prijyanonda has served as principal investigator on two studies related to the food processing industry and animal manure management. For each of these topics, he investigated promising technologies that can improve the efficiency of operations in the food and agriculture industry, and the market drivers and barriers to the

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technologies. He also proposed strategies that utilities can use to assist their food and agriculture customers overcome the market barriers to the technologies.

Mr. Prijyanonda has recently been involved in providing all technical analysis and building energy modeling and simulation expertise for creating a Database of Energy Efficiency Measures (DEEM). DEEM includes information on energy, peak demand, and life cycle cost impacts due to a variety of measures for eight building types located in 15 regions of the U.S. He has also led the technical analysis, building energy modeling and simulation of a large number of commercial and residential energy efficiency and demand-side management (DSM) measures for fourteen building types in order to assess the technical potential for energy efficiency and DSM in the State of Iowa. In addition he provided building energy modeling and simulation expertise, and assisted commercial and industrial customers in California to identify demand-side management measures that curtailed their peak demand during the summer of 2001.

Prior to joining Global, Mr. Prijyanonda led several energy-efficiency initiatives in Asia while he was a Project Manager with the International Institute for Energy Conservation. His background in building energy analysis and simulation enabled him to assist MERALCO (Manila's electricity utility) in the design and implementation of programs to increase the energy efficiency of commercial buildings. Mr. Prijyanonda also worked on developing the energy service market in Thailand and the Philippines, evaluating Thailand's Demand-Side Management Program, and estimating the commercial and industrial energy-efficiency potential in Thailand. Mr. Prijyanonda also has experience in determining the economic and environmental benefits of renewable energy projects.

Mr. Prijyanonda holds a Bachelor's degree in Mechanical Engineering from the University of California at Irvine, and a Master's degree in Energy Technology from the Asian Institute of Technology.

Ingrid Bran. A Senior Associate with Global Energy Partners, Ms. Bran has over fourteen years of experience in the energy sector and manages analyses that focus on technical and economic aspects of the industry. She brings expertise in the areas of load research, end-use data analysis, sampling and surveys, economic analysis, and market research. She has recently been involved in the management of projects to provide an assessment of the role of demand-side management (DSM) on greenhouse gas emissions, to implement load reduction programs in California, and to create a five-year R&D plan for the California electronics industry.

Prior to joining Global, Ms. Bran worked for over eight years at the Electric Power Research Institute (EPRI) in several management capacities. Her most recent responsibilities involved managing client relations, technology transfer and customer service in Spain, the Caribbean, and Latin America. At EPRI, she also was Manager of R&D Planning and Analysis for the Customer Systems Group, preparing and presenting strategic R&D forecasts for short-, medium-, and long-term horizons in consultation with client utility advisors.

Ingrid worked during four years at Southern California Edison (SCE) developing, analyzing, and reporting load research data in support of rate, regulatory, conservation/load management, system planning, and regulatory requirement activities. She created computer programs to access, validate, and statistically analyze electricity data and authored analytical reports on

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various electricity customer groups and programs including real-time pricing. Ms. Bran was also a Senior Analyst in economic consulting at Micronomics, Inc., and Market Planning and Research Analyst, and International Economist at Union Bank.

Ms. Bran holds a Bachelor's degree in Economics from California State University, Fullerton, and a Master's degree in Economics from the University of California, Berkeley. Ms. Bran is also fluent in Spanish, Portuguese, and French.

Qualifications of CCOF Foundation Staff and Farmers

Brian Leahy, Supervising Manager. Mr. Leahy is Executive Director of the CCOF Foundation and President of CCOF, Inc. He will provide oversight and guidance to the CCOF Foundation Project Manager. His leadership position in the organic farming movement is grounded in his own farming experience: he owned and operated Cherokee Ranch, a 900-acre organic rice farm in Chico, California, from 1980 to 2002. Mr. Leahy is a board member of the California Sustainable Agriculture Working Group and the National Campaign for Sustainable Agriculture. Mr. Leahy received a J.D. from Creighton University School of Law and worked as a legal aid attorney.

Jessica Hamburger, Project Manager. Ms. Hamburger, Program Director of the CCOF Foundation, will lead efforts to market energy efficiency measures that are part of the COFEE Program to CCOF clients. Ms. Hamburger is an experienced energy authority. She managed energy efficiency projects for Battelle, Pacific Northwest Laboratory from 1992 to 1996. She received a master's degree from the Yale School of Forestry and Environmental Studies in 1998, where she studied ways to minimize the environmental impacts of farming, forestry, and other land uses. She gained knowledge and experience in promoting organic and sustainable agriculture in California through her work as a Program Coordinator at Pesticide Action Network North America (PANNA) from 1999 to 2003.

Brian Sharpe, Marketing/Outreach Manager. Mr. Sharpe is Chapter Resource Coordinator for CCOF, Inc. and will support chapter leaders in conducting marketing and outreach to CCOF members for the COFEE Program. Mr. Sharpe works with all fourteen regional CCOF chapters and assists with government affairs that affect organic farmers. He previously worked for three years as a Canvass Director with the Fund for Public Interest Research in Santa Cruz, CA, helping to coordinate several grassroots campaigns with environmental, consumer, and public interest groups. Brian graduated with a Bachelor of Science degree in Zoology from the University of California, Santa Barbara in 1997.

Many CCOF farmers were the trailblazers of the organic movement, and they continue to look for ways to make their farms more ecologically sound and efficient, such as by adopting energy-efficiency and renewable-energy technologies. Fetzner Vineyards, for example, has installed photovoltaic panels to power its winery. Lundberg Family Farms is completely powered by wind energy. A number of CCOF members we have already contacted regarding the COFEE Program expressed enthusiasm and interest in improving the efficiency of their refrigeration, lighting, HVAC, pumping, motors and other end uses.

VIII. Budget

Global presents in Table 4 its summary budget for successfully performing the tasks and activities described in this proposal. Details regarding this summary budget are contained in the accompanying Program Workbook, COFEEWkBk.xls. This accompanying information completely adheres to the CPUC’s requirements.

Table 4: Summary Budget for the COFEE Program

| Budget Category | Total | Percentage of Total Budget |
|---|--------------------|-----------------------------------|
| Administrative | | |
| Managerial and Clerical Labor | \$166,557 | 11.86% |
| Human Resource Support and Development | \$0 | 0.00% |
| Travel and Conference Fees | \$33,360 | 2.38% |
| Overhead (General and Administrative) - Labor and Materials | \$24,093 | 1.72% |
| <i>Total Administrative Costs</i> | \$224,010 | 15.95% |
| Marketing/Advertising/Outreach | | |
| | \$188,933 | 13.45% |
| Direct Implementation | | |
| Financial Incentives to Customers | \$748,763 | 53.31% |
| Activity - Labor | \$25,736 | 1.83% |
| Installation and Service - Labor | \$0 | 0.00% |
| Hardware and Materials - Installation and Other DI Activity | \$0 | 0.00% |
| Rebate Processing and Inspection - Labor and Materials | \$90,981 | 6.48% |
| <i>Total Direct Implementation</i> | \$865,480 | 61.62% |
| Evaluation, Measurement and Verification | | |
| | \$92,319 | 6.57% |
| Financing Costs | | |
| | \$33,849 | 2.41% |
| Total Budget | \$1,404,590 | |