

**Energy Workforce Sector Strategy (EWSS)
Advisory Council Meeting
March 28,2014 at PG&E's Pacific Energy Center
Meeting Minutes**

Participants

In Person:

Catherine Ayers – Foothill College & Bay Area Community Colleges
Jim Caldwell – Workforce Incubator
Patti Castro – Alameda County
Patty Cook – ICF International
Robert Cormia – Foothill College
Emily Courtney – Strategic Energy Innovations (SEI)
Terry Fry – Nexant
Ahmad Ganji – San Francisco State University
Brenda Hopewell – PECI
Avni Jamdar – Emerald Cities – San Francisco
Desiree Landeros – Proteus, Inc.
Laurie Mack – West Ed
Tara Marchant – Emerald Cities – Oakland
Robert Marcial – PG&E
Joanne Martens – Green 360/The Intellecto Advantage
Mark Oullette – ICF International
Wenshen Pong – San Francisco State University
Susan Propst – San Francisco State University Darlene Besst - NECA
Pete Shoemaker – PG&E
J.D. Stack – Workforce Incubator
Ryan Stroupe – PG&E
Aaron Wilcher – Skyline College

By Webinar:

Denise Adams – Butte College
Christa Ansbergs – Lockheed Martin
Debra Barger – CSU, Chico
Larry Chang – Laney College
Daryl DeJean – Emerging Technologies Associates, Inc.
Natalie Culver-Dockins – Fresno City College
Ben Finkelor – UC Davis Energy Efficiency Center
Brad Hurte – Workforce Incubator
Erik Jensen – California Energy Commission
Bernie Kotlier – IBEW-NECA Labor Management Coordinating Committee
Walter Mizuno – CSU, Fresno
John Mummert – Foothill College
Lisa Paulo – California Public Utilities Commission
Catherine Swenson – California Corporate College, CCCEWD
Sheila Thomas – CSU Chancellor's Office
Mike Ward – CSU, Chico

Presentation and Discussion:

- Robert Marcial, Director of PG&E's Pacific Energy Center, welcomed everyone and explained the purpose of the meeting was to review Energy Workforce Sector Strategy (EWSS) project 2013 accomplishments and to obtain input on consultant recommendations for the 2014 EWSS Roadmap. He asked participants to each introduce themselves and their organization.
- Jim Caldwell, CEO of Workforce Incubator, then presented 2013 accomplishments and findings of his team's work investigating PG&E's Workforce Education & Training (WE&T) programs and identifying which programs may be worth considering as priorities for creating linkages with post-secondary education institutions as a way to better collaborate efforts and leverage respective resources. Brad Hurte and J.D. Stack assisted him in the presentation. See the accompanying slide deck for details of the presentation.
- Brenda Hopewell asked what was the purpose of prioritizing programs. Jim indicated that PG&E has some 100 WE&T programs and that Workforce Incubator had narrowed the list to 13 that will be ranked as most conducive for linkage with post-secondary institutions.
- Avni Jamdar asked if trade programs were looked at. Jim said the study scope was focused on PG&E programs and that the JATCs, UCs, and CBOs were outside the contract scope. Robert Marcial added that a separate scope of work is being drafted in parallel with this effort, which will include components for blue-green collar workforce.
- Lisa Paulo suggested that renewables are part of Integrated Design, Integrated Design Certificate, and Zero Net Energy (ZNE) and should be incorporated. Robert Marcial agreed, "It is part of IDSM (Integrated Demand Side Management)".
- Terry Fry said that we need to make sure that workforce training covers needs like:
 - IDSM
 - Facility management and energy auditing
 - Smart buildings & information technology (IT)
 - Advanced analytics
- Ahmad Ganji pointed out that SFSU has for over 20 years operated an energy efficiency training program for engineering students. This is known as the DOE-funded Industrial Assessment Center. SFSU also offers a Masters Degree in energy systems, with courses on auditing and measurement and validation (M&V). However, it does not appear that these programs. Jim Caldwell apologized for the oversight. Ahmad added that San Diego State University is a major source of energy engineers. He also indicated that Oakridge National Lab has data on energy engineers in the workforce.
- Bernie Kotlier mentioned that San Jose State has a new Masters program in energy storage engineering.
- Susan Propst said SFSU is definitely interested in working with the Pacific Energy Center. Ryan Stroupe responded by saying he will follow up with Ahmad and Susan.
- Bernie asked why apprenticeship programs were not included in the scope of work. Jim

said it was a matter of limited bandwidth and resources for the project, and agreed that it must be included in the overall work. Robert added that is a point well taken. “It is a top priority, and we will be taking a deeper dive”. Bernie asked that the slides be amended with a note indicating that apprenticeships need to be addressed. (After the meeting Brad Hurte pointed out that the final slide deck did not include updated slides that did in fact identify union apprenticeship programs as a key resource.) John Mummert requested that any apprenticeship slides be run by him first for review. Brad agreed.

- Bernie indicated that there is a lot of overlap among JATCs, community colleges and utility training programs. He suggested that the Lighting Linkages slide should include the California Lighting Technology Center at UC Davis. Brad added that UC Davis and UC Berkeley both do a lot on lighting and HVAC.
- Mark Oullette mentioned that the Lighting Linkages slide DID capture the schools that teach CALCTP courses. He reported that Laney College is moving toward CALCTP training.
- Lisa Paulo observed that lack of renewables labor market data has been an issue for years. A more strategic look is needed at renewables labor market data.
- Desiree Landero reported that Proteus has trained some 650 solar installers including for commercial buildings. She said that some PV project installation workers come from other countries and from temporary employment agencies. Jim said that in the past Solar Tech provided solar workforce data but its grant is over and the work is completed. “We need another focal point like Solar Tech.”
- Ahmad Ganji suggested that we also need to expose high school students to energy careers. Joanne Marten said that is just what Green 360 does, and they hope to expand their efforts.
- Patti Castro said that the Sacramento Region EE Coalition success factors are not the same as student outcomes and training course measures. Jim agreed and said these factors are just for the regional coalition.
- In response to a question about the Don Vial Center report, Robert mentioned that it has not yet been released but is expected to be any day.
- Brad reported that CALCTP is developing a new course for building operators. Jim added that the state’s Employment Training Panel (ETP) programs has a \$30 million in 2014-2015 for funding training programs for employers who do not have their own in-house training. This could be a significant source of funding for needed training.
- Participants were asked for their opinions on what programs they believe should be priorities.
 - Desiree pointed to HVAC technician training.
 - Robert Cormia suggested design and engineering of high performance buildings and integrated systems.
 - Wenshen Pong offered that SFSU offers course on weekends for incumbent

- engineers (e.g., EE measurements and auditing).
 - Terry Fry said HVAC and lighting performance are important, and don't ignore new building design. He added that we must find a way to address overlapping multi-disciplinary skills (e.g., sales and customer engagement).
 - Terry also emphasized that EE jobs are changing rapidly, so we should focus more on skill sets (e.g., auditing) than occupations. "We need to update this process frequently because jobs are changing so often." For example, in the future automation and technology may displace energy auditor jobs.
 - Bernie urged that training should be demand driven because industry needs are changing so rapidly. We must match dollars and resources to changing needs. Focus on supply and demand.
 - Patti Castro echoed these comments and added that employers have told her, "Don't get hung up on what to call a job. Skill sets are more critical". She indicated that colleges, K-12 education, and WIBs are supposed to pick priority sectors, and she is concerned how that will work out. We have lost 16% of our funding in the past two years, and I am concerned about our capacity to deliver.
 - Aaron Wilcher suggested that PEC offer shared resources to colleges and universities (e.g., shared facilities and faculty).
 - Catherine Ayers said she liked Aaron's idea about shared resources and collaboration among PEC and colleges and universities. Maybe we could work together toward a regional certificate program.
 - Finally, Robert Marcial indicated that sales training is a way to "top off" skills for journeyman. He also suggested the skills track could address multiple careers.
- The meeting adjourned at 3:00 p.m. with Robert thanking everyone for their participation and valuable input.

Minutes prepared by J.D. Stack (JD@EmpowerAdvisors.com).