

California's Workforce Education and Training Needs Assessment: An Interim Update

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ABSTRACT

In September 2008, workforce education and training was identified as a cross-cutting issue in California's Energy Efficiency Strategic Plan adopted by the California Public Utilities Commission. One of the near-term strategies identified for the workforce issue was a needs assessment to be conducted by a third-party consultant and jointly managed by the CPUC and California's major investor-owned utilities. Following stakeholder discussions regarding the scope of work and a competitive solicitation, a consultant was selected and the project got underway in December 2009. The schedule calls for completion of the project by the end of 2010.

This paper reviews the design and implementation of the on-going project and shares some preliminary results and general observations. The paper is intended for those interested in the objectives and findings of the on-going needs assessment being conducted in California as well as those considering a workforce needs assessment of their own.

Introduction

In California, policies designed to promote energy efficiency and improve the environment have and are expected to continue to increase the demand for energy efficiency and other green economy workers. Prior to the recent and severe economic downturn (or what is commonly referred to as the "Great Recession"), employers consistently reported a shortage of skilled workers to fill positions resulting from these increased investments (COE 2009 19; Goldman et al. 2010 4-6). Newspaper headlines questioned whether there would be a sufficient number of skilled workers around to meet the increased demand for energy efficiency and other green economy workers, including the skilled workers required for environmentally friendly (i.e., energy-efficient) construction (Green Gap, 2008).

In response to the economic downturn, the American Recovery and Reinvestment Act of 2009 ("ARRA") was signed into law in February 2009 (Recovery.gov 2010). As a result, additional federal funds have become available for various energy efficiency and other clean energy projects, including some for job training. While the primary objectives of this legislation according to the Federal Government Recovery website are (1) to create and preserve jobs and (2) to stimulate economic activity and invest in long-term growth, the questions remain whether or not there are and will continue to be a sufficient number of skilled workers for the newly created positions and, if not, what types of additional education and training programs and other workforce strategies should be pursued.

In September 2008 and prior to significant increases in unemployment in California, "Workforce Education and Training" (WE&T) was identified as one of four cross-cutting issues in California's "Long Term Energy Efficiency Strategic Plan" ("EE Strategic Plan") (CPUC 2008b 4, 74-79). Adopted by the California Public Utilities Commission ("CPUC" or "Commission") in September 2008, the EE Strategic Plan also identified four near-term

strategies for WE&T; one of these strategies was a needs assessment for long-range strategic planning (CPUC 2008b 74).¹ Between September 2008 and November 2009, stakeholder meetings were convened, a scope of work was developed, a competitive solicitation was conducted, and a consultant selected. Work on the needs assessment got underway in December 2009. The present schedule calls for the completion of the project by the end of December 2010.

At this time, there are no final results to report, but there is much that can be shared relating to the design and implementation of the needs assessment for WE&T or what is now titled the “California Workforce Education and Training Needs Assessment for Energy Efficiency and Demand-Side Management” (“WE&T Needs Assessment”). Section 2 provides an overview of the direction provided by the CPUC for the WE&T Needs Assessment. Section 3 considers some alternative interpretations of this direction and describes the approach adopted for the WE&T Needs Assessment. Section 4 provides a project overview, describing the objectives and key tasks. Section 5 describes some very preliminary results. Section 6 closes the paper with some observations based on looking back at the experience of designing and implementing the WE&T Needs Assessment and on looking forward to what may come next.

Direction Provided for the WE&T Needs Assessment

Most all needs assessments begin with a “client” providing some direction or vision on the objectives and scope. In the case of the WE&T Needs Assessment, this direction has been provided by the CPUC with the support and recommendations of a number of stakeholders representing energy, environmental, labor, education, and environmental interests. Beginning in the Fall of 2007, the development and implementation of the EE Strategic Plan has involved extensive stakeholder involvement. Leading up to the adoption of the EE Strategic Plan, some of these stakeholders identified the lack of a trained workforce as a potential barrier to the achievement of California’s aggressive energy efficiency and other demand-side management goals. Undoubtedly, others were influenced by the various studies available at the time that emphasized the potential job creation opportunities for California’s workers provided by increased investments in the green economy, including energy efficiency and demand-side management.²

The four near-term strategies for WE&T identified in the EE Strategic Plan included a WE&T needs assessment and a WE&T web portal. By describing these strategies in the EE Strategic Plan and providing further direction in a September 2009 decision, the Commission has provided some guidance with regard to the scope of the WE&T Needs Assessment. However, as discussed in the following section, this guidance has been subject to multiple interpretations as the scope of work for the WE&T Needs Assessment project has been developed, refined and then revised.

¹ In September 2008, the CPUC issued its decision adopting the EE Strategic Plan. In that decision, the CPUC required that all strategies in the EE Strategic Plan “...be incorporated into energy efficiency program planning and implementation starting in 2009.” (CPUC 2008a 1).

² At the time, a number of studies were available. Some addressed the implications for California of both implementation of greenhouse gas policies and increased investments in energy efficiency and renewable generation (Buffa et al. 2008; Henton et al. 2008; Pinderhughes 2007). Others had the apparent objective of influencing national policy, addressing the potential economic and job benefits of clean energy policies for metro areas and states (Global Insight Inc. 2008; Pollin et al. 2008).

This section reviews the Commission direction and identifies specific elements of this direction. A timeline of key dates for the WE&T Needs Assessment, including the key CPUC decisions and the ARRA legislation, is provided in Table 1.

Table 1. Key Dates for California’s WE&T Needs Assessment

Dates	Key Milestones and Activities
July 2007	CPUC directs the IOUs to include a section on specific training strategies in the development of a statewide strategic plan for energy efficiency
September 2008	CPUC adopts EE Strategic Plan, identifying a needs assessment as a near-term strategy for workforce education and training
February 2009	ARRA is signed by President Obama with the promise of additional funding for energy efficiency and renewable energy programs
September 2009	CPUC provides specific direction on the dissemination and use of findings from the WE&T needs assessment
December 2009	Commission Staff introduces the lead consultant for the needs assessment at a publicly announced WE&T Taskforce meeting
December 2010	Final report for WE&T Needs Assessment to be released

Sources: CPUC 2007; CPUC 2008a; CPUC 2008b; CPUC 2009; Recovery.gov 2010.

Include Specific Training Strategies in EE Strategic Plan

The following description of Commission direction for the WE&T Needs Assessment begins with a Commission decision issued in July 2007 (CPUC 2007). In that decision, California’s major investor-owned utilities (“IOUs” or “utilities”) were provided relatively detailed direction regarding the development of a single statewide strategic plan for energy efficiency. The four utilities -- Pacific Gas and Electric Company (“PG&E”), Southern California Edison Company (“SCE”), San Diego Gas and Electric Company (“SDG&E”) and Southern California Gas Company (“SoCalGas”) – are responsible for delivering 75 percent of the electricity to California’s retail customers (CEC 2009 39). These utilities also deliver approximately 80 percent of the natural gas consumed in California (CPUC 2010 2).

With respect to workforce issues, the Commission ordered the IOUs to include a separate section addressing specific training strategies for applicable sectors and markets in their statewide strategic plan for energy efficiency. In addition, specific training strategies for minority, low-income, and other disadvantaged communities were to be included. In the text of this 2007 decision, there was limited discussion of alternative training strategies but the problem of “an untrained workforce” in the HVAC industry was noted. The Commission specifically addressed the opportunities for increased energy efficiency for residential and small commercial HVAC [heating, ventilation, and air conditioning systems] and noted that a successful HVAC initiative must be structured to overcome a series of difficult problems, including “an untrained workforce.” (CPUC 2007 52)

At the time the EE Strategic Plan was being developed, reports were relatively common that one of the barriers to implementing energy efficiency was an untrained workforce. The California Energy Commission (“CEC”) contributed to this literature with a report in which “enhanced education and training” was identified as a key element to achieving energy efficiency from new central air-conditioning systems (CEC 2008 19). This report and other statements from stakeholders seemed to support the hypothesis that the numerous substandard installations were largely the result of a lack of training on the part of those involved in the installations. The strategy for addressing this lack of training seemed to be additional education

and training programs. Undoubtedly, there is some truth to the conclusion and potential benefits associated with this strategy; however, other hypotheses and strategies (e.g., employer incentives to support on-the-job training) do not appear to have received the same level of attention.

Conduct a Statewide Needs Assessment

Consistent with CPUC direction along with the views expressed by stakeholders, the September 2008 EE Strategic Plan includes a separate section addressing workforce issues. The WE&T section is introduced with the following straight-forward vision statement:

“By 2020, California’s workforce is trained and fully engaged to provide the human capital necessary to achieve California’s economic energy efficiency and demand-side management potential.” (CPUC 2008b 74)

In the discussion of the WE&T issue that follows, there are two somewhat more specific goals identified: (1) establish energy efficiency education and training at all levels of California’s educational systems, and (2) ensure that minority, low income and disadvantaged communities fully participate in training and education programs at all levels of the DSM [demand-side management] and energy efficiency industry (CPUC 2008b 74).

The WE&T vision statement is of interest in two respects for the design of the now on-going WE&T Needs Assessment. First, the vision statement focuses on ensuring a “trained and fully engaged” workforce and not solely on workforce education and training. Other means for achieving this vision have not been excluded. Second, the objective is to achieve “California’s economic energy efficiency and demand-side management potential.” The workforce issues associated with other elements of the green economy, such as clean transportation and utility-scale renewable generation, are not addressed.

With respect to the role of the Commission and the IOUs in achieving this vision, the EE Strategic Plan explicitly recognizes that a comprehensive statewide program calls for the collaborative efforts of many entities, including government, educational institutions, community-based and non-profit organizations, and industry and labor organizations. Throughout the EE Strategic Plan, the Commission also recognizes the multi-jurisdictional scope of the strategies articulated. To achieve the required level of collaboration, the EE Strategic Plan proposes an expanded process with participation of additional state agencies and possibly co-sponsorship of various task forces, including the task force focused on the WE&T issue.

Following the discussion of goals and the collaborative process for WE&T, the EE Strategic Plan identifies four short-term strategies and states that these strategies “...must be initiated or completed in the near term to more thoroughly define, initiate and drive long-term WE&T development and strategic planning.” These strategies include the WE&T needs assessment as well as the WE&T web portal. A slightly more detailed description of the WE&T needs assessment begins with the statement that “An in-depth formal statewide training and education resource inventory and needs assessment is necessary for long-range strategic planning.” The WE&T section also includes an implementation plan with key actions and specific activities organized by the two goals and three time periods. The three time-periods are: near-term (2009-2011), mid-term (2012-2015), and long-term (2016-2020) (CPUC 2008b 75).

Disseminate Study and Modify IOU Training Program to Reflect Results

In September 2009, the Commission reiterated its support for a statewide WE&T needs assessment and provided specific direction on the dissemination and use of the results (CPUC 2009). At the time the Commission issued its decision, the competitive solicitation process for the WE&T Needs Assessment project was taking place but the consultant had yet to be selected. The Commission described the overall purpose of the needs assessment as "...a statewide WE&T Needs Assessment on critical workforce needs and opportunities to help identify and fulfill those needs through collaboration and fund sharing." (CPUC 2009 220)

While this decision does mention that one of the products of the needs assessment will be "...a detailed inventory of the multitude of workforce training programs across the state," the focus is on "critical workforce needs and opportunities," and is not limited to workforce training programs. In the same decision, the Commission provides relatively specific direction on disseminating and using the results from the needs assessment. The final report is to be posted on the energy efficiency web portal maintained by the CPUC and a notice is to be sent to various service lists. In addition, the IOUs in conjunction with the Commission's Energy Division are to host a public workshop to obtain public input for ways to incorporate the findings in existing WE&T training programs within a month of the release of the final report. Within 60 days after the workshop, the utilities are to propose "...appropriate adjustments to the existing WE&T statewide program and existing training programs...in an advice letter." (CPUC 2009 221)

Alternative Interpretations and Adopted Approach

While the Commission clearly mandated that the CPUC and IOUs jointly conduct a needs assessment addressing workforce education and training issues in its 2008 decision and reiterated its support for a WE&T needs assessment in its 2009 decision, a number of alternative interpretations of this direction became apparent as the scope of the project was defined, refined and modified. These differences should not be a surprise given the number of stakeholders involved, the time that passed between the initial Commission direction and the start of the WE&T Needs Assessment, and the significant downturn in the economy over this time period.

The alternative interpretations of Commission direction guiding the project objective, the time horizon, the customer sectors and policies, and the definition of workforce education and training programs are addressed below. While this discussion is focused on defining the scope of California's WE&T Needs Assessment project, these are issues that must necessarily be addressed (either explicitly or implicitly) for any workforce needs assessment.

Project Objective

The first question concerns the project objective (or more likely objectives). For the WE&T Needs Assessment, the primary choices were between (1) an assessment of the California's workforce education and training programs and (2) an assessment of California's workforce development infrastructure. As described above, the EE Strategic Plan seems to suggest a relatively broad focus for the WE&T issue with the vision statement but to have placed the emphasis on education and training and on serving minority, low-income and disadvantaged communities in the title of the section and in the statement of goals.

For purposes of establishing the overall objective of the WE&T Needs Assessment, there are several interpretations for the differences between the vision statement and the statement of

specific goals and strategies. One interpretation is that the WE&T Needs Assessment should be limited to an assessment of the adequacy of and the need for additional workforce education and training programs. Another interpretation is that the WE&T Needs Assessment should identify all potential strategies for improving California's workforce infrastructure and contributing to achieving the vision for WE&T. At the time, a review of education and training programs was simply one of the obvious requirements for a WE&T needs assessment; the discussion of this strategy was not intended to eliminate consideration of other workforce development strategies.

The WE&T Needs Assessment project has adopted the second of these two interpretations. All identified strategies for developing California's workforce infrastructure are being considered, including but not limited to expanding workforce education and training programs and developing employment information systems, such as the proposed WE&T web portal. Limiting strategies solely to education and job training seems ill-advised since other promising strategies for achieving the vision for WE&T would have been ignored.

Time Horizon

A second question deals with the time horizon. In the EE Strategic Plan, specific direction was provided to structure the needs assessment and resource inventory to "...produce short-, near- and long-term workforce strategies..." (CPUC 2008b 75). Under the implementation plans, the three time periods are approximately equal time periods from 2009 through 2020. However, whether the focus should be on the long term (i.e., the 12-year period from 2009 through 2020) or on the short-term and mid-term periods was not addressed.

The choice of time horizon heavily influences the choice of methodologies, particularly with respect to the approach used to develop job projections and skill requirements for these jobs and to identify strategies. For a relatively short-term period, such as one to three years, employer and employee self-reports are of particular value, providing local market intelligence and facilitating the development of collaborative relationships within local labor markets and the placement of workers completing training programs. However, self-reports are not likely to reflect a common view of future economic conditions and public policies, including funding for implementing these policies, with some employers and workers being more optimistic than others. For longer time horizons, alternative approaches where the consistency in economic, policy and funding assumptions can be maintained are preferred.

The WE&T Needs Assessment is considering the short-, mid-, and long-term periods consistent with the EE Strategic Plan. Employment projections, including the number and types of jobs by industry sector, are being developed using a macro-economic model designed specifically for California and previously used in assessing the implications of greenhouse gas measures associated with the implementation of AB32, California's greenhouse gas legislation. Scenarios are being developed with alternative economic and "clean energy" policies to maintain some consistency over the time period. Case studies of a limited number of specific sectors and interviews with stakeholders are being used to both better understand and assess the adequacy of the current workforce infrastructure. Recent studies based on employer and employee self-reports are being consulted as well.

Customer Sectors and Policies

A third question concerns the customer sectors and policies to be addressed. For both areas, there are numerous choices. For customer sectors, one option is to limit the sectors to the

retail customer sectors served by the utilities -- residential, commercial, industrial, agricultural, and municipal pumping customers. These are the customer sectors addressed in the EE Strategic Plan. Excluded are sectors commonly included in definitions of the “green economy” (e.g., utility-scale renewable generation, clean transportation).

For policies, the WE&T vision statement provides some general guidance, suggesting that all policies designed to promote energy efficiency and demand-side management be considered. While not explicitly defined in the EE Strategic Plan, the term “demand-side management” seems to be commonly understood to include energy efficiency, demand response (including smart meters), and distributed generation. Use of this definition is consistent with plans for zero net energy buildings with the use of solar and other distributed generation technologies. As with the customer sectors, limiting the policies to those designed to promote energy efficiency and demand-side management does exclude policies commonly associated with promoting the “green economy” (e.g., subsidies for purchases of alternative fueled vehicles; cap-and-trade and carbon taxes favoring utility-scale renewable generation).

Despite the apparent direction to only address a portion of those sectors and policies commonly associated with the “green economy,” the Commission’s emphasis on collaboration and fund-sharing does provide some support for expanding the customer sectors and policies to include those commonly associated with the “green economy. In fact, based on input from stakeholders, the scope of work incorporated in the competitive solicitation for the WE&T Needs Assessment did include renewable generation and other green workforce issues in addition to energy efficiency and demand-side management.

After the competitive solicitation was conducted and the WE&T Needs Assessment project was underway, utility-scale renewable generation and other green economy sectors (e.g., clean transportation, environmental services) were excluded. The customer sectors are limited to those sectors served by the utilities – residential, commercial, industrial, agricultural and municipal pumping. The policies now being addressed include federal, state, and local policies and are consistent with the policies identified in the EE Strategic Plan for DSM Coordination and Integration. These policies are limited to those supporting energy efficiency and demand-side management (e.g., demand response, advanced metering (or “smart meters”), and distributed generation). Distributed generation policies are limited to those designed to promote solar, wind, and fuel cells with policies promoting combined heat and power excluded. The reduction in scope has allowed for a more in-depth analysis of specific sectors and policies than would have been the case with the initial scope specified in the competitive solicitation.

Definition of a Workforce Program

A fourth question concerns the types of workforce education and job training programs to be considered. One interpretation of Commission direction is to limit programs to those that result in specific job skills for the set of occupations associated with energy efficiency and demand-side management. This approach would exclude the majority of K-12 programs as well as higher education programs preparing students for careers in energy efficiency but not focused on developing specific job skills. A second interpretation of Commission direction is to include a broader set of programs, including programs that introduce K-12 students to potential careers in energy efficiency and demand-side management and provide college-level students with background on alternative energy policies and energy technologies.

The WE&T Needs Assessment is defining workforce education and training programs to include not only programs focused on providing specific jobs skills but programs for K-12

students that provide fundamental and preparatory education focused on career awareness and on energy and environmental awareness. This approach seems consistent with the first of the two overall goals of the WE&T issue in the EE Strategic Plan of establishing "...energy efficiency education and training at all levels of California's education systems." However, this interpretation requires a relatively broad definition of the "workforce training programs" referenced in the September 2009 decision.

Overview of California's WE&T Needs Assessment

In late November 2009, a team from the University of California at Berkeley ("University" or "UCB") with extensive experience in workforce research, including experience in evaluating the implications of California's greenhouse gas legislation, was selected as the lead consultant. The selected UCB team is closely affiliated with the Donald Vial Center for Employment and the Green Economy, a part of the Institute for Research on Labor and Employment at the University. The UCB team supplemented their team by enlisting several groups familiar with energy efficiency and the educational and job training programs offered by the investor-owned utilities. As directed by the EE Strategic Plan, the project is being managed jointly by the CPUC and investor-owned utilities. SCE is serving as the project manager for the IOUs.

The overall objectives of the research are: (1) to prepare a comprehensive assessment of the capacity of California's current workforce development infrastructure, (2) to develop strategies for supporting the workforce development infrastructure in California, and (3) to assist in the dissemination of the results. The recommended strategies that result from this assessment (or "gap" analysis) are not to be limited to education and job training programs. Consistent with the direction of the Commission, resource inventories of education and job training programs are being developed and special attention is being given to best practices for ensuring participation of low-income, minority, and disadvantaged communities.

The comprehensive assessment includes two major areas to develop the information base required for the development of workforce strategies. The first area is the development of a comprehensive understanding of the economic restructuring that can be expected as a result of California's policy to pursue economic energy efficiency and demand-side management. This comprehensive understanding requires both an understanding of the forces shaping the workforce and workplace in California (Task 1) and the implications on California's labor market of policies and program designed to support energy efficiency and demand-side management (Task 2). These two tasks rely on a mix of methodologies, including the review and analysis of existing information sources, multi-sector macro-economic modeling, and detailed case studies.

The second area is an understanding of current and planned efforts to develop the workforce infrastructure. This includes an understanding of plans and capabilities of public and private entities supporting California's workforce infrastructure (Task 3) as well as an assessment of California's education and job training programs and employment information systems (Task 4). Task 4 includes the development of comprehensive resource inventories of education and job training programs and employment information systems. The assessment of employment information systems is designed to support the development of the proposed WE&T web portal. To ensure that strategies supporting the full participation of minority, low-income and disadvantaged communities are developed, the Needs Assessment includes a separate task focused on identifying best practices for workforce education and training programs serving

these communities (Task 5). These three tasks also rely on a mix of methodologies – literature reviews, directed conversations with stakeholders from both the public and private sectors, and collection of program information from organizations offering education and job training programs.

Task 6 brings together the information developed in the prior tasks to identify “gaps” and develop strategies to address these gaps. Task 7 supports the dissemination of the results through a public meeting and other approaches yet to be identified. Both Task 6 and Task 7 are expected to benefit from the understanding of plans and capabilities of public and private entities, which is the focus of Task 3.

Preliminary Results

As of May 2010, preliminary results from the WE&T Needs Assessment are beginning to become available. The preliminary results provided below are based largely on interviews with stakeholders and industry experts and on analyses of available data.

- The overall economic environment in California points to limited opportunities in new construction and in large commercial building retrofit projects for the next several years. The housing bubble has resulted in an excess of new homes in many of California’s regional housing markets. The disruptions in the financial markets have contributed to the delays both for new construction and large commercial retrofit projects.
- Many of the jobs required to support energy efficiency and demand-side management represent existing jobs with some skill enhancements. Some of the jobs do not presently have clear career paths, including jobs being created in the residential retrofit market. While this finding is consistent with prior studies, the case studies for the building retrofit markets provide additional detail on how these markets operate.
- California’s present workforce system is characterized by poorly aligned funding streams and often ill-defined roles for the institutions involved in carrying out the range of workforce development functions. This fragmentation and lack of coordination has resulted in concerns that many programs are “chasing” after workforce dollars without sufficient attention to coordination. The speed at which ARRA funds are required to be dispersed seems to have exacerbated this tendency to chase dollars.
- The potential benefits from supporting “green,” including but not limited to the opportunity to receive ARRA funds, has propelled experimentation, collaboration, and significant success in overcoming “silos.” The Green Collar Jobs Council, established by legislation in September 2008, has served an important coordinating role, facilitating the development of a series of interesting collaborative partnerships within California.
- A number of new training programs are being supported by ARRA funding. At the same time, deep funding cuts to the community colleges, and particularly to their Economic and Workforce Divisions, have undermined long-term program development and has led some colleges to seek short-term grants as a major funding source.
- At present, there are numerous conferences and “summits” addressing the green economy and potential audiences are reporting “meeting fatigue.” Meetings must be carefully designed to attract participants and to provide the anticipated benefits (e.g., knowledge, networking, and collaborative opportunities) to those attending.

Concluding Observations

The following observations are based on looking back on the design and implementation of the WE&T Needs Assessment project and considering what should follow to make best use of the investment in the WE&T Needs Assessment project.

Challenge of Making Results Used and Useful

As noted in the second section of this paper, the Commission has recognized the need for collaboration and fund-sharing for development of the workforce infrastructure for achieving California's economic energy efficiency and demand-side potential. The Commission also has provided direction for the dissemination of the WE&T Needs Assessment final report and for the use of the findings in making possible modifications to existing WE&T programs funded by the IOU ratepayers.

While this direction is not questioned as being an appropriate part of the process, merely making a report publicly available, holding a public meeting, and requiring the IOUs to modify existing programs based on the reported findings does not ensure that results will be understood and accepted (i.e., used and useful). Nor do these activities ensure that "collaborative and fund-sharing" approaches for developing California's workforce infrastructure will be implemented going forward. Other means of dissemination are being considered in recognition of the needs of the different audiences. For collaborative and fund-sharing opportunities to be realized, the differences in legislative and constitutional mandates among various state and local agencies also need to be acknowledged and addressed. At the very least, there is an obvious need to solicit and listen to the input of others, particularly those from public and private agencies involved in developing California's workforce infrastructure.

How one develops support for the results of the WE&T Needs Assessment is not all that clear, particularly prior to the results becoming available. At this point, formal and informal advisory groups are being consulted. Plans are also being made for a public meeting where representatives from both the energy and workforce communities would be brought together to review the results of the WE&T Needs Assessment and to explore the implementation of recommended strategies. There is little question that the advisory groups and public meeting(s) are only a beginning and that resources will be required to ensure that the results are "used and useful" once the project is completed.

Implications of the Great Recession and ARRA Funding

The Great Recession and the added ARRA funding for green jobs and green job training have significantly changed California's workforce environment, at least for the short-term. The initial CPUC direction along with the initial stakeholder process occurred prior to the now recognized Great Recession. At the time, the focus was not on creating jobs but on ensuring that workers were adequately trained to support the achievement of California's economic energy efficiency and demand-side management potential. Table 2 illustrates this change in California's economic environment by comparing the unemployment rates in California to the key dates for the WE&T Needs Assessment presented in Table 1. Between September 2007 when the Commission directed the utilities to address workforce issues in the EE Strategic Plan and April 2010, California's unemployment rate more than doubled, increasing from a respectable and generally acceptable rate of 5.4 percent to 12.6 percent (BLS 2010).

Table 2. California’s Unemployment Rate and Key Dates for WE&T Needs Assessment

Dates	California’s Unemployment Rate (Seasonally Adjusted)
July 2007	5.4%
September 2008	7.8%
February 2009	10.2%
September 2009	12.1%
December 2009	12.3%
April 2010 (most recent available)	12.6%
December 2010	?

Sources and Notes: BLS 2010 Table 1. Unemployment rates through December 2009 reflect revised population controls, model re-estimation and new seasonal adjustment. The unemployment rate for April 2010 is preliminary.

As a consequence of the Great Recession and actions taken in Washington, D.C. to “kick-start” the economy, there have been significant increases in funding for green jobs as well as green job training programs both in California and throughout the United States. Unless the ARRA funded programs lead to some permanent workforce infrastructure changes, an objective of many responsible for the allocation of the ARRA funds, the contribution of the short-term ARRA funded programs to California’s workforce infrastructure is likely to be limited. In contrast to the focus of ARRA funded programs, the WE&T Needs Assessment is intended to support long-range strategic planning, at least through 2020. Whether or not the efforts to sustain the programs initially implemented with ARRA funds are all successful, the collaborative relationships that have been developed are likely to support efforts to coordinate and make more effective use of future investments in workforce training, including utility-funded programs.

Plans to Review and Update the WE&T Needs Assessment

While the WE&T Needs Assessment is a significant step for the development of a coherent, statewide WE&T plan as recognized by the Commission, the changing environment requires that the Needs Assessment be reviewed and updated on a regular basis. There will undoubtedly be short-comings to the methodology used that will need to be addressed. In addition, there will be a number of areas in which additional resources could be used to develop improved information. Finally, there is value in reviewing the extent to which recommendations have been adopted and programs modified to reflect the Needs Assessment findings

Some obvious questions to explore are how frequently such a study should be updated and who should be responsible for the updating. While it is unlikely that an annual update is all that helpful, updates every 3-5 years are probably appropriate. In the near-term, additional case studies and more in-depth needs assessments for market sectors not fully addressed in the WE&T Needs Assessment may also be appropriate. With regard to who should conduct the future needs assessments, there are strong arguments on both sides on whether the project should be competitively bid or not. These questions and others will all need to be addressed in the not so distant future.

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