

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



June 30, 2010

Advice Letter 3080-G-A/3596-E-A

3080-G-A/3596-E-A

Brian Cherry
Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street Mail Code B20C
P.O. Box 770000
San Francisco, CA 94177

Subject: Energy Division Disposition on Above Referenced Advice Letter

Dear Mr. Cherry:

Advice Letter 3080-G-A/3596-E-A is approved. The effective Date of this Advice Letter is March 5, 2010.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julie A. Fitch'.

Julie A. Fitch, Director
Energy Division



February 23, 2010

Advice 3080-G-A/3596-E-A

(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

**Subject: Green Pathways Pilot Program Supplemental Advice Letter Pursuant
to D.09-09-047**

Pacific Gas and Electric Company (PG&E) hereby submits its Green Pathways Pilot Program supplemental Advice Letter (AL) for its 2010-2012 Energy Efficiency (EE) Portfolio in compliance with Decision (D.) 09-09-047, Ordering Paragraph (OP) 20 and other directives of the Decision. This supplemental advice letter is being filed at the request of Energy Division and replaces in its entirety Advice 3080-G/3596-E. A revision-marked copy of this supplemental advice letter and Attachment A, Green Pathways Pilot Program Performance Metrics, are attached as Attachment C.

Purpose

OP 20 of the EE Decision directed the investor-owned utilities (IOUs) to file an advice letter for all approved pilot programs within 120 days after the decision's effective date. Submitted for approval, this compliance advice letter (AL) provides details for PG&E's Green Pathways Pilot Program within the Statewide Workforce Education and Training (WE&T) Program.

Background

On July 21, 2008, PG&E and the other IOUs filed their 2009-2011 EE portfolio applications. On September 18, 2008, the California Public Utilities Commission (Commission) adopted the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) in D.08-09-040. Following Energy Division (ED) review of the portfolio applications, PG&E and the other IOUs amended their applications on March 2, 2009, in compliance with the Strategic Plan and as directed through a series of Commission rulings. Per D.09-05-037 issued May 21, 2009, PG&E and the other IOUs supplemented their portfolio requests on July 2, 2009. On September 24, 2009, the Commission issued D.09-09-047 adopting three-year portfolio budgets for 2010-2012

for each IOU. The adopted budget for PG&E is \$295 million less than the requested budget in its July 2, 2009 filing.

In accordance with OP 15 of the EE Decision, PG&E filed its compliance advice letter (AL) 3065-G/3562-E, which proposed, in part, detailed program budgets for the 2010-2012 EE portfolio. The Green Pathways Pilot Program is \$1.4 million of PG&E's total \$4.1 million WE&T Connections budget, which is proposed in the compliance AL. On December 18, 2009, the ED suspended the AL stating, however, that the suspension should not delay program implementation effective January 1, 2010.

Ordering Paragraph 20 directed the IOUs to file Pilot Program ALs and specified the content required for these advice letters. The table below outlines the compliance items for this Green Pathways Pilot Program Advice Letter and indicates the section covering each compliance item.

Cite	Compliance Item	AL Section
OP 19	The following energy efficiency pilot program of [PG&E] are approved, subject to the requirements listed in ordering Paragraph 20: PG&E's ZNE Pilot Program, PG&E's Innovator Pilots, PG&E's Green Communities program...and WE&T Pilot Programs (Building Commissioning Workshop Series, Residential HVAC Seminars, Comprehensive Evaluation of Food Svc. Center, Green Pathways...)	
OP 20, Section 4.3	The utilities shall file an Advice Letter for each approved "Pilot Program" containing the following elements:	
	1. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs	Program Description
	2. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation	Supporting the Strategic Plan
	3. Specific goals, objectives and end points for the project	Goals and Objectives
	4. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed	Program Description Testing New and Innovative Design and Partnerships
	5. A clear budget and timeframe to complete the project and obtain results within a portfolio cycle-pilot projects should not be continuations of programs from previous portfolios	Budget
	6. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes be measured	Attachment A

Cite	Compliance Item	AL Section
	7. Program performance metrics following the methodology outlines in OP11:	Metrics Attachment A
	8. Methodologies to test the cost-effectiveness of the project	Program Description Methodologies to Test Cost Effectiveness
	9. A proposed EM&V plan	EM&V Plan
	10. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all CA utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage	Identifying and Disseminating Best Practices and Lessons Learned
OP 11	“[IOUs] shall jointly file a “Program Performance Metrics” Advice Letter requesting approval for their proposed logic models and metrics, with sections for each statewide program (and associated sub-programs) within 120 days of the effective date of this decision. In their filing, [IOUs] shall include a completed Program Performance Indicator Worksheet for each energy efficiency statewide program and associated sub-program (see Appendix 2). In addition, the Advice Letter filing shall include for each statewide program (and associated subprograms): a. completed Program Performance Indicator Table as depicted in Appendix 2; b. An updated program logic model as indicated in the Program Performance Indicator Worksheet; c. A discussion to specifically address the extent to which each program and sub-program plan included an end game for each technology or practice that transforms building, purchasing, and use decisions to become either standard practice, or incorporated into minimum codes and standards;	Metric Attachment A Attachment B

PROGRAM DESCRIPTION

Career Pathway Awareness Gap: Connecting Professionals with Students and their Educators

In the next fifty years, business, industry and government will be faced with the unprecedented sustainability challenge of stabilizing carbon emissions. To be successful, employers will need to attract bright young minds and harness their vision and creative energy to promote and generate innovative solutions. However, today's young people and many of their teachers and counselors largely lack awareness of the diverse and interesting green work opportunities emerging in business, industry, and government.

Practicing professionals are in an excellent position to identify existing needs and challenges on their industry horizons and to help young people explore potentially satisfying and productive careers that respond to these challenges. Green Pathways will develop and promote a user-friendly virtual communications platform and adaptive curriculum that will enable students, teachers, and professionals to exchange timely information and advice about existing and new careers in the emerging green economy. Without such a platform, students and teachers would be unlikely to obtain information in a single location on current and future needs in innovative green careers. As a further benefit, this pilot program model is designed for cost-effective replication throughout the state.

High School Program Gap

Programs for younger students in elementary and middle schools sponsored by California's IOUs have been implemented successfully for many years. The Energenius Program is a Grade K–8 curriculum program addressing energy, energy efficiency, and the environment. However, IOU programs have not targeted WE&T efforts beyond the middle school level.

To fill this gap, the Green Pathways Program will leverage PG&E's experience in developing and delivering energy education to create and pilot an education program tailored to the needs of high school students. Specifically, Green Pathways will comprise:

- An interactive website, network-based communications, and a career development curricular framework that will connect a virtual community of high school students, teachers, and career counselors with professionals from industry, government, academic institutions and nonprofit organizations;
- Curriculum that explores the landscape of energy-related fields, such as the environment, energy efficiency, renewable energy, and water conservation, that will guide young adults to identify career options and develop strategies toward work in the green economy;
- Real-world examples that will make coursework in math, science, communications, and behavior more relevant to high school students. This information will be captured in student career research and will emerge through communication with practicing professionals; and
- A collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

Green Pathways will provide the following benefits:

- Link and leverage current and potential partners and programs within PG&E, other California IOUs, and a broader range of market segments; and
- Bridge programs serving younger students with expanding Green Jobs programs for young adults, such as Green Academies (CDE), vocational career technical education (CTE) programs at high schools and community colleges, the Green Job Corps established by Governor Schwarzenegger, research and degree

programs at universities, and private and public Green Job partnerships funded by industry and federal stimulus dollars.

Recruiting Engagement of Industry and Education Professionals

The Green Pathways program is uniquely positioned to cultivate communication between key groups: students and education professionals in Grades 9-12, industry sectors, and education and training sectors. Its goal is to facilitate the exchange of ideas and information about what is both known and anticipated regarding green careers in the coming decade.

Green Pathways will invite and market to industry representatives, technical training providers and institutions of higher education to share information with students about emerging green careers. These representatives will share preparation strategies and resources as well as short and long-range challenges and opportunities within their sector. Green Pathways will identify subject matter experts through existing contacts and professional network programs, advisory group member referrals, and contacts made while attending energy related conferences and meetings throughout California. Further, the pilot will involve the talent and resources within PG&E by partnering with PG&E's Pacific Energy Center's Education & Training and Employee Volunteer Programs. Green Pathways will also be listed on PG&E's integrated education programs' website to generate interest and participation. As the program develops, industry and education professionals will be targeted through the dissemination of program information through print and web-based communications such as blogs and other social media. These avenues for outreach will be expanded further through third party referrals from the above sources and personal and professional networking.

The program will offer multiple formats for the participation of subject-matter experts including completing "Green Opportunities" information web forms, responding to interview questions, and participating in web-based dialogues. Green Pathways will create an interactive environment that enables all stakeholders to explore current and projected challenges and opportunities. Opportunities will be framed to maximize the professionals' time and will be geared to meet the goals of their respective institutions.

Addressing the Gap Cost-Effectively through a PG&E Program

The utility-sponsored Grades K–8 education programs and the training provided at PG&E's energy centers has firmly demonstrated PG&E's ability to develop and cost-effectively deliver energy education programs. Building on this legacy, the Green Pathways program is designed to provide a scalable, accessible, and cost-effective program to California young adults in at high school level. Key aspects of the program to support cost-effectiveness include:

- A portable curriculum and activity plan co-developed by participating schools and other stakeholders that can be easily adapted to a variety of learning goals and environments in schools and communities throughout California;
- A technical infrastructure capable of serving very large numbers of students and stakeholder partners through cutting-edge electronic and networked communications;

- A web-based repository of content that can be maintained remotely and updated by distributed stakeholders to keep information current and relevant;
 - Green Pathways will create an organizing structure to manage career information. The content will be organized around a career taxonomy developed by the program and through the use of user-generated tags.
 - Content can be contributed by subject matter experts and Green Pathways students researching green careers.
 - Users will contribute content using a format developed in collaboration with participants and teachers.
 - All content will be reviewed according to guidelines such as those used by Wikipedia.
 - Contributors can login to update and edit information, to maintain currency.
- Web-based dialogues that support structured and informal communication between students and practicing professionals without incurring the expense associated with time away from work or travel; and
- Leveraged linkages to school, community, nonprofit, government and industry efforts to speed California's transformation to energy efficiency and sustainability through civic and economic activities.

The Green Pathways pilot program will be marketed through high schools and community based organizations (CBOs) in the targeted regions; local chapters of professional education associations such as science teachers; extra-curricular programs such as green clubs at schools; and through social media such as Facebook.

Supporting the Strategic Plan

While advancing numerous Strategic Plan goals, Green Pathways focuses primarily on the Workforce Training and Education vision as described in Section #9, Goal 1: Establish energy efficiency education and training at all levels of California's educational system. Key Action 1-5: Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields of the Strategic Plan. As described above, Green Pathways addresses this goal through a number of components:

- A unique, collaborative community that links students with green job education and links while leveraging the needs and opportunities of the five educational sectors: Grades K-12, adult education and community colleges, technical training, colleges and universities, minority, low income, and disadvantaged communities.
 - The Green Pathways program will target high schools in pilot regions having feeder middle schools that are participating in PG&E's Energenius program.¹

¹ PG&E's Energenius Program teaches kids to use energy wisely and safely with interactive, engaging programs for grades kindergarten through eight. (For more information, please visit <http://www.pge.com/Energenius/>.)

- It will invite participation from community colleges and universities as both a green career resource for students and an educational resource for prospective students.
- By collaborating with community-based organizations working in at-risk communities and encouraging effective preparation for green careers the Green Pathways pilot expects to expand its reach as well as gain an understanding of how the program and services might be framed to serve diverse populations.
- Green Pathways focuses on high school youth bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities.
 - By creating a green career learning community the Green Pathways program will cultivate a broad set of interconnected stakeholders, high school and college students, and a range of industry and education professionals. Each group will contribute to the community's collective development and understanding of current and emerging green careers.
 - The program will explore with teachers various strategies to encourage students to reach out to the middle schools they attended previously to share information about Green Pathways and generate interest in pursuing green careers.
 - Social media will be explored as an avenue to reach and engage students.
 - Green Pathways will identify colleges, universities and vocational programs in target regions. It will build relationships with these entities in order to share information about the educational opportunities within the region and to inform their students about exciting green opportunities elsewhere.
- The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

Testing New and Innovative Design and Partnerships

Green Pathways builds on established and emerging programs in education, industry, government and other sectors, yet incorporates several innovations:

- Green Pathways will create and nurture a web-based “virtual community” and develop communication methods that will link students and teachers with each other in addition to practicing and retired professionals for industry training and higher education. In so doing, this virtual community will foster new partnerships to serve the unmet needs of high school students. This virtual community will be a vital and dynamic core element of the Green Pathways project geared towards young people's comfort and dexterity with new forms of social media communication and engagement.
- Green Pathways will provide students with opportunities to become active participants in California's transformation into energy efficiency. Participating youth will be encouraged to conduct research, educate others, and advocate energy efficient strategies and new green career pathways. The web-based dialogue platform and site will enable California high school students to

exchange ideas and information with industry and education stakeholders without the financial and environmental limitations and expenses associated with physical travel.

- Green Pathways will create a program activity model with a curricular framework characterized by flexibility and accessibility. These features make this model more adaptive and likely to be replicated to scale throughout the state. This process will not result in a lengthy, cumbersome or costly program that requires large grants or extensive staff training to implement at school sites already wrestling with competing social and educational imperatives.

Methodologies to Test Cost Effectiveness

As described above, Green Pathways will employ a number of cost-effective approaches. However, it is modeled as a non-resource program and does not have quantified savings. The cost is also included in the overall cost effectiveness test for the portfolio. PG&E will participate with ED and other stakeholders in developing methodologies for determining the cost-effectiveness of meeting non-energy-related objectives.

Identifying and Disseminating Best Practices and Lessons Learned

Green Pathways will employ many strategies for identifying and disseminating best practices and lessons learned from the pilot program to all California utilities. Pilot program results will be transferred to other WE&T programs and eventually form a model for career counseling in the conventional education system to inspire high school students to seek careers in sustainable enterprises. Strategies for identifying and disseminating best practice include the following:

- Publications regarding program findings;
- Hosting of web-based dialogues with partners, collaborators, and stakeholders to discuss findings and broaden reach (California utilities, stakeholders, collaboration, education and industry sectors);
- Presentations at meetings and conferences;
- Information on Green Pathways, PG&E, partners, and collaborators websites;
- Co-branding Green Pathways with program partners and corporations in relevant industry sectors; and
- PG&E will apply the results of EM&V activities to develop lessons learned. These lessons learned will be used to refine the program as it moves forward and expands, and as appropriate, will be shared as best practices.

To prepare for scaling strategy development of the program's post-pilot statewide expansion, program implementers will provide a plan by the end of the 4th quarter of 2011 to inform post-pilot statewide expansion. Elements of this plan will include:

- Creation of additional dialogue targeting industries/sectors of particular interest to other California IOUs;
- Expansion of service/offers through key organizations and educators/groups and social networks;
- Expansion to statewide members of initial partner organizations;

- Partnerships with related school and community programs providing energy efficiency and sustainability information; and
- Communication strategy with practicing professionals and high school educators throughout California regarding how Green Pathways' content may enhance existing course curriculum.
- To expand the program, Green Pathways will cultivate partnerships, and co-funding efforts with IOUs, corporations, and interested government agencies and organizations. It may collaborate with education initiatives addressing green careers such as California Department of Education Green Academies, PG&E's New Energy Academies and high school and community colleges receiving Career Technical Education (CTE) funding. Many CTE sites are involved in developing student interest in and planning green careers. Local efforts to develop and expand the Green Pathways program are expected to include collaborations with Work Force Investment Boards in targeted areas, foundations and other community based organizations focusing on economic and green development.

Goals and Objectives

Goals of the Program include the following:

- Create a collaborative virtual community of committed youth and adults focused on increasing the number of high school students in California who choose to pursue vocational and professional green careers and civic and community service that accelerate California's transformation into an energy efficient and sustainable society.
- Develop a program model that includes templates for each aspect of the Green Pathways' process in order for the program to be economically expanded to serve students throughout the state. The Green Pathways program will include of steps, or phases designed to guide students through the process of learning about and developing a green career plan such as: 1) assessing one's skills, talents, and interests; 2) researching green careers; 3) understanding the principles of career self reliance; and 4) how to develop an effective career plan. Information about each phase will be organized in a "template" to create an infrastructure for publication on the website and communication with students and adult leaders. For example, each aspect of the program will include the learning goal, key information, assignments for students, tips for teachers, reference resource/s and how this phase informs the students' career path. The consistent treatment of each aspect will contribute to future automation for eventual scalability. Green Pathways will test the model in representative education and community settings with a diverse sample of students and other stakeholders to position the program for statewide rollout and adoption.

Objectives of the Program include the following:

- Create an interactive website: to serve as an information and communication hub for the Green Pathways program. The website will provide youth-friendly program

information, climate, energy, and career reference resources, schedules and links to dialogues and social media, and private portfolios for youth to track their information and progress. The site will include evaluation feedback forms and track user activities.

- Develop a network-based “student-savvy” communication strategy: to enable professionals in industry and education to discuss green careers and required training and education preparation with small and large groups of students. These dialogues will be structured and framed to evolve a template that will enable future dialogues to be developed and produced more economically. The structure will include features to aid in mining content to capture “big ideas” for wider distribution.
- Create a career development curricular framework: to provide students with the information and resources they need to plan a green career path to advance themselves into rewarding careers in the energy services fields. The framework will include individual assessments, information on current and emerging green careers, career planning strategies and group coaching to support the research and thought needed to compose one’s career path.
- Pursue iterative green pathway program implementations: to conduct a minimum of three iterations of the Green Pathways program within two to three PG&E regions. Test implementations in multiple education and community settings. Engage a diverse mix of students and partners. Seek the broadest possible experience in preparation to expand program offerings and scale throughout California. The total number of participants will be determined once the budget is finalized.
- Market and conduct outreach in targeted regions: by strategically identifying and selecting high schools and community colleges that demonstrate active need and interest in each target region. Schools will be selected based on regionally relevant and diverse group of participants and mix of education and community settings. The program will target teachers who are interested or seeking to engage in providing students with green career information and planning.

This program is expected to continue and expand beyond the three-year EE portfolio cycle. However, program advances and the funding provision from other sources could reduce or eliminate the need for ratepayer funding beyond the portfolio cycle. Any of these scenarios are possible:

- The Commission will approve funding for statewide expansion in continued support of the Strategic Plan;
- California IOUs adopt Green Pathways as their workforce and career development program for youth;
- Green Pathways is integrated or leveraged with existing and developing energy efficiency high school and higher education programs such as New Energy Academies and Green Academies;
- Corporate sponsorship supports ongoing innovation and expansion; and

- State or federal grants support expansion.

Budget and Timeline

Three-Year Budget: \$1,433,928, including PG&E program support.

- Year 1: \$503,000
- Year 2: \$528,000
- Year 3: \$402,928

The following proposed timeline assumes timely approval of this AL and is subject to final contract negotiations.

Proposed Deliverables	2010	2011	2012
Task 1: <u>Pilot project planning, administration, stakeholder engagement and communication.</u>			
1.1. Submit project plan and timeline including progress report templates, schedule for program review, and plan for external organization participation.	2010: Q2		
1.2. Hold annual advisory group meetings with representative participant stakeholders.	2010: Q3	2011: Q2	2012: Q2
1.3. Preliminary report outlining the challenges, opportunities and recommended plan and schedule for future expansion.		2011: Q4	
1.4. Final project report capturing highlights, evaluation data and lessons learned from the pilot.			2012: Q4
1.5. Cultivate stakeholder engagement using ongoing outreach and communication strategies. Presentations at education and industry meetings and conferences.	ongoing	ongoing	ongoing
1.6. Disseminate GP information through PG&E, the California Department of Education, WestEd, and stakeholder websites. Host informational webinars to highlight and lessons learned from the pilot to all California utilities and stakeholders for consideration for statewide expansion.			2012:Q1-Q4
Task 2: <u>Evaluation.</u> Develop a written plan documenting the evaluation criteria and assessment process. Incorporate PG&E evaluation criteria as needed. Conduct program evaluation activities on each implementation, synthesize information, and prepare final report.	2010:Q2-Q4	2011:Q1-Q4	2012:Q1-Q4
Task 3: <u>Develop an interactive website that will serve as the Green Pathways information and communication hub among stakeholders.</u> The site will include the Web Dialogues communication platform modified to meet Green Pathways functional and stakeholder requirements. Development will follow an iterative model that will create initial small sections of the sites so that stakeholders can define their needs, preferences, and functionality and design goals as they participate in research and curricular development activities.	2010:Q3-Q4	2011:Q1-Q4	

Proposed Deliverables	2010	2011	2012
Task 4: <u>Green Pathways career development curriculum that provides students with the information and resources they need to plan their green career path.</u> Create the Green Pathways curricular plan and development strategy. Conduct stakeholder research through Web Dialogues and other information gathering activities. Develop the curricular plan and web-based communication and delivery strategy incorporating findings from stakeholder research. Integrate and communicate the Green Pathways content with web-based resources. Create a Climate 101 informational presentation for inclusion on the Website. Initiate development of a repository of green career information and resources available in conjunction with the Green Pathways website.	2010:Q3-Q4	2011:Q1-Q4	
Task 5: <u>Regional Green Pathway Program Implementations.</u> Conduct the Green Pathways program within two to three PG&E regions. Test implementations in multiple education and community settings with a diverse mix of students and partners.			
5.1.a. Develop marketing and recruitment plan and associated collateral.		2011:Q2-Q3	
5.1.b. Conduct Green Pathways marketing and recruitment activities.		2011:Q3-Q4	2012:Q1-Q3
5.1.c. Select Green Pathways program series participants.			2012:Q1-Q4
5.2. Conduct beta test of Green Pathways program series and two full implementations including tools, orientation, and guidance.		2011:Q4	2012:Q1,Q4

Metrics

Program performance metrics are show in Attachment A.

Logic Model

The program logic model is shown in Attachment B.

EM&V Plan

PG&E proposes to develop specific research scopes of work and priorities in accordance with the directives set forth in the upcoming Commission decision on EM&V issues and/or through collaboration between the IOUs and Energy Division. In the Decision, the Commission deferred resolution of various EM&V issues to a subsequent decision on EM&V. (See D. 09-09-047, pp. 301-04 and OP 60). The Decision also deferred issues included a clarification of the respective EM&V roles and responsibilities for ED and the IOUs in addition to the actual allocation of the EM&V budget. PG&E proposes further development of its EM&V plan upon Commission resolution of these pending issues in the upcoming EM&V decision.

PG&E will support ED in developing an EM&V plan that will support development and dissemination of best practices and lessons learned and development of cost-

effectiveness methodologies tied to achievement of non-energy program objectives as described in the Strategic Plan and program performance metrics currently being developed.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **March 1, 2010**, which is **6** days after the date of this filing. PG&E is requesting this shortened protest period consistent with guidance from the Energy Division. Comments will be restricted to the revisions made to the original advice letter. Protests should be mailed to:

CPUC Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Avenue
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: jjn@cpuc.ca.gov and mas@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Effective Date

PG&E is filing this supplemental advice letter to be effective **March 2, 2010**, which is **7** days from the filing date. PG&E is requesting this shortened review period due to the fact that there were no protests of PG&E 3080-G/3596-E that sought to delay its implementation. Further, the supplemental information provided here does not change the scope or intent of the program. This supplemental advice letter clarifies certain program information per the Energy Division's request.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list and all electronic approvals should be directed to email PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

Handwritten signature of Brian Cherry in cursive script.

Vice President, Regulatory Relations

Attachments:

Attachment A: Program Performance Metrics

Attachment B: Logic Diagram

Attachment C: Revision-marked Copies of Advice Letter and Attachment A

cc: Service List A.08-07-021

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:

☒ ELC ☒ GAS

☐ PLC ☐ HEAT ☐ WATER

Contact Person: Olivia Brown

Phone #: 415.973.9312

E-mail: oxb4@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas ☐

PLC = Pipeline

HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 3080-G-A/3596-E-A

Tier: 2

Subject of AL: Green Pathways Pilot Program Supplemental Advice Letter

Keywords (choose from CPUC listing): Compliance, Energy Efficiency

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.09-09-047

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: N/A

Resolution Required? ☐ Yes ☒ No

Requested effective date: March 2, 2010

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division

Tariff Files, Room 4005

DMS Branch

505 Van Ness Ave., San Francisco, CA 94102

jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Brian K. Cherry, Vice President, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

ADVICE 3080-G-A/3596-E-A

Attachment A:

Program Performance Metrics

Attachment A

Green Pathways Pilot Program Performance Metrics

Program Performance Metrics identified for this pilot will be developed in coordination with the broader program performance metric development effort as described in D.09-09-047.

Green Pathways Program

1. Include a list of the utility and program administrator staff directly involved in deriving the program performance indicator metric. Include their title and contact information.

Pam Murray

- Telephone: (415) 972-5416
- E-mail: Pmw2@pge.com

2. Describe each program performance indicator being proposed for this program. Indicate in a description for each, what type of performance indicator it is (see attached above). If the program indicator is being changed from an already approved program indicator indicate why the change is necessary. Provide additional analysis that adequately justifies the need to revise the metric as an attachment to this worksheet.

Proposed metric: Adherence to program implementation deliverable schedule

Baseline: Zero deliverables produced at program inception.

3. For each program performance metric being proposed, indicate why you have selected them including how the metric meets the SMART convention (Specific, Measurable, Actionable, Relevant, Timely)

- Specific: Provide data on meeting program development and implementation schedule
- Measurable: Results can be tracked by program staff
- Actionable: Action can be taken based on reported progress
- Relevant: It is direct measurement of program activities and results
- Timely: Results can be reported on a quarterly basis

4. State the program mission. The program mission is the basic purpose of a program, its reason for existing, and the general means through which it will accomplish its purpose in view of overarching goals and objectives (CEESP, BBEES, CPUC EE Goals).

The Green Pathways Program will leverage PG&E's experience in developing and delivering energy education to create and pilot an education program tailored to the needs of high school students. Specifically, Green Pathways will comprise:

- An interactive website, network-based communications, and a career development curricular framework that will connect a virtual community of high

- school students, teachers, and career counselors with professionals from industry, government, academic institutions, and nonprofit organizations;
- Curriculum that explores the landscape of energy-related fields (such as the environment, energy efficiency, and water) and guides young adults to identify career options and develop strategies toward work in the green economy;
- Real-world examples that will make coursework in math, science, communications, and behavior more relevant to high school students. This information will be captured in student career research and will emerge through communication with practicing professionals; and
- A collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

5. Describe the program performance goals (both internal and external), standards, and/or benchmarks. Program goals should support the programs' overall mission and are general statements about the results to be produced by the program. If program goals are being revised from previous program goals indicate why the change is necessary providing additional analysis to justify the change.

CEESP Section 9 (Workforce Education & Training) – Goal 1

Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.

6. Describe the critical work processes, program requirements, and critical results desired (both internal and external) linked to promotion of the program mission and goals above.

CEESP Section 9 (Workforce Education & Training) – Goal 1

As described above, Green Pathways addresses this goal through a number of components:

- A unique, collaborative community that links students with green job education and links and leverages the needs and opportunities of the five educational sectors: K-12; adult education and community colleges; technical training; colleges and universities; and minority, low income, and disadvantaged communities.
- Green Pathways focuses on high school youth, bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities.
- The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

7. Describe how the proposed program performance metrics are a measure of the critical work processes or critical results identified above.

The program implementation deliverables schedule lays out the process by which high school students will receive energy efficiency education through the program; continued adherence to that schedule is crucial in measuring the success of the critical work processes.

8. Describe what the program objectives are. Program objectives are the specific milestones and targets to be achieved to which the proposed program performance metrics seek to measure. Program objectives should be chosen that promote accomplishment of the program goals and should meet the SMART convention described above. If the program objectives are being revised from previous program objectives indicate why the change is necessary. Provide additional analysis to justify this change.

Adherence to program implementation deliverable schedule

- All deliverables produced on schedule.

9. Describe how the metrics will be collected, what data source they will come from, and how they will be tracked and reported.

Data will come directly from utility program tracking database.

10. Attach a program logic model that graphically represents what has been described in this worksheet. Logic models should depict the flow between program activities, their outputs, and subsequent short term, intermediate, and long term outcomes as well as how program elements are linked and the influence of external influences. Proposed program performance indicators should be incorporated at the appropriate locations within the logic model indicating what program activities and outcomes within the model will be measured both internal and external to the program (see example above).

See Attachment B for program logic model.

11. Include a completed Program Performance Indicator Table as an attachment to this worksheet

See Table below.

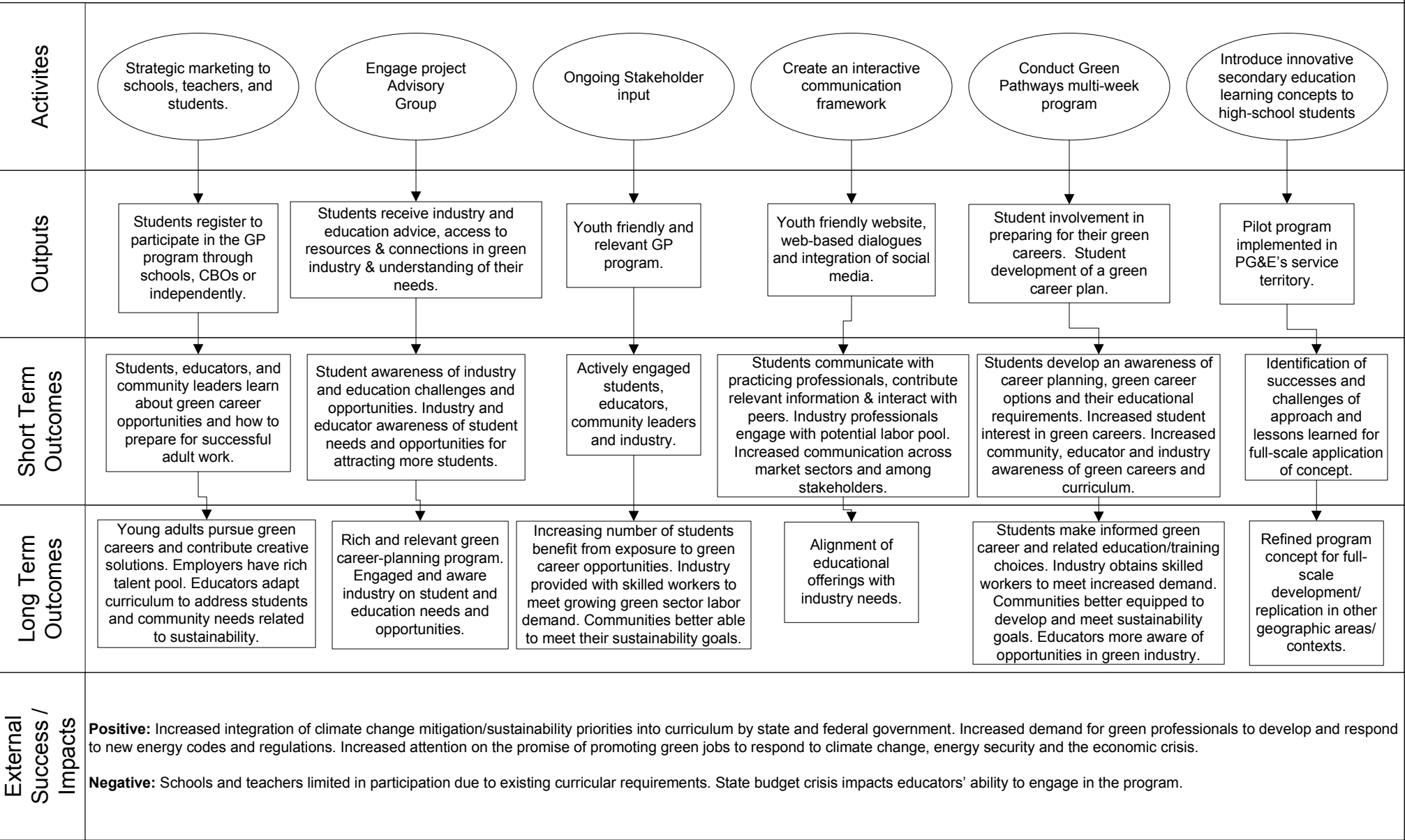
Green Pathways Performance Indicator Table

Program Sector	Program Name	Program #	IOU Program Goals	Strategic Planning Strategy	2010-2012 Strategic Milestones	IOU Proposed Metrics
WE&T Program	WE&T Connections Sub-program	PGE210921	Strategic Plan Section 9 (WE&T) – Goal 1 Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.	Strategic Plan Section 9 (WE&T) – Goal 1 As described above, Green Pathways addresses this goal through a number of components: • A unique, collaborative community that links students with green job education and links and leverages the needs and opportunities of the five educational sectors: K-12; adult education and community colleges; technical training; colleges and universities; and minority, low income, and disadvantaged communities. • Green Pathways focuses on high school youth, bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities. • The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders	All deliverables produced on schedule.	Adherence to program implementation deliverable schedule.

ADVICE 3080-G-A/3596-E-A

Attachment B: Logic Diagram

Green Pathways - Logic Diagram



ADVICE 3080-G-A/3596-E-A

Attachment C:

**Revision-marked Copies of Advice Letter and
Attachment A**



~~January 21~~ February 23, 2010

Advice 3080-G-A/3596-E-A
(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

Subject: Green Pathways Pilot Program Supplemental Advice Letter Pursuant to D. 09-09-047

Pacific Gas and Electric Company (PG&E) hereby submits its Green Pathways Pilot Program supplemental Advice Letter (AL) for its 2010-2012 Energy Efficiency (EE) Portfolio in compliance with Decision (D.) 09-09-047, Ordering Paragraph (OP) 20 and other directives of the Decision. This supplemental advice letter is being filed at the request of Energy Division and replaces in its entirety Advice 3080-G/3596-E. A revision-marked copy of this supplemental advice letter and Attachment A, Green Pathways Pilot Program Performance Metrics, are attached as Attachment C.

Purpose

OP 20 of the EE Decision directed the investor-owned utilities (IOUs) to file an advice letter for all approved pilot programs within 120 days after the decision's effective date. Submitted for approval, this compliance advice letter (AL) provides details for PG&E's Green Pathways Pilot Program within the Statewide Workforce Education and Training (WE&T) Program.

Background

On July 21, 2008, PG&E and the other IOUs filed their 2009-2011 EE portfolio applications. On September 18, 2008, the California Public Utilities Commission (Commission) adopted the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) in D.08-09-040. Following Energy Division (ED) review of the portfolio applications, PG&E and the other IOUs amended their applications on March 2, 2009, in compliance with the Strategic Plan and as directed through a series of Commission rulings. Per D.09-05-037 issued May 21, 2009, PG&E and the other IOUs supplemented their portfolio requests on July 2, 2009. On September 24, 2009, the Commission issued D.09-09-047 adopting three-year portfolio budgets for 2010-2012

for each IOU. The adopted budget for PG&E is \$295 million less than the requested budget in its July 2, 2009 filing.

In accordance with OP 15 of the EE Decision, PG&E filed its compliance advice letter (AL) 3065-G/3562-E, which proposed, in part, detailed program budgets for the 2010-2012 EE portfolio. The Green Pathways Pilot Program is \$1.4 million of PG&E's total \$4.1 million WE&T Connections budget, which is proposed in the compliance AL. On December 18, 2009, the ED suspended the AL stating, however, that the suspension should not delay program implementation effective January 1, 2010.

Ordering Paragraph 20 directed the IOUs to file Pilot Program ALs and specified the content required for these advice letters. The table below outlines the compliance items for this Green Pathways Pilot Program Advice Letter and indicates the section covering each compliance item.

Cite	Compliance Item	AL Section
OP 19	The following energy efficiency pilot program of [PG&E] are approved, subject to the requirements listed in ordering Paragraph 20: PG&E's ZNE Pilot Program, PG&E's Innovator Pilots, PG&E's Green Communities program...and WE&T Pilot Programs (Building Commissioning Workshop Series, Residential HVAC Seminars, Comprehensive Evaluation of Food Svc. Center, Green Pathways...)	
OP 20, Section 4.3	The utilities shall file an Advice Letter for each approved "Pilot Program" containing the following elements:	
	1. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs	Program Description
	2. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation	Supporting the Strategic Plan
	3. Specific goals, objectives and end points for the project	Goals and Objectives
	4. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed	Program Description Testing New and Innovative Design and Partnerships
	5. A clear budget and timeframe to complete the project and obtain results within a portfolio cycle-pilot projects should not be continuations of programs from previous portfolios	Budget and Timeline
	6. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes be measured	Attachment A

Cite	Compliance Item	AL Section
	7. Program performance metrics following the methodology outlines in OP11:	<u>Metrics</u> Attachment A
	8. Methodologies to test the cost-effectiveness of the project	Program Description Methodologies to Test Cost Effectiveness
	9. A proposed EM&V plan	EM&V Plan
	10. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all CA utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage	Identifying and Disseminating Best Practices and Lessons Learned
OP 11	"[IOUs] shall jointly file a "Program Performance Metrics" Advice Letter requesting approval for their proposed logic models and metrics, with sections for each statewide program (and associated sub-programs) within 120 days of the effective date of this decision. In their filing, [IOUs] shall include a completed Program Performance Indicator Worksheet for each energy efficiency statewide program and associated sub-program (see Appendix 2). In addition, the Advice Letter filing shall include for each statewide program (and associated subprograms): a. completed Program Performance Indicator Table as depicted in Appendix 2; b. An updated program logic model as indicated in the Program Performance Indicator Worksheet; c. A discussion to specifically address the extent to which each program and sub-program plan included an end game for each technology or practice that transforms building, purchasing, and use decisions to become either standard practice, or incorporated into minimum codes and standards;	<u>Metric</u> Attachment A Attachment B

Program DescriptionPROGRAM DESCRIPTION**Career Pathway Awareness Gap: Connecting Professionals with Students and their Educators**

In the next fifty years, business, industry and government will be faced with the unprecedented sustainability challenge of stabilizing carbon emissions. To be successful, employers will need to attract bright young minds and harness their vision and creative energy to promote and generate innovative solutions. However, today's

young people and many of their teachers and counselors largely lack awareness of the diverse and interesting green work opportunities emerging in business, industry, and government.

Practicing professionals are in an excellent position to identify existing needs and challenges on their industry horizons and to help young people explore potentially satisfying and productive careers that respond to these challenges. Green Pathways will develop and promote a user-friendly virtual communications platform and adaptive curriculum that will enable students, teachers, and professionals to exchange timely information and advice about existing and new careers in the emerging green economy. Without such a platform, students and teachers would be unlikely to obtain information in a single location on current and future needs in innovative green careers. As a further benefit, this pilot program model is designed for cost-effective replication throughout the state.

High School Program Gap

Programs for younger students in elementary and middle schools sponsored by California's IOUs have been implemented successfully for many years. The Energenius Program is a Grade K–8 curriculum program addressing energy, energy efficiency, and the environment. However, ~~little such curricula exist for students~~ IOU programs have not targeted WE&T efforts beyond the middle-school level.

To fill this gap, the Green Pathways Program will leverage PG&E's experience in developing and delivering energy education to create and pilot an education program tailored to the needs of high school students. Specifically, Green Pathways will comprise:

- An interactive website, network-based communications, and a career development curricular framework that will connect a virtual community of high school students, teachers, and career counselors with professionals from industry, government, academic institutions and nonprofit organizations;
- Curriculum that explores the landscape of energy-related fields, such as the environment, energy efficiency, renewable energy, and water conservation, that will guide young adults to identify career options and develop strategies toward work in the green economy;
- Real-world examples that will make coursework in math, science, communications, and behavior more relevant to high school students. This information will be captured in student career research and will emerge through communication with practicing professionals; and
- A collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

Green Pathways will provide the following benefits:

- Link and leverage current and potential partners and programs within PG&E, other California IOUs, and a broader range of market segments; and

- Bridge programs serving younger students with expanding Green Jobs programs for young adults, such as Green Academies (CDE), vocational career technical education (CTE) programs at high schools and community colleges, the Green Job Corps established by Governor Schwarzenegger, research and degree programs at universities, and private and public Green Job partnerships funded by industry and federal stimulus dollars.

Recruiting Engagement of Industry and Education Professionals

The Green Pathways program is uniquely positioned to cultivate communication between key groups: students and education professionals in Grades 9-12, industry sectors, and education and training sectors. Its goal is to facilitate the exchange of ideas and information about what is both known and anticipated regarding green careers in the coming decade.

Green Pathways will invite and market to industry representatives, technical training providers and institutions of higher education to share information with students about emerging green careers. These representatives will share preparation strategies and resources as well as short and long-range challenges and opportunities within their sector. Green Pathways will identify subject matter experts through existing contacts and professional network programs, advisory group member referrals, and contacts made while attending energy related conferences and meetings throughout California. Further, the pilot will involve the talent and resources within PG&E by partnering with PG&E's Pacific Energy Center's Education & Training and Employee Volunteer Programs. Green Pathways will also be listed on PG&E's integrated education programs' website to generate interest and participation. As the program develops, industry and education professionals will be targeted through the dissemination of program information through print and web-based communications such as blogs and other social media. These avenues for outreach will be expanded further through third party referrals from the above sources and personal and professional networking.

The program will offer multiple formats for the participation of subject-matter experts including completing "Green Opportunities" information web forms, responding to interview questions, and participating in web-based dialogues. Green Pathways will create an interactive environment that enables all stakeholders to explore current and projected challenges and opportunities. Opportunities will be framed to maximize the professionals' time and will be geared to meet the goals of their respective institutions.

Addressing the Gap Cost-Effectively through a PG&E Program

The utility-sponsored Grades K–8 education programs and the training provided at PG&E's energy centers has firmly demonstrated PG&E's ability to develop and cost-effectively deliver energy education programs. Building on this legacy, the Green

Pathways program is designed to provide a scalable, accessible, and cost-effective program to California young adults in at high school level. Key aspects of the program to support cost-effectiveness include:

- A portable curriculum and activity plan co-developed by participating schools and other stakeholders that can be easily adapted to a variety of learning goals and environments in schools and communities throughout California;
- A technical infrastructure capable of serving very large numbers of students and stakeholder partners through cutting-edge electronic and networked communications;
- A web-based repository of content that can be maintained remotely and updated by distributed stakeholders to keep information current and relevant;
 - Green Pathways will create an organizing structure to manage career information. The content will be organized around a career taxonomy developed by the program and through the use of user-generated tags.
 - Content can be contributed by subject matter experts and Green Pathways students researching green careers.
 - Users will contribute content using a format developed in collaboration with participants and teachers.
 - All content will be reviewed according to guidelines such as those used by Wikipedia.
 - Contributors can login to update and edit information, to maintain currency.
- Web-based dialogues that support structured and informal communication between students and practicing professionals without incurring the expense associated with time away from work or travel; and
- Leveraged linkages to school, community, nonprofit, government and industry efforts to speed California's transformation to energy efficiency and sustainability through civic and economic activities.

The Green Pathways pilot program will be marketed through high schools and community based organizations (CBOs) in the targeted regions; local chapters of professional education associations such as science teachers; extra-curricular programs such as green clubs at schools; and through social media such as Facebook.

Supporting the Strategic Plan

While advancing numerous Strategic Plan goals, Green Pathways focuses primarily on the Workforce Training and Education vision as described in Section #9, Goal 1: Establish energy efficiency education and training at all levels of California's educational system. Key Actions 1-5: Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields of the Strategic Plan. As described above, Green Pathways addresses this goal through a number of components:

- A unique, collaborative community that links students with green job education and links while leveraging the needs and opportunities of the five educational sectors: Grades K-12, adult education and community colleges, technical training, colleges and universities, minority, low income, and disadvantaged communities.
 - The Green Pathways program will target high schools in pilot regions having feeder middle schools that are participating in PG&E's Energenius program.¹
 - It will invite participation from community colleges and universities as both a green career resource for students and an educational resource for prospective students.
 - By collaborating with community-based organizations working in at-risk communities and encouraging effective preparation for green careers the Green Pathways pilot expects to expand its reach as well as gain an understanding of how the program and services might be framed to serve diverse populations.
- Green Pathways focuses on high school youth bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities.
 - By creating a green career learning community the Green Pathways program will cultivate a broad set of interconnected stakeholders, high school and college students, and a range of industry and education professionals. Each group will contribute to the community's collective development and understanding of current and emerging green careers.
 - The program will explore with teachers various strategies to encourage students to reach out to the middle schools they attended previously to share information about Green Pathways and generate interest in pursuing green careers.
 - Social media will be explored as an avenue to reach and engage students.
 - Green Pathways will identify colleges, universities and vocational programs in target regions. It will build relationships with these entities in order to share information about the educational opportunities within the region and to inform their students about exciting green opportunities elsewhere.
- The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

Testing New and Innovative Design and Partnerships

Green Pathways builds on established and emerging programs in education, industry, government and other sectors, yet incorporates several innovations:

¹ PG&E's Energenius Program teaches kids to use energy wisely and safely with interactive, engaging programs for grades kindergarten through eight. (For more information, please visit <http://www.pge.com/Energenius/>.)

- Green Pathways will create and nurture a web-based “virtual community” and develop communication methods that will link students and teachers with each other in addition to practicing and retired professionals for industry training and higher education. In so doing, this virtual community will foster new partnerships to serve the unmet needs of high school students. This virtual community will be a vital and dynamic core element of the Green Pathways project geared towards young people’s comfort and dexterity with new forms of social media communication and engagement.
- Green Pathways will provide students with opportunities to become active participants in California’s transformation into energy efficiency. Participating youth will be encouraged to conduct research, educate others, and advocate energy efficient strategies and new green career pathways. The web-based dialogue platform and site will enable California high school students to exchange ideas and information with industry and education stakeholders without the financial and environmental limitations and expenses associated with physical travel.
- Green Pathways will create a program activity model with a curricular framework characterized by flexibility and accessibility. These features make this model more adaptive and likely to be replicated to scale throughout the state. This process will not result in a lengthy, cumbersome or costly program that requires large grants or extensive staff training to implement at school sites already wrestling with competing social and educational imperatives.

Methodologies to Test Cost Effectiveness

As described above, Green Pathways will employ a number of cost-effective approaches. However, it is modeled as a non-resource program and does not have quantified savings. The cost is also included in ~~our~~the overall cost effectiveness test for the portfolio. PG&E will participate with ED and other stakeholders in developing methodologies for determining the cost-effectiveness of meeting non-energy-related objectives.

Identifying and Disseminating Best Practices and Lessons Learned

Green Pathways will employ many strategies for identifying and disseminating best practices and lessons learned from the pilot program to all California utilities. Pilot program results will be transferred to other WE&T programs and eventually form a model for career counseling in the conventional education system to inspire high school students to seek careers in sustainable enterprises. Strategies for identifying and disseminating best practice include the following:

- Publications regarding program findings;
- Hosting of web-based dialogues with partners, collaborators, and stakeholders to discuss findings and broaden reach (California utilities, stakeholders, collaboration, education and industry sectors);
- Presentations at meetings and conferences;

- Information on Green Pathways, PG&E, partners, and collaborators websites; ~~and~~
- Co-branding Green Pathways with program partners and corporations in relevant industry sectors; ~~and~~
- PG&E will apply the results of EM&V activities to develop lessons learned. These lessons learned will be used to refine the program as it moves forward and expands, and as appropriate, will be shared as best practices.

To prepare for scaling strategy development of the program's post-pilot ~~Statewide~~statewide expansion, program implementers will provide a plan ~~and schedule~~ by the end of the 4th quarter of 2011 to inform post-pilot statewide expansion. Elements of this plan will include:

- Creation of additional dialogue targeting industries/sectors of particular interest to other California IOUs;
- Expansion of service/offerings through key organizations and educators/groups and social networks;
- Expansion to statewide members of initial partner organizations;
- Partnerships with related school and community programs providing energy efficiency and sustainability information; and
- Communication strategy with practicing professionals and high school educators throughout California regarding how Green Pathways' content may enhance existing course curriculum.
- To expand the program, Green Pathways will cultivate partnerships, and co-funding efforts with IOUs, corporations, and interested government agencies and organizations. It may collaborate with education initiatives addressing green careers such as California Department of Education Green Academies, PG&E's New Energy Academies and high school and community colleges receiving Career Technical Education (CTE) funding. Many CTE sites are involved in developing student interest in and planning green careers. Local efforts to develop and expand the Green Pathways program are expected to include collaborations with Work Force Investment Boards in targeted areas, foundations and other community based organizations focusing on economic and green development.

Goals and Objectives

Goals of the Program include the following:

- Create a collaborative virtual community of committed youth and adults focused on increasing the number of high school students in California who choose to pursue vocational and professional green careers and civic and community service that accelerate California's transformation into an energy efficient and sustainable society.
- Develop a program model that includes templates for each aspect of the Green Pathways' process in order for the program to be economically expanded to serve students throughout the state. ~~Test~~The Green

Pathways program will include of steps, or phases designed to guide students through the process of learning about and developing a green career plan such as: 1) assessing one's skills, talents, and interests; 2) researching green careers; 3) understanding the principles of career self reliance; and 4) how to develop an effective career plan. Information about each phase will be organized in a "template" to create an infrastructure for publication on the website and communication with students and adult leaders. For example, each aspect of the program will include the learning goal, key information, assignments for students, tips for teachers, reference resource/s and how this phase informs the students' career path. The consistent treatment of each aspect will contribute to future automation for eventual scalability. Green Pathways will test the model in representative education and community settings with a diverse sample of students and other stakeholders to position the program for statewide rollout and adoption.

Objectives of the Program include the following:

- Create an interactive website: to serve as an information and communication hub for the Green Pathways program. The website will provide youth-friendly program information, climate, energy, and career reference resources, schedules and links to dialogues and social media, and private portfolios for youth to track their information and progress. The site will include evaluation feedback forms and track user activities.
- Develop a network-based "student-savvy" communication strategy: to enable professionals in industry and education to discuss green careers and required training and education preparation with small and large groups of students. These dialogues will be structured and framed to evolve a template that will enable future dialogues to be developed and produced more economically. The structure will include features to aid in mining content to capture "big ideas" for wider distribution.
- Create a career development curricular framework: to provide students with the information and resources they need to plan a green career path to advance themselves into rewarding careers in the energy services fields. The framework will include individual assessments, information on current and emerging green careers, career planning strategies and group coaching to support the research and thought needed to compose one's career path.
- Pursue iterative green pathway program implementations: to conduct a minimum of three iterations of the Green Pathways program within two to three PG&E regions. Test implementations in multiple education and community settings. Engage a diverse mix of students and partners. Seek the broadest possible experience in preparation to expand program offerings and scale throughout California. The total number of participants will be determined once the budget is finalized.

- Market and conduct outreach in targeted regions: by strategically identifying and selecting high schools and community colleges that demonstrate active need and interest in each target region. Schools will be selected based on regionally relevant and diverse group of participants and mix of education and community settings. The program will target teachers who are interested or seeking to engage in providing students with green career information and planning.

This program is expected to continue and expand beyond the three-year EE portfolio cycle. However, program advances and the funding provision from other sources could reduce or eliminate the need for ratepayer funding beyond the portfolio cycle. Any of these scenarios are possible:

- The Commission will fund approve funding for statewide expansion in continued support of the Strategic Plan;
- California IOUs adopt Green Pathways as their workforce and career development program for youth;
- Green Pathways is integrated into leveraged with existing and developing energy efficiency high school and higher education programs such as New Energy Academies and Green Academies;
- Corporate sponsorship supports ongoing innovation and expansion; and
- State or federal grants support expansion.

Budget and Timeline

Three-Year Budget: \$1,433,928, including PG&E program support.

- Year 1: \$503,000
- Year 2: \$528,000
- Year 3: \$402,928

The following proposed timeline assumes timely approval of this AL and is subject to final contract negotiations.

Proposed Deliverables	2010	2011	2012
Task 1: <u>Pilot project planning, administration, stakeholder engagement and evaluation communication.</u>			
1.1. Submit project plan and timeline including progress report templates, schedule for program review, <u>and plan for external organization participation, evaluation criteria and assessment process.</u>	2010: Q2		
1.2. Hold annual advisory group meetings with representative participant stakeholders.	2010: Q3	2011: Q2	2012: Q2
1.3. Preliminary report outlining the challenges, opportunities and recommended plan and schedule for future expansion.		2011: Q4	
1.4. Final project report capturing highlights, evaluation			2012: Q4

Proposed Deliverables	2010	2011	2012
data and lessons learned from the pilot.			
1.5. Cultivate stakeholder engagement using ongoing outreach and communication strategies. Presentations at education and industry meetings and conferences.	ongoing	ongoing	Ongoing ongoing
1.6. Disseminate GP information through PG&E, the California Department of Education, WestEd, and stakeholder websites. Host informational webinars to highlight and lessons learned from the pilot to all California utilities and stakeholders for consideration for statewide expansion.			2012:-Q1-Q4
Task 2: Interactive website. Develop an Interactive website that will serve as an information and communication hub for the Green Pathways program. Periodic modifications to website will be informed by stakeholder feedback. <u>Evaluation. Develop a written plan documenting the evaluation criteria and assessment process. Incorporate PG&E evaluation criteria as needed. Conduct program evaluation activities on each implementation, synthesize information, and prepare final report.</u>	2010:-Q3- 4 <u>Q2-Q4</u>	2011:-Q1- Q4	<u>2012:Q1-Q4</u>
Task 3: Develop and refine the GP network-based communication strategy and infrastructurean interactive website that achieves goals of collaborative relationships,will serve as the Green Pathways information dissemination, and group communication hub among stakeholders. The site will include the Web Dialogues communication platform modified to meet Green Pathways functional and stakeholder requirements. Development will follow an iterative model that will create initial small sections of the sites so that stakeholders can define their needs, preferences, and functionality and design goals as they participate in research and curricular development activities.	<u>2010:Q3-Q4</u>	2011:Q1- Q2 <u>Q4</u>	
Task 4: Green Pathways career development curriculum that provides students with the information and resources they need to plan their green career path. <u>Create the Green Pathways curricular plan and development strategy. Conduct stakeholder research through Web Dialogues and other information gathering activities. Develop the curricular plan and web-based communication and delivery strategy incorporating findings from stakeholder research. Integrate and communicate the Green Pathways content with web-based resources. Create a Climate 101 informational presentation for inclusion on the Website. Initiate development of a repository of green career information and resources available in conjunction with the Green Pathways website.</u>	<u>2010:Q3-Q4</u>	<u>2011:Q1-Q4</u>	
4.1. Green Pathways curricular plan including program objectives, learning activities, roles and responsibilities, orientation information for adults and students, example	<u>2010: Q3</u>		

Proposed Deliverables	2010	2011	2012
assessment tools and evaluation strategy.			
4.2. Description of the GP program series, process, and text for inclusions on website and publication in PDF doc.	2010: Q4	2011: Q1	
4.3. Develop career planning WebDialogue content/strategy.	2010: Q4	2011: Q1	
4.4. Build repository of green career information and resources on the GP website. Involve young people in researching and interviewing adults about green careers	2010: Q4	2011: Q1-4	2012: Q1-4
4.5. Climate 101 Webinar presenting basic climate change information and linking to careers addressing mitigation and adaptation strategies and related careers.		2011: Q1	
4.6. Green career web-based dialogue to guide development of post-pilot implementation. The template integrates green career research and development and the principles of career planning and self-reliance.			2012: Q4
Task 5: Regional Green Pathway Program Implementations. Conduct the Green Pathways program within two to three PG&E regions. Test implementations in multiple education and community settings with a diverse mix of students and partners.			
5.1.a. Develop marketing and recruitment plan and associated collateral.	2010: Q4	2011: Q1 Q2-Q3	
5.2.1.b. Conduct GP Green Pathways marketing and recruitment activities.		2011: Q2 Q3-Q4	2012: Q1- Q2 Q3
5.3.1.c. Select GP Green Pathways program series participants.		2011: Q3 Q4	2012: Q3 Q1-Q4
5.4.2. Conduct beta test of GP Green Pathways program series and two full implementations including tools, orientation, and guidance.		2011: Q4	2012: Q1, Q4
5.5. Conduct evaluation activities at the completion of each program series.		2011: Q4	2012: Q1, Q4

Metrics

Program performance metrics are show in Attachment A.

Logic Model

The program logic model is shown in Attachment B.

EM&V Plan

PG&E proposes to develop specific research scopes of work and priorities in accordance with the directives set forth in the upcoming Commission decision on EM&V issues and/or through collaboration between the IOUs and Energy Division. In the Decision, the Commission deferred resolution of various EM&V issues to a subsequent

decision on EM&V. (See D. 09-09-047, pp. 301-04 and OP 60). The Decision also deferred issues included a clarification of the respective EM&V roles and responsibilities for ED and the IOUs in addition to the actual allocation of the EM&V budget. PG&E proposes further development of its EM&V plan upon Commission resolution of these pending issues in the upcoming EM&V decision.

PG&E will support ED in developing an EM&V plan that will support development and dissemination of best practices and lessons learned and development of cost-effectiveness methodologies tied to achievement of non-energy program objectives as described in the Strategic Plan and program performance metrics currently being developed.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than ~~February 10~~March 1, 2010, which is ~~20~~6 days after the date of this filing. PG&E is requesting this shortened protest period consistent with guidance from the Energy Division. Comments will be restricted made to the revisions made the original advice letter. Protests should be mailed to:

CPUC Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Avenue
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Effective Date

PG&E is filing this supplemental advice letter ~~as Tier 2~~ to be ~~approved by February 22~~effective March 2, 2010, which is 327 days ~~after~~from the filing date. PG&E is requesting this shortened review period due to the fact that there were no protests of PG&E 3080-G/3596-E that sought to delay its implementation. Further, the supplemental information provided here does not change the scope or intent of the program. This supplemental advice letter clarifies certain program information per the Energy Division's request.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list and all electronic approvals should be directed to email PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

Brian Cherry

Vice President, Regulatory Relations

Attachments:

Attachment A: Program Performance Metrics

Attachment B: Logic Diagram

Attachment C: Revision-marked Copies of Advice Letter and Attachment A

cc: Service List A.08-07-021

Attachment A Green Pathways Pilot Program Performance Metrics

Program Performance Metrics identified for this pilot will be developed in coordination with the broader program performance metric development effort as described in D.09-09-047.

Green Pathways Program

1. Include a list of the utility and program administrator staff directly involved in deriving the program performance indicator metric. Include their title and contact information.

Pam Murray

- Telephone: (415) 972-5416
- E-mail: Pmw2@pge.com

2. Describe each program performance indicator being proposed for this program. Indicate in a description for each, what type of performance indicator it is (see attached above). If the program indicator is being changed from an already approved program indicator indicate why the change is necessary. Provide additional analysis that adequately justifies the need to revise the metric as an attachment to this worksheet.

Proposed metric: Adherence to program implementation deliverable schedule

Baseline: Zero deliverables produced at program inception.

3. For each program performance metric being proposed, indicate why you have selected them including how the metric meets the SMART convention (Specific, Measurable, Actionable, Relevant, Timely)

- Specific: Provide data on meeting program development and implementation schedule
- Measurable: Results can be tracked by program staff
- Actionable: Action can be taken based on reported progress
- Relevant: It is direct measurement of program activities and results
- Timely: Results can be reported on a quarterly basis

4. State the program mission. The program mission is the basic purpose of a program, its reason for existing, and the general means through which it will accomplish its purpose in view of overarching goals and objectives (CEESP, BBEES, CPUC EE Goals).

The Green Pathways Program will leverage PG&E's experience in developing and delivering energy education to create and pilot an education program tailored to the needs of high school students. Specifically, Green Pathways will comprise:

- An interactive website, network-based communications, and a career development curricular framework that will connect a virtual community of high

- school students, teachers, and career counselors with professionals from industry, government, academic institutions, and nonprofit organizations;
- Curriculum that explores the landscape of energy-related fields (such as the environment, energy efficiency, and water) and guides young adults to identify career options and develop strategies toward work in the green economy;
- Real-world examples that will make coursework in math, science, communications, and behavior more relevant to high school students. This information will be captured in student career research and will emerge through communication with practicing professionals; and
- A collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

5. Describe the program performance goals (both internal and external), standards, and/or benchmarks. Program goals should support the programs' overall mission and are general statements about the results to be produced by the program. If program goals are being revised from previous program goals indicate why the change is necessary providing additional analysis to justify the change.

CEESP Section 9 (Workforce Education & Training) – Goal 1

Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.

6. Describe the critical work processes, program requirements, and critical results desired (both internal and external) linked to promotion of the program mission and goals above.

CEESP Section 9 (Workforce Education & Training) – Goal 1

As described above, Green Pathways addresses this goal through a number of components:

- A unique, collaborative community that links students with green job education and links and leverages the needs and opportunities of the five educational sectors: K-12; adult education and community colleges; technical training; colleges and universities; and minority, low income, and disadvantaged communities.
- Green Pathways focuses on high school youth, bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities.
- The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders.

7. Describe how the proposed program performance metrics are a measure of the critical work processes or critical results identified above.

The program implementation deliverables schedule lays out the process by which high school students will receive energy efficiency education through the program; continued adherence to that schedule is crucial in measuring the success of the critical work processes.

8. Describe what the program objectives are. Program objectives are the specific milestones and targets to be achieved to which the proposed program performance metrics seek to measure. Program objectives should be chosen that promote accomplishment of the program goals and should meet the SMART convention described above. If the program objectives are being revised from previous program objectives indicate why the change is necessary. Provide additional analysis to justify this change.

Adherence to program implementation deliverable schedule

- All deliverables produced on schedule.

9. Describe how the metrics will be collected, what data source they will come from, and how they will be tracked and reported.

Data will come directly from utility program tracking database.

10. Attach a program logic model that graphically represents what has been described in this worksheet. Logic models should depict the flow between program activities, their outputs, and subsequent short term, intermediate, and long term outcomes as well as how program elements are linked and the influence of external influences. Proposed program performance indicators should be incorporated at the appropriate locations within the logic model indicating what program activities and outcomes within the model will be measured both internal and external to the program (see example above).

See Attachment B for program logic model.

11. Include a completed Program Performance Indicator Table as an attachment to this worksheet

See Table below.

Green Pathways Performance Indicator Table

Program Sector	Program Name	Program #	IOU Program Goals	Strategic Planning Strategy	2010-2012 Strategic Milestones	IOU Proposed Metrics
WE&T Program	WE&T Connections Sub-program	PGE210921	Strategic Plan Section 9 (WE&T) – Goal 1 Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.	Strategic Plan Section 9 (WE&T) – Goal 1 As described above, Green Pathways addresses this goal through a number of components: • A unique, collaborative community that links students with green job education and links and leverages the needs and opportunities of the five educational sectors: K-12; adult education and community colleges; technical training; colleges and universities; and minority, low income, and disadvantaged communities. • Green Pathways focuses on high school youth, bridging the gap between programs for elementary and middle school students and the growing number of vocational and professional programs for young adults at community colleges and universities. • The program will create a collaborative community based on a foundation of information exchange and dialogue among project partners and stakeholders	All deliverables produced on schedule.	Adherence to program implementation deliverable schedule.

**PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV**

Aglet	Day Carter Murphy	North Coast SolarResources
Alcantar & Kahl	Defense Energy Support Center	Occidental Energy Marketing, Inc.
Ameresco	Department of Water Resources	OnGrid Solar
Anderson & Poole	Department of the Army	Praxair
Arizona Public Service Company	Dept of General Services	R. W. Beck & Associates
BART	Division of Business Advisory Services	RCS, Inc.
BP Energy Company	Douglass & Liddell	Recon Research
Barkovich & Yap, Inc.	Downey & Brand	SCD Energy Solutions
Bartle Wells Associates	Duke Energy	SCE
Boston Properties	Dutcher, John	SMUD
C & H Sugar Co.	Economic Sciences Corporation	SPURR
CA Bldg Industry Association	Ellison Schneider & Harris LLP	Santa Fe Jets
CAISO	FPL Energy Project Management, Inc.	Seattle City Light
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California Energy Commission	Green Power Institute	
California League of Food Processors	Hanna & Morton	Southern California Edison Company
California Public Utilities Commission	International Power Technology	Sunshine Design
Calpine	Intestate Gas Services, Inc.	Sutherland, Asbill & Brennan
Cameron McKenna	Los Angeles Dept of Water & Power	Tabors Caramanis & Associates
Casner, Steve	Luce, Forward, Hamilton & Scripps LLP	Tecogen, Inc.
Chamberlain, Eric	MBMC, Inc.	Tiger Natural Gas, Inc.
Chris, King	MRW & Associates	Tioga Energy
City of Glendale	Manatt Phelps Phillips	TransCanada
City of Palo Alto	McKenzie & Associates	Turlock Irrigation District
Clean Energy Fuels	Merced Irrigation District	U S Borax, Inc.
Coast Economic Consulting	Mirant	United Cogen
Commerce Energy	Modesto Irrigation District	Utility Cost Management
Commercial Energy	Morgan Stanley	Utility Specialists
Consumer Federation of California	Morrison & Foerster	Verizon
Crossborder Energy	New United Motor Mfg., Inc.	Wellhead Electric Company
		Western Manufactured Housing Communities Association (WMA)
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