



## Pacific Northwest Center of Excellence for Clean Energy

### Education Taskforce Meeting

Jack Stewart Training Facility  
8307 N Regal, Spokane, WA

**Sept. 13, 2012      9 am – 3:30 pm**

#### **Attending:**

Ryan Fedie, Bonneville Power Administration (Taskforce Chair)  
Lawrence Beaty, Idaho State University, Energy Systems Technology Education Center  
Brian Dale, Veterans Conservation Corps  
Ryan Davis, Regional Education and Training Center  
Seth Dyson, Spokane Area Workforce Development Council  
Mark Fischer, Washington Dept. of Veterans Affairs  
Jeremy Gall, Avista  
Jeff Hammarlund, Portland State University  
Mike Hanson, Avista  
Alan Hardcastle, WSU Extension Energy Program  
Melanie Hayes, Avista  
Lauren Huckaba, Avista  
Jamie Krause, PNCECE  
Patrick Lewis, Spokane Community College  
Alice Lockridge, Seattle City Light  
Bill Magers, Avista  
Kairie Pierce, Washington State Labor Council, AFL-CIO  
Diane Quincy, Avista  
Kevin Schneider, Pacific Northwest National Laboratory  
Patty Shea, Avista  
David Sorensen, WestCAMP, Inc.  
Bob Topping, Regional Education and Training Center-Satsop Campus  
Mike Toutloff, Avista

#### **Call to Order** – 9:20 am, *Chair Ryan Fedie*

The group agreed to change the agenda by working through lunch to view the Substation Hazard Awareness Training video before the afternoon tour. Alan Hardcastle moved to adopt the revised agenda; Mike Hanson second the motion. Unanimously approved.

#### **Adoption of June 20, 2012 Minutes**

Ryan reviewed the highlights of the June 20, 2012 Education Taskforce meeting and called for a motion to adopt the minutes. Jeff Hammarlund moved the minutes be adopted as written. Second, Mark Fischer. The minutes were unanimously approved without exception.

#### **Welcome** –*Mike Hanson, Manager Craft Training at Avista*

Mike welcomed the Taskforce to the Jack Stewart Training Center. He highlighted the progress made by Avista on the deliverables for the Smart Grid Training Substation and noted the group would have a chance to tour the Substation in the afternoon. Barbara thanked Avista for hosting the meeting.

### **Year 3 Summary - *Jamie Krause, Smart Grid Project Manager***

Jamie presented a summary of the Year Three subcontractor workplans. Alan Hardcastle mentioned that he and Barbara are members of the Evergreen Jobs Leadership Team that is looking at all ARRA investments across the state. On report outs of all the grantees, our Energy Smart Grid project is carrying a large portion of the state's training and placement numbers. Do we have a breakdown of the kinds of training that are being offered through the grant? To what extent are there quick hit trainings, medium and difficult training? Jamie will extract information from the quarterly report and summarize the training topics.

### **Curriculum Development Subcommittee Update - *Bob Topping, Director of Strategic Initiatives, RETC***

Bob mentioned that the majority of learning content we are developing has an outcome that aligns with industry standards. Learning modules must meet the requirements established by the Curriculum Development Subcommittee to be meaningful to industry, with demonstrated outcomes that are measureable. Bob summarized the Curriculum Development Subcommittee meeting held in Pend Oreille County at the PUD on September 11 -12. He talked about the National Training and Education Resource (NTER) webinar with Michelle Fox from the Department of Energy and noted her comment that the questions she received from our subcommittee are the most dynamic and thoughtful she has received from any of the webinars she has facilitated to date. The reputation of this project is permeating through DOE as deliverables are generated and the project moves forward. NTER will allow us to better address a spectrum of curriculum development and learning module development tools from eLearning and authoring software to voiceover PowerPoint and basic pdf files.

Members of the subcommittee have signed up for NTER training and at the next Education Taskforce meeting will be able to better explain the value of the platform to regional Smart Grid training partners.

### **Customer Service Representative (CSR) Skill Standards – *Alan Hardcastle, WSU Extension***

Alan highlighted the background of CSR standards and presented the draft layout of the CSR document to the Taskforce. He acknowledged the critical participation of the region's utilities in the preparation and validation of the Standards. Alan noted that WSUs Year 3 activities will build on Year 2 outcomes by investigating two or three grantees from the Pacific Northwest Demonstration project to determine the demand-side data management knowledge, skills and abilities needed by the workforce in the Smart Grid environment. The design includes looking at the technical and knowledge outcomes of the demonstration projects and determining what KSAs would be needed by the future workforce. WSU is beginning the conversation with Avista and the Pullman Smart Grid demonstration project to serve as a backdrop that will help document the emergence and need for new skills such as IT, data management and analysis skills.

### **Labor Market Study**

In 2008 PNCECE launched the first study of workforce issues for the energy sector in Washington and Oregon. It is significant to note that the energy industry has been missed in recent state and regional labor market studies. We have found that standard Labor Market and Economic Analysis (LMEA) data tends to show the industry as flat. There is more volatility than is typically reported. This is an opportunity to look at retirement patterns and how the economy has affected the workforce; to analyze where future jobs will come from. At its core, energy is fundamental and is an essential industry at the core of all other sectors. Because energy is not reflected in most labor market studies we have determined a need to do a labor market study of our own. It's important to understand the sense of urgency from our industry partners to ensure the best and focused use of limited resources. The Labor Market Study is currently in the design phase.

## Video Projects

Barbara provided a brief background on the filming of the new *Energy Efficiency: Careers that make a difference* video. The video may be viewed at <http://cleanenergyexcellence.org/career-videos/>

Jamie introduced the Montana State University (MSU) video project, *Smart Grid 101 for Consumers*. The downloadable Smart Grid Fact Sheet and FAQ that will be available for consumers and educators on the PNCECE website. Video can be viewed at <http://cleanenergyexcellence.org/smart-grid/>

Avista presented their new *Substation Hazard Awareness* training video prior to a tour of their new Smart Grid Training Substation. The Training Substation was funded through the PNCECE Smart Grid Workforce Development project. Permitting, excavation and construction of the \$1 million project has been completed and the substation has been energized for training purposes.

**Careers in Energy Week - Kairie Pierce, K-12 Apprenticeship Director and Labor Liaison for Community and Technical Colleges at the Washington State Labor Council, AFL-CIO (WSLC)**

Kairie presented an update on the *Careers in Energy Week* planned for October 15 – 19, 2012. More events are planned this year than last. PNCECE in partnership with WSLC are leading a statewide effort in collaboration with industry, education and labor partners to organize events that bring the energy industry to life for students, school counselors, parents and military veterans. Events range from dam tours to counselor workshops, hands-on power grid simulation activities at the Gonzaga University ZagOps Lab to an education event at Tacoma Power's Cowlitz River Salmon Hatchery and Visitors Center. Kairie noted that proclamations have been issued by Governor Gregoire, the Board of County Commissioners for Spokane County and the mayor of Centralia and Spokane declaring October 15 – 19, 2012 as Careers in Energy Week. Statewide events include:

Oct 15:	Newport School District and Box Canyon Dam Tour
Oct 16:	Avista Pre-Apprentice Line School
Oct 16 – 19:	Mobius Science Center, Spokane
Oct 17:	Spokane Community College and Gonzaga University
Oct 17:	Lewis and Clark High School College and Career Fair
Oct 18:	Spokane Regional Solid Waste System Steam Plant Tours
Oct 18:	Regional Education and Training Center, Satsop Campus, Elma, WA
Oct 19:	Tacoma Power – Cowlitz River Salmon Hatchery and Mossyrock Dam Tour
Oct 19:	LaunchPad INWA Job Seekers Lunch
Oct 20:	TRiO @ Centralia College: <i>Expand Your Horizons</i> for 7 <sup>th</sup> – 9 <sup>th</sup> grade girls
Oct 20:	Gonzaga University and Avista Veterans' Outreach/ZagOps
Nov 10:	Expand Your Horizons in Spokane. 6 <sup>th</sup> – 9 <sup>th</sup> grade girls STEM and energy workshops

Pacific Northwest project partners in Oregon and Idaho (Idaho Education Network & Idaho Dept. of Labor) also have events planned. An energy careers proclamation and energy efficiency proclamation have been issued in Idaho.

## Upcoming Meetings and Events:

- AACC in Wisconsin, Oct. 2 – 3 (Barbara & Troy)
- NSF Conference, Washington DC, Oct 23 – 26 (Barbara, Alison Pugh, Alan Hardcastle, Sally Zeiger Hanson)
- CoE Advisory Board at Tacoma Power's Cowlitz Salmon Hatchery/Visitors Center, Nov. 2
- CEWD Fall Conference, Arlington, VA, Nov 14 – 16 (Avista will attend)
- Education Taskforce at ~~Seattle City Light~~, (in Portland, OR) Dec. 7
- 8<sup>th</sup> Annual Energy & Construction Best Practices Summit, June 19 & 20, 2013

## **Good of the Order**

Ryan Davis asked the group: “How can we help students navigate through the utility hiring processes?” He wanted to hear from industry partners on how we can help students bridge barriers. These questions served to inform the Year 3 smart grid project deliverable for the RETC to update links for the jobs that are available across the project region (WA, OR, ID, MT, UT). Ryan Fedie stated that simply having the information consolidated in one place will be helpful. Students must learn how to do web search, fill out applications, how to interview, what a good cover letter and resume look like, etc. Diane said that prospective applicants also need to know how to mine related experience and translate experience into a line in the application that reflects transferrable skills.

Mark Fischer highlighted the partnership between The Society for Human Resource Management (SHRM) Washington State SHRM Council and the Veterans Conservation Corps (VCC). Veterans hiring events co-sponsored by SHRM and VCC are being planned for the Seattle area and at JBLM. These events will include employers that have current job openings versus a job fair format.

## **Get Into Energy Careers Project - *Seth Dyson, Spokane Area Workforce Development Council***

Seth gave a presentation on the Get Into Energy Careers Program (GIECP). GIECP is a pilot project funded by the Bill and Melinda Gates Foundation and overseen by the Center for Energy Workforce Development (CEWD) to test pathways into energy careers. PNCECE was chosen as one of nine sites to manage the program at the state level and contracted with the Spokane Area Workforce Development Council to test the pathway in conjunction with the Avista/SCC Lineworker School. Seth’s presentation highlighted the specifics of the career pathways model and looked at outcomes, lessons learned and new approaches to recruitment and retention for low income youth ages 18 – 26 seeking to apply to the Avista Pre-Apprenticeship Line School.

## **Smart Grid Manufacturing Taskforce Update, *Dave Sorensen, Executive Director, WestCAMP, Inc***

Dave introduced the National Institute for Standards and Technology (NIST) Interoperability Standards. The standards have been endorsed by the International Electrical and Electronics Engineering Society (IEEE). Dave opened his presentation of the Interoperability Standards and NIST by reviewing the background on NIST’s role in smart grid. NIST has developed a framework of standards to support smart grid interoperability. He reviewed the anticipated benefits of the smart grid system and the seven domains in the smart grid conceptual model including graphics that illustrate the communication flow for each domain and the interconnection between customers, markets, service providers, operations, bulk generation, transmission and distribution.

The smart grid program is not a one or two year activity. It will take 20 to 30 years to fully mature. As it is implemented, we realize there will be new and better ways to accomplish objectives. There will continue to be significant improvement tools, technologies and methods.

“We need to seriously consider what part we want to play,” Dave stated. “What are our specific strengths and weaknesses? What can we do better than many others? What are some unique needs of the program that we can specifically address? Now is the time to plan for our future participation in the smart grid program.”

## **Tour & Training Substation Progress Report**

*A Hazard Awareness for Substation* video was viewed at a tailboard safety meeting. The taskforce was treated to a tour of Avista’s new Smart Grid Training Substation. The training substation was funded through the PNCECE DOE Smart Grid project. Permitting, excavation and construction of the \$1-million project has been completed and the substation has been energized for training purposes.

**Adjourned** - The meeting adjourned at 3:30 p.m.