



## Pacific Northwest Center of Excellence for Clean Energy

### Governance Board Meeting Hanson Board Room, Centralia College

May 15, 2013  
9:30 am – 11:30 am

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#### In Attendance:

Troy Nutter, PSE, Governance Board Chair  
Dr. James Walton, Centralia College  
Lawrence Beaty, Idaho State University/ESTEC  
Ryan Davis, RETC  
Mark Fischer, Green River CC (representing WDVA VCC)  
Bob Guenther, IBEW Local 77  
Mike Hanson, Avista  
Alan Hardcastle, WSU Energy Program  
Vicki Oakerman, Centralia College  
Kairie Pierce, Washington State Labor Council  
Diane Quincy, Avista  
David Sorensen, WestCAMP, Inc.  
Kevin Schneider, Pacific Northwest National Laboratory  
Bob Topping, RETC  
Sally Zeiger Hanson, WSU Energy Program  
PNCECE staff: Barbara Hins-Turner, Jamie Krause, Monica Brummer

*Note: This was a special meeting held to recognize the work done by the board and its members. There was a review and discussion of the 3-year, \$5-million (leveraged to \$12-million) Department of Energy Smart Grid Workforce Development Grant.*

#### **Call to Order and Introductions, Troy Nutter, Chair**

*Action item:* February 12, 2013 Minutes were adopted without corrections

#### **Welcome and Thank You, Dr. James Walton, President/Centralia College**

Dr. Walton handed letters of appreciation to all Governance Board members and said, *"It's almost a shame that it's been only three years. I feel like we just got the project going and now we have to end it. You have all done a phenomenal job. Thank you."*

#### **Budget Report, Vicki Oakerman, Centralia College**

Through May, the project is 91.7% complete. Expenditures = 87.5%; Match = 98.2%. Everyone is very close to where we expected them to be. Avista's report came in today, which isn't included. July 31 is the last day to submit invoices. The bulk of your work should be done before that. Jamie Krause noted we are expecting \$160,000 in match to come in from Seattle City Light's meter lab. (Fiscal Report Attached)

#### **DoE Project Summary, Barbara Hins-Turner, Exec. Director; Jamie Krause, Project Manager**

Barbara presented the history of the DOE Smart Grid grant writing process. The Center of Excellence convened industry, labor and education in 2009 to develop a proposal for the U.S. Department of

Energy—Recovery Act—Workforce Training for the Electric Power Sector funding opportunity. The resulting application was announced in April 2010, funded August 1, 2010 and runs through July 31, 2013. The Northwest Energy Efficiency Taskforce (NEET) was the catalyst behind a regional application. Early in the collaborative process Cal Shirley, VP Energy Efficiency, Puget Sound Energy and a NEET Taskforce member asked “Who are the PNCECE counterparts in the other states? Let’s secure some funding.” Roger Woodworth, now the Chief Strategy Officer for Avista Utilities, and others made us successful. The project was supported by a letter signed by four governors in the project region. Barbara emphasized that it was the legislative support that made our application successful. We thank Senator Maria Cantwell who was a key advocate for our proposal during the selection process. Barbara also acknowledged Troy Nutter, Mike Hanson, Jeff Hammarlund and Bob Topping for their contribution to the successful proposal.

Jamie Krause, Smart Grid Project Manager recapped the project history starting with implementation, which put Centralia College and PNCECE on the national map for the third time. We are one of only two projects in the country that was funded at the maximum level (\$5 million). We have met and exceeded our training and job placement benchmarks. As of March 31, 2013, 5267 individuals have received training against a target of 1,215, and 259 individuals have been placed into high skill, high wage jobs—the job placement benchmark was 234!

The grant allowed us to build and coordinate a collaboration of partnerships (a legacy group) across state boundaries.

Some of the project highlights include: (PowerPoint Presentation Attached)

**Avista** – Built a live training substation at their Jack Stewart Training Center. Avista used pre-apprenticeship students and journeymen throughout the building process. Curriculum modules were developed that are slated for upload to the National Training Education Resource (NTER) open source platform.

Discussion of the construction and learning processes for the substation were discussed by Mike Hanson and Diane Quincy. Jamie concluded this section of the presentation by noting “The Jack Stewart field training substation is a legacy project from this grant.” Diane Quincy stated “This has been one example where Mike has had a long-term vision of where we can be excellent in our training. He worked on the vision, picked the right partners – the state grant did all of the preliminary work. This is a good physical tribute to Mike.”

**Website** – NEET’s request was to have a centralized web portal. Over the course of the smart grid project, PNCECE developed and populated a regional website: <http://cleanenergyexcellence.org>. Website highlights include:

- Edmonds/ five-state college program matrix (WA, OR, ID, MT and UT) – now displayed as “College Programs” – and the Energy Educators Association
  - Alan Hardcastle: “We need to recognize our industry partners. For some of them this is new territory too. Build our programs from industry first; then inform the educators.
- Washington State University’s supply-side and demand-side occupational skill profiles and the career lattice – which led to the interactive career i-map <http://cleanenergyexcellence.org/careers/>
  - Alan continued to talk about the key occupational discoveries revealed by the project that resulted in the development of a full Customer Service Representative (CSR) Skill Standards for the utility sector. There was nothing to describe this position in a systematic way. The CSR role was changing before our eyes. Industry is on the cusp of discovering the specific changes that are needed. The CSR skill standards project brought some cultural awareness of the changes that are coming our way. What does the job look like, how is that changing, what are the challenges, how will the occupation continue to

change down the road? Our college programs, which can't change on a dime, will have time to put programs together.

- Bob Guenther: It was Don Guilliot who appointed Rachel geBauer to the table to participate in the skill standards process—he deserves credit for that.”
- **Other Products from the Smart Grid project:** The *Train-the-Trainer* grab and go box was presented—a teaching toolkit containing; a poster visual of a Smart Grid “city” highlighting the related energy jobs and a “What is a Home Area Network (HAN) poster depicting “smart” technologies that are installed at the consumer level and a consumer video talking about the what and why of smart technologies—what is meant by “smart grid.” The teaching tools were produced by Montana State University--Bozman as a deliverable of the smart grid project.

Troy Nutter – “The CoE needs to take credit for listening and acting on what industry says. You are open to industry and are willing to seek, ask for and take advice.” Mike Hanson confirmed that the CoE in Centralia is unique.

**K-12 and Careers in Energy Week,** Kairie Pierce, College/K-12 Apprenticeship Director for the Washington State Labor Council, AFL-CIO, had the opportunity to take the lead during the second year of Careers in Energy Week and expanded the number of events. The governor, 2 mayors and county commissioners were involved. 19 events reached out to nearly 500 individuals and the word was spread to even more. Washington state has been number one nationally for two years in a row in terms of number of events and outreach.

**LightSticks** & Six Sigma led by Bob Topping – Bob described how he is working in the Oregon High School Advanced Construction Class program. The LightStick project began with outreach to 12 high schools. 75 students participated the first year; now there are 116 students involved with this project. Students created a LightStick factory to apply the concepts of Lean/Six Sigma to design and build a prototype for a rechargeable LED lighting and charging system capable of providing 16 hours of light for a small 100 square foot house. They re-created a product called the LightStick, which was introduced to them by the Community Solutions Initiative, and found that it could be useful in more ways than one. Not only will it light up a room, the LightStick will create economic development as well. This year's project has students researching new cultures, developing products, creating business plans and designing factory models to send to third world countries, such as Cameroon, Africa. These students are celebrating successes alongside of failures and are learning every step of the way.

**National Training and Educational Resource (NTER)** – Will be our portal for an estimated 50 online courses. Bob Topping and Jamie gave an overview of some of the courses that will be available on the NTER open source learning platform. <http://cleanenergyexcellence.org/projects/nter/>

**Labor Market Study:** The last regional Labor Market Study was completed in 2008. With the changes in the economy and the PNCECE expansion to a regional partnership across five states, a new labor market study has been conducted and will be published soon – to produce a more realistic snapshot and more comprehensive information on the state of the regional energy workforce.

- Alan Hardcastle - The 2008 report created a lot of conversation. My hope is that we'll be able to leverage this new information to see what our future needs will be. We'll see the impact of the recession. People have cut back from energy use; more energy efficiency; retirement issue is resurfacing as an even bigger event. What is succession planning going to look like? What's next? How are we going to face these challenges? Energy isn't the only industry facing these problems.
- Sally: It's interesting how the research has gone dark (quiet) since 2008. It will be interesting to see what will come out of this new research.

**Curriculum** – Kevin Schneider presented the curriculum modules he authored on the “History of Power in the Northwest.” Kevin noted that history explains the reasons why we have the system that we have today. Kevin’s 120 slides, which are presented on five narrated slide decks will be available on NTER.

- Lawrence Beaty talked about curriculum and the need to get this into the hands of more instructors. He stated that we need to continue to sell the regional collaborative vision going forward. He said he believes we have the momentum to keep this technical evolution pipeline moving forward.

**DOE Project National Wrap-up** – The Center for Energy Workforce Development (CEWD) will sponsor a Smart Grid project wrap-up gathering in Indianapolis in August as a part of the Nuclear Energy Educators Network (NEEN) meeting. No other national wrap-up meeting for the U.S. Dept. of Energy Smart Grid projects has been announced.

**Dept. of Labor TAACCCT Grant discussion, *project team***

Trade Adjustment Assistance Community College Career Training Grant Proposal

Barbara: This is the third round of grants under the TAACCCT project. PNCECE has never been the lead in a DoL grant because we didn’t want to jeopardize the DoE smart grid project. We have been doing some preliminary work – the SGA is 88 pages long.

The team then discussed capacity building and competency-based learning. Community colleges have to be at the heart of the grant focus and it’s important to have a 4-year university involved.

Other grant facts:

Job placement needs to be every year

- 4-year grant. Last year is about “what you learned and what can you share”—research only
- Targeting dislocated workers and veterans and their spouses
- New piece: performance scorecard plan; employment outcomes and wages
- Training needs to be 24 months or less
- Employer engagement
- Grant funds are distributed directly to consortium partner colleges
- Could include training for Customer Service Reps, Grid Cyber Security, EMS engineers
- Includes two categories: energy and manufacturing; stackable certificates, competencies, badges and credit hours
- It’s going to be a very competitive process; there are at least six other applications moving forward within the state of Washington

**Discussion highlights:**

- Submit as a multi-state consortia – Front Range CC in Colorado (they are leading the country in NERC certification preparation) wants to be involved.
- David Sorensen in regards to smart grid: 84% of new technologies go into making products, which aren’t manufactured by utilities; comparing skill sets within industries. There are 20 NAICS codes that can be categorized into four areas.
- Troy Nutter: How do we match skills with competencies?
- Alan Hardcastle: We need to leverage what we have – use what we know and do well. Industry-manufacturing connection is really important, especially in regards to smart grid; employment needs “We used to poach from one another, now we poach from other industries and manufacturing is one of them” (quoting Pat McCarty)
- How do we build capacity to fit the training requirements? How do we connect and solve immediate needs? In the future, our utilities will look to other industries more
- How do we create assessments for veterans to target train to the skills/competencies they are missing? May be able to train them to bring them up to mid-level vs. entry level.