

PGE2049 Wine Industry Efficiency Solutions—D&R International

2006 - 2008

| | |
|--------------------------|-------------|
| 1. Projected Budget* | \$2,086,720 |
| 2. Projected Net Impacts | |
| MWh | 2,310 |
| MW (Summer Peak) | .357 |
| Therms | 162,473 |
| 3. Cost Effectiveness* | |
| TRC | 1.49 |
| PAC | 1.45 |

*Does not include PG&E contract administration costs, which are estimated at 5 percent of expected contract value and included at the portfolio level.

4. Descriptors

Market Sector: Nonresidential (Commercial)
 Classification: Third Party
 Status: New

D&R International’s Wine Industry Efficiency Solutions (WIES) program addresses energy efficiency and resource management in a holistic and comprehensive manner, and implements a process that will ensure demand and energy savings within the wine industry market sector. The WIES Program will identify efficiency improvement opportunities and provide incentives through either Installation Support Services or rebates for those who agree to move forward with upgrade recommendations. The distinguishing element of this program is the Installation Support Services component, which is designed to address the market barriers faced by hard to reach customers. D&R developed the Resource Management Advisor program model for businesses that require more than rebates to encourage program participation. This model assists customers with the confusing and often tedious tasks involved in implementing efficiency projects such as equipment specification, bid package development, contractor selection, project financing and project management.

D&R’s Wine Industry Efficiency Solutions Program is targeted to existing small to medium-sized wineries and wine grape growers in PG&E’s service area. D&R’s Wine Industry Efficiency Solutions Program will result in measurable energy savings that will contribute to PG&E’s energy-savings goals. To appeal to customers using the wine industry’s flare for colorful marketing, D&R proposes a tagline for the program: *More Wine for Less Energy!* D&R will work with its subcontractors, Kenwood Energy and Green Building Studios, to target all small to medium wineries. The D&R Team will focus first in the Napa, Sonoma, Central Coast, North Central, North Coast, and Central Valley regions for a total of 735 wineries. Table 4-1 provides information on the distribution of California wineries by location and case quantities produced annually.

| Table 4-1. 2004 California Wineries by Case Size ¹ | | | | | | | |
|---|-------------|-------------|---------------|---------------|---------------|-------------------|----------------|
| Location | Under 5,000 | 5,000-9,999 | 10,000-24,999 | 25,000-49,999 | 50,000-99,999 | 100,000-1 million | Over 1 million |
| Napa | 165 | 57 | 52 | 31 | 24 | 16 | 8 |
| Sonoma | 101 | 21 | 46 | 18 | 19 | 34 | 4 |
| Central Coast | 90 | 35 | 22 | 10 | 5 | 10 | 0 |
| North Central | 44 | 16 | 14 | 1 | 1 | 6 | 2 |
| North Coast | 31 | 9 | 9 | 4 | 4 | 2 | 1 |
| Central Valley | 14 | 7 | 5 | 1 | 1 | 4 | 5 |
| Monterey | 19 | 5 | 8 | 6 | 6 | 5 | 0 |
| South Bay | 15 | 6 | 6 | 2 | 2 | 4 | 1 |
| South Central | 17 | 12 | 6 | 0 | 0 | 1 | 0 |
| North Bay | 13 | 10 | 1 | 1 | 1 | 1 | 0 |
| South Coast | 12 | 4 | 1 | 0 | 0 | 2 | 0 |
| Foothills | 13 | 2 | 0 | 0 | 0 | 0 | 0 |

Though D&R will proactively target the program to small to medium size wineries, the program will be open to all winery customers within PG&E's service area that are interested in participating.

The D&R Team will serve as a "Resource Management Advisor" to wineries and wine grape growers, helping them develop and implement comprehensive energy-management strategies. This model has proven successful in D&R's School Energy Efficiency Program currently being implemented in PG&E's service area.

The role of the Resource Management Advisor is to:

- Be a single, reliable point of contact
- Develop a strategy that does not focus on low-hanging fruit but on the greatest energy-saving opportunities, thus maximizing peak kW and kWh savings
- Provide simple, unbiased and credible information to help customers understand and prioritize their energy and resource management activities
- Be a conduit to deliver information on utility and state programs
- Provide hands-on, customized Installation Support Services

¹ The Wine Industry Symposium Group, *14th Annual Wine Industry Financial Symposium*, September 2005

The Installation Support Services component of the program provides assistance in equipment specification, bid package development, contractor selection, project financing, and implementation. To develop the energy-management strategy, the D&R Team will evaluate a wide range of demand-side opportunities and, through its comprehensive energy management reports, determine where the greatest savings lie in refrigeration and non-refrigeration activities:

- ✓ Refrigeration
 - Heat recovery
 - Humidity control
 - Refrigerant charge
 - Upgraded central refrigeration compressors chillers
 - Radiant and reflective coatings for roofs and possibly walls
 - Low power air-cooled condensers vs. evaporative condensers
 - Tank insulation (especially and primarily for white wine facilities)
 - Insulation of tank rooms and other refrigerated spaces
 - Condensers: floating head pressure with fixed setpoint
 - Use of efficient screw, variable speed and unequally sized chillers
 - Condensers: floating head pressure with variable setpoint
 - Insulation of refrigeration lines
 - Demand response control of refrigerated spaces and possibly for tanks during cold stabilization (white wines only)
 - Non-compressor based cooling methods for removing heat of fermentation from red wine tanks
- ✓ Non-refrigeration
 - High efficiency condensing boilers
 - Lighting retrofits
 - Barrel and tank storage facilities
 - Use of occupancy sensors
 - Optimized envelope insulation
 - Optimized roof insulation
 - Use of radiant barriers
 - Enhanced ventilation to use thermal mass
 - Use of low-e surface coatings
 - Use of improved windows
 - Addition of daylighting controls
 - Natural ventilation
 - Heat recovery strategies
 - Use of (vfds) on loop pumps and condenser fans
 - Radiant heating/cooling
 - Use of premium efficiency fan and pump motors
 - Geothermal potential for space-heating, geothermal heat pumps and hydronic heat pump loops
 - Irrigation pumping

In addition, the D&R Team has the expertise to evaluate a number of non-energy efficiency strategies should PG&E want to include these in the future, such as:

- ✓ Thermal Energy Storage
- ✓ Distributed Generation
 - Solar Electricity
 - Solar Thermal
 - Cogeneration
 - Trigenation

D&R will also make a variety of low cost and no cost efficiency recommendations as a part of the energy management report. In addition, the team has an abiding interest in new uses for existing technology. Related to this interest, D&R believes there is an opportunity for hot water savings relating to the use of a “pre-rinse” device similar to, but on a larger scale than, what is customarily used as an energy efficiency measure in commercial kitchens. Hot water use in wineries for sanitizing, general cleanup, bottle rinsing and barrel/tank cleaning is significant. At this time D&R can make estimates of the amount of hot water used in aggregate, but can’t estimate the savings potential associated with using high velocity, reduced flow “pre-rinse” devices in wineries. D&R will examine, though, the feasibility of using such a device as a low cost introductory measure during field site visits.

Working with hard to reach markets has inherent challenges that increase the timeframe for delivering installed energy savings. Small business owners face many demands on their time and resources and therefore it takes longer to secure commitments and install projects. In addition, the wine industry experiences seasonal demands that projects must work around such as crush. Given these challenges, D&R projects that 6 percent of the programs projected energy savings will be delivered in 2006, 21 percent in 2007, 73 percent in 2008.

5. Statement

Though many large wineries and grape growers have incorporated energy management into their business strategies, most of the small to medium-size wineries and wine grape growers have not dedicated the time, energy or budget to develop a comprehensive energy management plan. After receiving efficiency upgrade recommendations from the utility, ESCOs or vendors, many small to medium wineries or wine grape growers have often failed to implement efficiency projects due to limited resources, lack of trust in a specific product or supplier, limited knowledge of the benefits of energy efficiency improvements, or other business priorities that put energy efficiency on the back burner. Just as important, many wineries and wine grape growers do not pursue energy efficiency in a comprehensive fashion, undertaking one or more disconnected efficiency projects without realizing the full cost savings potential of a more comprehensive plan.

6. Rationale

Through its experience promoting energy efficiency to local governments and the commercial and industrial sectors, D&R has found that many customers--particularly those that are smaller and hard to reach--do not have the knowledge, time or expertise to understand what efficiency opportunities are available to them, how best to prioritize and implement energy management strategies, and what operational and financial benefits will be realized as a result.

A key component to success is explaining how affordable energy efficiency really is. Most small customers do not know that energy savings usually pay for efficiency projects, and that financing institutions are available to provide funding at competitive terms, based on the energy savings. Thus, education is a key component.

- From the outset, customers will learn that they will achieve far greater savings than they would realize if they pursued only selected measures or did not pursue any efficiency upgrades at all.
- The D&R Team will provide a project lifecycle cost analysis specific to each customer that goes beyond Simple Payback and considers Internal Rate of Return for each efficiency project identified.
- The D&R Team will recommend an integrated package of highly efficient cost-saving measures that create a neutral or slightly positive cash flow by leveraging low-interest financing available through entities such as SAFE-BIDCO or other third-party low interest financing companies.

But persuasion starts with knowing the customer. Smaller wineries are typically family-owned and capital constrained. They also place high priority on aesthetics, which must be taken into consideration when providing recommendations. For example, an energy efficiency measure that negatively impacts the ambiance of the tasting room or vineyard would not be welcome. Taking time to understand the customer and his or her needs will lead to efficiency projects that are well accepted and pursued. As an extension to the customer's organization, the D&R Team will provide Installation Support Services that help specify the proper equipment for the project, identify and secure installation contractors capable of performing the work with the greatest level of commitment, and ensure that systems are installed and commissioned correctly without overtaxing the customer's internal staff or budget.

7. Outcomes

Following are the Program outcomes and indicators of success:

- Measurable energy savings achieved as a result of program participation.
- Customers gain a greater understanding of the benefits associated with implementing energy efficiency strategies and practices into the wine production process.
- Increased customer knowledge about a wide variety of energy-efficiency technologies available in the marketplace today that are appropriate for their businesses.

- Energy-efficiency upgrade projects become a high priority within the wine industry business sector.
- Customers potentially seek other ways to reduce costs and mitigate future potential supply constraints through demand response, distributed generation technologies and sustainable wine industry design and operating practices.
- Customers gain an understanding of other PG&E Programs that can assist them in their energy plans.

8. Strategy

The D&R Team will:

- Identify and perform outreach to the small and medium wineries and wine grape growers in the northern and central regions of PG&E's service area
- Conduct no-cost comprehensive audits to evaluate and implement demand and energy reduction upgrade opportunities
- Summarize the opportunities in an energy management report
- Provide Installation Support Services

The D&R Team will complete energy audits and meet with the customer's facility and management staff to review the most cost-effective and comprehensive recommended measures. In most cases, D&R will recommend implementing measures that result in an Internal Rate of Return of 15 percent or more. For customers who choose Installation Support Services, the customer will sign an agreement to move forward with project implementation. The team will help them develop an energy management plan and recommend a project scope and timeline to assist the customer in project implementation activities.

D&R's Wine Industry Efficiency Solutions Program addresses lost opportunities in several significant ways. First, the program provides hands-on assistance to this hard-to-reach niche market sector that would not otherwise have the resources to make informed equipment selection decisions. Second, the approach is comprehensive, looking at the operations as a whole rather than the typical practice involving piecemeal equipment upgrades at the time of failure. Finally, the innovative Installation Support Services model ensures that the participants have efficiency expertise helping them through each step of project implementation versus forcing them to rely on self-interested equipment vendors. As evidenced by the program yield D&R has projected, minimizing lost opportunities and achieving maximum energy savings for this important sector of the wine industry carries a higher transaction cost than what PG&E experiences with large agricultural customers. PG&E's projected program yield for the Agricultural and Food Processing sector includes many large customers that have internal energy management expertise and therefore are able participate in PG&E's rebate program as a part of their overall energy management plan. The small to medium customer segment, however, clearly needs customized assistance to compel action, as rebates alone are not sufficient.

In addition, the D&R Team will work closely with PG&E to develop synergies between the Wine Industry Efficiency Solutions Program and other PG&E programs to avoid lost opportunities. For example, the team will seek opportunities to provide program participants information on PG&E's Savings by Design program for wineries looking to build new facilities or expand existing operations. The team may also provide the "BEST" Winery tool developed by the Lawrence Berkeley National Laboratory or a similar energy simulation model developed by GBS to identify energy efficiency opportunities.

9. Objectives

The primary objective of the WIES Program is to increase the level and rate at which demand and energy savings are realized in this hard to reach customer segment. To do this, the small to medium-sized wine industry customer needs the knowledge, project management and technical support to implement energy efficiency projects that result in improved operations, lower costs and energy savings.

Specific, measurable objectives of the WIES Program are as follows:

- Recruit up to 80 small to medium wine industry customers committed to implementing energy saving measures
- Conduct approximately 160 facility audits to increase energy efficiency awareness and identify energy efficiency improvement projects that lead to measurable savings
- Provide Installation Support Services or rebates for approximately 80 projects²
- Host wine industry peer group discussions/workshops to provide a forum in which to share knowledge, lessons learned and Program successes

10. Implementation

Customer Recruitment

The D&R Team will develop a preliminary customer target list, identify marketing channels and network with industry groups and service providers to promote the Program. Marketing materials will be developed to disseminate through service provider networks, through industry group presentations and directly to end-use customers during face-to-face meetings to secure a Program Participation Agreement (PPA) with interested customers.

D&R seeks to leverage existing customer relationships established by PG&E and coordinate marketing and outreach activities with PG&E's account management group. D&R may work directly with PG&E representatives who serve the regions identified by D&R as having the greatest opportunity for Program participation. D&R will provide Program information and work with the regional account managers as necessary to compile a list of priority accounts to target. D&R will try to align outreach efforts with PG&E account management activities to

² The actual number of audits conducted and projects implemented will be determined based on actual savings per project in order to meet Program energy savings goals.

prevent customer confusion and present clear information on Program services and benefits. D&R will provide Program information to the statewide Flex Your Power program and seek ways to incorporate Program information on PG&E's Web site so that potential customers can be referred to the Program through these avenues.

D&R will also develop a list of organizations and industry events that will serve as effective avenues to present the Program and provide direct access to the small and medium wine industry customers. These organizations include the California Sustainable Winegrowing Alliance, the Napa County and Sonoma County Winery Associations and the Central California Winegrowers Association. D&R will conduct a minimum of four formal presentations at wine industry events or meetings in 2006 to promote the Program. D&R will also conduct ongoing promotion throughout the Program period to continue to provide information to the wine industry and encourage customers to participate. In 2007 and 2008, D&R will present Program information at four industry events each year to provide updated Program information and solicit new Program participants.

D&R will also seek opportunities to coordinate marketing and outreach efforts with other third party programs or service providers that work with the wine industry sector. The customer and industry information collected through these efforts will be used to inform and update the Program database used during the initial marketing phases of the Program.

D&R will develop a WIES Program brochure that will serve as the primary hard copy overview of the Program. The brochure will describe each Program component, Program benefits, and provide a mechanism for participating in the Program. The brochure will be distributed through industry channels, provided during presentations conducted at industry association meetings and conferences, and during one-on-one customer meetings. D&R will also create a WIES Program Web site that will provide potential customers information on the Program, Program requirements and benefits, how to participate, and who to contact to answer any questions or provide additional Program information. D&R will also include case studies and testimonials associated with successful completed projects that will educate other wine industry customers and encourage them to participate in the Program.

D&R will conduct one-on-one customer meetings and group presentations at various industry events and workshops, using the data collected from the initial marketing activities. D&R will provide an overview of the Program, describe the benefits of Program participation, respond to customer inquiries and develop relationships with key customer contacts to secure customer participation. Since not every outreach activity will lead to a signed PPA, D&R will document and monitor all marketing and outreach activities on the Program database and continue to provide Program information should circumstances change and the customer chooses at a later date to participate in the Program.

D&R will maintain ongoing communications with PG&E staff and hold regular update meetings to share Program referrals as appropriate and limit redundancy in customer communications during the marketing and outreach phase of the Program. D&R will report initial contacts to PG&E Account Services and/or the energy efficiency clearinghouse, as specified by PG&E, to

ensure overall coordination in program delivery, and will keep PG&E staff apprised of outreach activities undertaken as needed.

Program Tracking and Forms

A critical part of program implementation will be developing Program tools and forms. D&R will develop the following tools and forms needed for Program implementation:

- Program tracking database
- Customer screening form
- Audit report template
- Program Participation Agreement
- Project Implementation Agreement

Program Tracking Database: D&R will develop a tracking database to log and monitor progress in reaching out to prospective customers, maintain contacts, track communications and Program activities. The database will be used to record status in achieving Program goals and milestones.

Customer Screening Form: A customer screening form will be used in the initial marketing and outreach phase of the Program to determine a customer's interest in moving forward and exploring Program opportunities, evaluate potential customer project opportunities, and designate a customer contact who will take lead responsibilities to move to the next step. The form will be filled out by D&R staff and verified by interested customers. Screening questions will assist D&R in determining where to invest program resources. D&R will target wine industry customers that have the greatest potential for equipment upgrades and have not implemented energy efficiency measures promoted through the Program either independently or as part of PG&E or other efficiency programs. These customers are most likely to benefit from the type of support offered by the WIES Program and, in many cases, lack the information and resources to implement measures without the assistance the WIES Program offers.

Audit Report Template: D&R will develop a WIES Program savings spreadsheet and audit report template to be used in the analysis and presentation of the customer energy management reports that identify and recommend energy efficiency measures to implement. The savings spreadsheet will be used to calculate estimated kWh, therm and dollar savings associated with each recommended energy efficiency measure, the results of which will be highlighted in each customer energy management report. The spreadsheet will also calculate the Internal Rate of Return and Net Present Value of each identified measure. Each report will follow a similar lifecycle cost and savings analysis format but will be customized for each Program participant based on the findings of the field audit. D&R will follow a similar format and provide consistent reports to all customers who sign the PPA. An audit report will include baseline energy consumption information about each audited building, a list of implementation measures and energy savings potential, a financial analysis section that addresses internal rate of return as well as providing an overview of financing options, and implementation recommendations for the projects under consideration.

Program Participation Agreement (PPA): Once a customer meets the basic screening criteria, D&R staff will work with the main contact and other designated customer representatives to outline Program opportunities and benefits, and secure a reasonable level of commitment and interest that justifies investing Program implementation resources. The purpose of the PPA is to require a written expression of interest and commitment that the customer will move forward with Program implementation. The PPA will outline the range of Program activities, including energy audits and the implementation of recommended upgrades through the Program's Direct Implementation Incentives.

Project Implementation Agreement (PIA): The PIA signifies a mutual commitment to implement specific measures within a specific scope and timeline. The PIA requires the customer to decide whether to implement the measures through Installation Support Services or Rebates provided through the Program.

Program Participation

D&R will develop specific criteria to determine customer eligibility for participation in the Program. Screening questions will be developed and used during initial Program discussions with prospective customers to determine the type of project opportunities that may be available and to evaluate the probability for project success with customers who show interest in the Program. Once D&R and the customer determine that there are opportunities worth examining further, D&R will outline the preliminary steps the customer and D&R will take to secure the customer's participation in the Program and explore the potential to implement energy saving measures. The screening questions will allow D&R early on to gauge the customer's intentions, determine Program applicability, and target Program services to customers and projects that will potentially provide the highest return for the dollars invested.

Direct Implementation

Direct Implementation Activities are those activities required to deliver Program services from the point a customer signs a PPA. The activities during this stage of the Program will be documented as Direct Implementation on the WIES Program database. An important aspect of the Program is to secure future energy savings from a high percentage of participant's that sign a PPA. To achieve this, the PPA will present specific conditions that the customer must agree to before D&R commits Program funds to prospective Program participants. The PPA will provide information on the Direct Implementation Incentives so the customer has a clear understanding of the Program services that support project implementation activities.

The first step beyond the PPA in achieving energy savings will be conducting facility audits for each Program participant. D&R will conduct approximately 160 facility audits³ and develop comprehensive energy management reports that identify energy efficiency measures to implement. D&R expects 40 percent of the audits will be conducted at small customer facilities while 60 percent of the audits will be conducted at medium size facilities. D&R will present an

³ The actual number of audits completed will depend upon the number required to achieve the energy savings goals.

energy management report to each participant that describes energy efficiency measures to implement, promoting those measures with the highest Internal Rate of Return and energy savings that will meet the customer's specific business and operational needs. The energy management report will also describe a proposed strategy to implement the energy efficiency upgrades. D&R will work closely with each Program participant to provide additional technical support in order to further promote or clarify the recommended measures outlined in the report and move the customer into project implementation. Detailed information on D&R's Direct Implementation Incentives will be provided that summarizes ways D&R will help support and manage project implementation activities.

D&R will work closely with each Program participant to help influence Program activities and present information to other customer decision makers in order to move the recommended measures into project implementation. Once the customer agrees to implement any or all of the recommended measures, the customer will move into the Direct Implementation Incentives phase of the Program. The customer will sign a PIA that requires the customer to decide whether to implement the measures through Installation Support Services or Rebates provided through the Program. If the customer chooses Installation Support Services, the agreement will outline the range and extent of services available through this service offering. If the customer chooses Rebates, the qualifying measures, rebate requirements and reimbursement process will be outlined.

Customers that choose Direct Implementation Incentives will not be eligible to receive similar PG&E rebates or state incentives for the measures installed through the WIES Program. D&R will work with the customer to develop a project implementation plan and timeline that will serve as a roadmap to track and manage project activities.

In addition to the field audits and energy management reports, D&R will provide opportunities for Program participants to meet and conduct peer group discussions to share best practices, discuss issues that affect their business and learn from the D&R team about ways to incorporate energy efficiency activities into their business operations. The peer group discussions will be informal and conducted periodically throughout the Program period to further engage participants and non-participants in an ongoing dialogue on energy management. The meetings will also serve as an opportunity to recognize Program participants that have developed and implemented successful energy efficiency projects.

One of the distinctive features of D&R's program design is Program participants have the option of taking either of two paths for incentives: Installation Support Services or Rebates.

Direct Implementation Incentives: Installation Support Services

Program participants will be encouraged to participate in D&R's Installation Support Services. Based on D&R's experience, many small and medium customers do not have the internal expertise, time and contacts to identify energy the best and most comprehensive energy efficiency projects to undertake, hire qualified service providers to implement successful projects, work through the documentation required to secure project financing, or develop

accurate bid specifications for each project. Without additional support, many customers are likely to either choose not to move forward into project implementation or will implement the least expensive or simplest measures that will not provide maximum and sustainable savings over time.

Installation Support Services provide the customer with technical, financial and administrative expertise that educates him or her on every aspect of implementing successful, comprehensive and sustainable energy efficiency projects in the future. By working side by side with the customer, D&R is broadening the scope of work and encouraging the customer to seek additional upgrade opportunities in a more comprehensive manner than would be realized otherwise had the customer moved forward on his or her own without the additional support and information.

Installation Support Service activities include:

- *Project financing support:* D&R will evaluate and identify financial options to ensure project viability and create a positive cash flow based on the deemed energy savings. D&R will help with all paperwork to apply for a low interest loan.
- *Bid Package Development:* D&R will support the customer in developing a bid package for each upgrade project to implement. The bid package will include the equipment specification, general Terms and Conditions, Bidder instructions, a Bid Sheet, bidder minimum qualifications, bond requirements, sample contract, project details, etc.
- *Bid Support and Evaluation:* D&R will support the customer throughout the bid process. Support may include leading the pre-bid walk, answering bidder questions, and evaluating the bids once they are received. D&R may meet with the customer's staff to discuss the bids, bidder qualifications, and provide recommendations on which bidder to select for each project pursued.
- *Contracting and Project Management:* Upon customer's selection of the winning bidder for each installation, D&R will assist the customer in reaching contractual agreement with the bidder and assist in managing the project. Project Management may include development of implementation schedules, weekly reporting of progress and status, development of punch list items, 100 percent onsite inspection of installed equipment and final installation approval.

Direct Implementation Incentives: Rebates

For each customer that selects a WIES Program cash rebate in place of Installation Support Services, D&R will provide a WIES Program Rebate for qualifying measures installed. The details of the rebate structure will be developed during the program development phase of implementation. D&R will still provide assistance in identifying the type of equipment to install that will best achieve cost-effective energy savings. D&R will also provide support in completing the rebate documents and processing the paperwork to generate the rebate and reimburse the customer. Prior to the payment of any rebate, D&R will obtain proof of purchase

from the customer and post-field 100 percent of the projects to confirm the equipment has been installed and is in operation.

Under both the Installation Support Services and Rebate incentives, D&R will track the type and number of measures installed and the associated energy savings in an energy tracking database within the Program database. The data will be used as part of D&R's reporting requirements.

11. Customer Description

The program is open to all PG&E wine industry customers, though the D&R Team will initially target small to medium wineries and wine grape growers in the northern and central regions of PG&E's service area where the majority of wine growing and production takes place.

12. Customer Interface

Though all wine industry customers in PG&E's service area are eligible for the WIES Program, D&R will specifically market the Program within the priority counties highlighted in Table 4-1. D&R will request assistance from PG&E in identifying and targeting customers and will work closely with PG&E's account managers if applicable to develop its target list and disseminate information directly to assigned customers that reside in the target counties. For customers that are not assigned, or if PG&E outreach assistance is not possible, D&R will work through existing marketing channels and industry groups to reach individual small to medium wine industry customers. Specific marketing activities to present and distribute Program information within target counties and to target customers will be outlined in D&R's WIES Program plan. These activities will include Program presentations at industry group workshops, meetings or conferences, and one-on-one meetings. In addition to personal outreach and presentations, D&R will provide information through its Web site and/or the Flex Your Power Web site as a means for customers to learn about the Program and have a way to contact D&R should a customer be interested in participating.

Once direct contact is made with an individual customer, D&R will ask a series of questions to evaluate whether or not a real opportunity exists to implement efficiency projects at the customer's facility and if the customer intends on pursuing and implementing building or process improvements. Upon verification that the prospect is a good candidate for the Program, D&R will work with the primary customer contact to meet with other customer decision makers as necessary to authorize participation in the Program and secure a PPA. The PPA is the official document that commits the customer to the Program and initiates the delivery of Program services. D&R will make certain that the customer is clear on the obligations outlined in the PPA and that Program participation includes committing to installing one or more energy efficiency projects recommended in the energy management report.

D&R will meet with each Program participant on an ongoing basis to obtain data required to evaluate the customer's facility or facilities, conduct facility audits and develop and present the energy management report. D&R will also meet with other customer decision makers to help educate them on the information outlined in the report and influence the customer to agree on an

implementation strategy that meets the needs of the customer and achieves the objectives of the Program.

One benefit of D&R's approach through direct project implementation assistance is the knowledge and experience wine industry customers will gain in understanding how to evaluate, develop and manage energy efficiency upgrades in a consistent and comprehensive manner. Through ongoing interface during project development and implementation, customers will gain an appreciation of the technical and process management requirements of each project, and will be better equipped to adopt a similar approach beyond the life of the WIES Program.

13. Energy Measures and Program Activities

13.1 Prescriptive measures. Measure details are included in the cost-effectiveness calculator.

13.2 kWh Level Data. Measure details are included in the cost-effectiveness calculator.

13.3 Non-energy Activities

13.3.1 End-use Load (if applicable)

13.3.2 Targeted Sector
Agricultural and Food Processing

13.3.3 Activity Description
Customer recruitment, marketing, energy audits, benchmarking, facility staff training, Installation Support Services, rebate processing

13.3.4 Quantitative Activity Goals

- Recruit up to 80 small to medium wine industry customers committed to implementing energy saving measures
- Conduct approximately 160 facility audits to increase energy efficiency awareness and identify energy efficiency improvement projects that lead to measurable savings
- Provide Installation Support Services or rebates for approximately 80 projects⁴
- Host wine industry peer group discussions/workshops to provide a forum in which to share knowledge, lessons learned and Program successes

13.3.5 Assigned Attributes of the Activity

13.4 Subcontractor Activities

⁴ The actual number of audits conducted and projects implemented will be determined based on actual savings per project in order to meet Program energy savings goals.

Kenwood Energy: Kenwood Energy will be the primary technical subcontractor on the D&R team, conducting detailed energy audits and developing the energy audit reports presenting them to customers. Kenwood Energy will also serve as a technical advisor to the D&R team and assist D&R in educating participating customers on energy efficiency and self-generation technologies.

The Green Building Studio: The Green Building Studio, Inc., provides web-based tools and analytical services that help architects and engineers cost-effectively integrate energy efficiency and green building concepts into project design. D&R will work closely with GBS to provide building simulation models and technical support in the development of customer strategic energy management plans that specify equipment upgrades and incorporate sustainable building technologies and practices.

13.5 Quality Assurance and Evaluation Activities

D&R will submit a Quality Assurance and Measure Verification Plan as required by PG&E. The Plan will address the procedures associated with both D&R's Installation Support Services incentive and the direct rebate incentive.

In the case of Installation Support Services, D&R will support the customer in establishing project requirements and developing a bid package, which may include equipment specifications, general Terms and Conditions, Bidder instructions, a Bid Sheet, bidder minimum qualifications, bond requirements, a sample contract and project details. D&R may also support the customer throughout the bid process, which may include leading the pre-bid walk, answering bidder questions, and evaluating the bids once they are received. D&R may meet with the customer's staff once bids are received to discuss the bids, the bidder's qualifications, and assist in bidder selection. Upon the customer's selection of the winning bidder for each installation, D&R may assist the customer in reaching contractual agreement with the bidder and assist in managing the project. Project management will include development of implementation schedules, weekly reporting of progress and status, development of punch list items, and 100 percent onsite inspection of installed equipment for final installation approval to ensure that both the equipment and installation procedures meet the specified requirements. D&R will conduct quality assurance and verification procedures for 100 percent of the projects.

In the case of rebates paid directly to the customer, D&R will specify the product and installation standards when the measures are reviewed by the customer so he or she is clear on what is required in order to be reimbursed. D&R will require that the customer provide technical equipment specifications that verify the performance of the equipment to be installed prior to the purchase of the equipment. D&R will ensure that the equipment meets efficiency standards that are consistent with PG&E's energy efficiency programs. Once the equipment has been approved, purchased and installed by the customer, D&R will request proof of purchase and conduct a site inspection to verify that the equipment is installed and in operation. Once approved, D&R will process the rebate paperwork, process the rebate check and deliver the check to the customer.

13.6 Marketing Activities

The success of the WIES Program will rely on a focused, direct marketing strategy that identifies high potential Program participants and secures a commitment from each customer to implement energy efficiency upgrades. The Program will focus on small to medium wine industry customers that have not actively participated in energy efficiency programs in the past and have not evaluated or pursued a full range of energy efficiency upgrades due to lack of knowledge, time or experience.

Initial marketing efforts will focus primarily on developing a preliminary customer target list. D&R seeks to work with PG&E representatives who serve the regions identified by D&R as having the greatest opportunity for Program participation to acquire customer information and leverage existing customer relationships in disseminating Program information. D&R will try to align outreach efforts with PG&E, other program implementers and service providers to enhance consistency in program offers, coordinate program services where applicable, prevent customer confusion, and present clear information on energy efficiency program services and benefits. D&R will maintain ongoing communications with PG&E staff and hold regular update meetings to share Program referrals as appropriate and limit redundancy in customer communications during the marketing and outreach phase of the Program. D&R will report initial contacts to PG&E Account Services and/or the energy efficiency clearinghouse, as specified by PG&E, to ensure overall coordination in program delivery, and will keep PG&E staff apprised of outreach activities undertaken as needed.

D&R will also identify and pursue wine industry marketing channels and network with industry groups to promote the Program. D&R will develop a list of organizations and industry events that will serve as effective avenues to present the Program and provide direct access to the small and medium wine industry customers. These organizations include the California Sustainable Winegrowing Alliance, the Napa County and Sonoma County Winery Associations and the Central California Winegrowers Association. D&R will also seek opportunities to coordinate marketing and outreach efforts with other third party programs or service providers that work with the wine industry sector. The customer and industry information collected through these efforts will be used to inform and update the Program database used during the marketing phases of the Program.

As part of the initial Program launch, D&R will provide Program information to the statewide Flex Your Power program and seek ways to incorporate Program information on PG&E's Web site so that potential customers can be referred to the Program through these avenues.

A WIES Program brochure will be developed to distribute through service provider networks, during industry group presentations and directly to end-use customers during face-to-face meetings. The brochure will serve as a Program overview that describes the Program and its benefits, defines customer eligibility and provides a means for interested customers to contact D&R to receive additional information or sign up for the Program.

In addition to the brochure, D&R will develop and maintain Program information on its Web site. The Web site will contain information similar to that found in the Program brochure and will, over time, contain Program updates, customer testimonials and success stories about customers actively participating in the Program.

As part of the preliminary marketing and outreach activities, D&R will develop specific criteria to determine customer eligibility for participation in the Program. Screening questions will be developed and used during initial Program discussions with prospective customers to determine the type of project opportunities that may be available and to evaluate the probability for project success with customers who show interest in the Program. Once D&R and the customer determine that there are opportunities worth examining further, D&R will outline the preliminary steps the customer and D&R will take to secure the customer's participation in the Program and explore the potential to implement energy saving measures. The screening questions will allow D&R early on to gauge the customer's intentions, determine Program applicability, and target Program services to customers and projects that will potentially provide the highest return for the dollars invested. Since not every outreach activity or customer interface will lead to a signed PPA, D&R will document and monitor all marketing and outreach activities on the Program database and continue to provide Program information should circumstances change and the customer chooses at a later date to participate in the Program.

14. Conclusion

Rising energy costs, dramatic growth in the wine industry and an increased interest in sustainable wine growing practices among vintners and growers all make this an opportune time to implement an effective and comprehensive program targeted to small and medium wine industry stakeholders.

The Wine Industry Efficiency Solutions Program will lead to a greater understanding among vintners and wine grape growers of the benefits of incorporating a full menu of cost-effective energy efficiency measures and practices into their business operations. This will result in additional peak demand and energy savings. D&R brings a high level of marketing skills, technical skills and program management and implementation expertise to the program to achieve the anticipated results outlined in this proposal.