



Pacific Northwest Center of Excellence for Clean Energy

Educational Taskforce June 22, 2011 Minutes Puget Sound Energy, Olympia, WA

In attendance:

Ed Bowen, Department of Veterans Affairs, Veterans Conservation Corp
Monica Brummer, PNCECE/Centralia College
Yvonne Chase, PNCECE
Terry Cox, North Seattle Community College
Christy Doyle, Spokane Community College
Ryan Fedie, Taskforce Chair, Bonneville Power Administration
Tim Fiegenbaum, North Seattle Community College
Alan Hardcastle, Washington State University, Extension Energy Program
Barbara Hins-Turner, PNCECE
Lauren Huckaba, Avista Utilities
Frank Jump, North Seattle Community College
Jamie Krause, PNCECE
Alice Lockridge, Seattle City Light
Jim Malinowski, Clark College
Jilliene McKinstry, Gonzaga University
Troy Nutter, Puget Sound Energy
Mel Oyler, Cascadia Community College
Shane Pacini, Avista Utilities
Kairie Pierce, Washington State Labor Council
Alison Pugh, Edmonds Community College
Diane Quincy, Avista Utilities
R. Scott Rasmussen, Idaho State University, Energy Systems Technology and Education
Dale Singer, Avista Utilities
Dennis Skarr, Department of Veterans Affairs, Veterans Conservation Corp
Dave Sorensen, WestCamp
Bob Topping, Chemeketa College
Michael Wehling, Puget Sound Energy
Ron Wheadon, Cascadia Community College
Sally Zeiger Hanson, Washington State University, Extension Energy Program

Call to Order and Introductions, Barbara Hins-Turner

Bob Topping was asked to be the interim Education Taskforce chair for this meeting. He called the group to order. Barbara Hins-Turner announced that Sue Walsh was assigned another position at Bonneville Power Administration. As a result, she resigned her position as the Education Taskforce chair. Ryan Fedie from Bonneville Power Administration was designated as the new chair for the Education Taskforce. Ryan introduced himself and the following biography was provided to the group.

Ryan Fedie, the Energy Efficiency Engineering Service Manager for Bonneville Power Administration, guides the technical direction of an energy-efficiency program that had the best year in BPA conservation acquisition history last year. These achievements have helped residential, industrial, commercial and agricultural customers save millions of dollars in energy each year thanks to collaboration among the Bonneville Power Administration, Northwest Power and Conservation Council, regional utilities, state agencies and environmental interests. This continues a legacy of conservation efforts where energy efficiency accounts for nearly 12% of regional electricity production.

As a member of BPA's energy efficiency management team, Fedie oversees BPA's energy efficiency, demand response and smart grid activities. Ryan sits on BPA's technology innovation (R&D), sustainability and workforce diversity teams. He also manages millions of dollars in energy efficiency research and development projects for the agency's Office of Technology Innovation. To bridge the gap between R&D and programmatic activity, his team has developed an emerging technologies framework to "fill the pipeline" with commercially available energy efficiency strategies and technologies for the future.

He holds a bachelor's degree in mechanical engineering from the Milwaukee School of Engineering, a master's degree in mechanical engineering from Portland State University and is finalizing a second master's degree in engineering and technology management from Portland State University.

Barbara Hins-Turner asked for a round of introductions from all present.

Adoption of March 24, 2011 Minutes (Action Item)

Bob Topping asked everyone to review the minutes for approval. Alan Hardcastle motioned to approve the minutes. Troy Nutter seconded the motion. The minutes were approved as written.

Update on Career Lattice, Alan Hardcastle & Sally Zeiger Hanson

Alan Hardcastle and Sally Zeiger Hanson gave a presentation on the Career Lattice. Alan introduced the presentation by stating their findings, their notion on the lattice, key elements, and how to use this information to communicate to our audience; students, employees, and stakeholders who want to look at opportunities in the energy field. Alan and Sally said they tried to collect the information in a way that will make sense to these audiences. They stated that it has been a challenge gathering this information because each organization looks at the data differently and putting it in a format that doesn't overwhelm them with details.

The presentation covered areas such as a framework for depicting relationships between and among jobs, information based on industry input, and information about training, certificates, and job requirements. When the grant was put together there were ten occupations that were identified and WSU Extension Energy Program's charge was to create a career lattice that would be more complex than a career ladder with occupations that are connected with training points and how people come in and out of those positions. This is the knowledge, skills, abilities that industry expects of people in the job seeker community and workforce.

The deliverables related to the career lattice are a summary and analysis of skill standards; sample job descriptions; identification and illustration of connections and gaps between and among specific jobs; narrative overview of the career lattice; draft of lattice web images; and to post findings on project website. The career lattice process was to conduct background research; collect skill standards and sample job descriptions; conduct 30 industry interviews with 13 employers across the five state region; make connections between and among jobs identified with a summary prepared; and connect those items to training and education.

The companies interviewed in Washington were Centralia City Light, Seattle City Light, Avista Utilities, Puget Sound Energy, Evergreen School District, Evergreen Power, and McKinstry; in Oregon interviews were conducted with Portland General Electric and Energy Trust of Oregon; Montana interviews were conducted with NorthWestern Energy; Idaho Power was interviewed; and to add a regional perspective, Bonneville Power Administration and PacifiCorp were interviewed.

What the career lattice does is focus on pathways, not skills; includes more information than originally sought; and includes corporate and education training information. Additional focus in year two will be needed. What the career lattice does not do is provide company specific information; develop skill standards or skill panels; include all energy occupations; and provide complete gap analysis information.

Findings were that jobs are distinct; jobs are changing; occupations vary among employers; and Smart Grid will require more IT, Data Management & Analysis, and Communication Skills.

A connection between Supply and Demand Side Occupations was discussed in addition to Supply Side options. It was found that there wasn't a lot of connection on the supply side. Functions that were connected between supply and demand side occupations were communications, data management and analysis, and information technology.

On the demand side: meter readers are being phased out and transitioning to meter technicians. There is currently a large supply of energy auditors. Customer Service Representatives (the portal to the utility world), are professional positions, not entry level. A person usually comes with some type of CSR experience, with math, writing, and communication skills. Once someone enters into a CSR position, a significant level of training is involved and opportunities are available to move up. An example of areas a CSR can move to are billing, finance, corporate communication, specialize in types of customers, team leader, or unit supervisor. Energy Advisors are a role CSR could move into. It is a position that varies among utilities. Energy Conservation Program Administrators help customers move toward efficiencies. They can move up to consultants or become employed outside the utilities in an Energy Service Company. Resource Conservation Managers (RCM) don't necessarily move jobs but grow their responsibilities. You may have one work several cities or be a sustainability director.

It was discovered that the utilities are at different points. Some are looking ten years down the road whereas others may be trying to catch up to technology. Information Technology is expected to play a larger role in the future.

Next steps needed are to create an on-line tool to make data accessible, plot occupations into a Smart Grid graphic image, follow up on industry interviews to refine data, and connect the career lattice to supply and demand side information.

Sally Zeiger Hanson gave a tutorial on how to navigate the Career Lattice, which is now on the PNCECE website www.cleanenergyexcellence.org. She requested feedback for improvements. A link was provided and information was sent out electronically to receive feedback. Feedback should be sent to Sally Zeiger Hanson. A request was made for input on the interactive Smart Grid graphic that will be designed for the website.

Sally Zeiger Hanson displayed sample images of Career Lattice graphics for discussion as options for the portal. The goal is to make it as easy as possible for the user to navigate around. Monica Brummer discussed some other options that she has been working on. Other members brought up many different assessments available. A Graphics sub-committee will be formed to evaluate how to move this phase of the Career Lattice forward. Those who want to be on the sub-committee please contact Jamie Krause.

Dave Sorensen discussed a company called Net Endeavor in Utah that does apprenticeship management programs. He will send the information to Sally. Bob Topping asked about the accessibility to the users, especially veterans. Alan said they are making it as accessible as possible. It's designed to attract people to this industry.

Ed Bowen asked about the connections between lineworker and relay technician. If a worker moves from a lineworker to a relay tech., why doesn't the diagram show that they can't go back if they wanted? Alan Hardcastle said that most people don't want to go back. When one reaches a relay tech, it is considered a senior position. Also, the physical labor of a lineworker is another reason some don't want to return to that occupation once they move on to relay tech.

Ed Bowen asked if the energy auditor is at a high level because of education or experience in the job. Alan Hardcastle said both. The education background—the certification adds to the portfolio and provides more opportunities.

Alice Lockridge asked to pay special attention to keeping the information gender neutral for the target occupations. For example: wireman and foreman.

Monica noted the tab titled "Jobs" on the PNCECE website where the partners list available positions available.

Smart Grid Education Programs Matrix, Alison Pugh

Alison Pugh discussed the updated Smart Grid Education Programs Matrix. The matrix is a collection of training and career programs related to energy across the partner region. Since the initial distribution, Idaho and Montana have been added in addition to four year universities and an expansion of private colleges. An addendum was added to provide further information about the program. The updated version provides a more comprehensive list along with hyperlinks to the programs listed at the institutions. Limits: this is a snap shot in time and the programs are constantly changing. Making the matrix match to the target occupations, particularly on the supply side is challenging because these are crafts and don't typically directly relate to an educational program outside the apprenticeship track. On the demand side, there aren't many programs that really support the target occupations.

The next step is to receive additional feedback from the Education Taskforce. The online piece will be added to the PNCECE website in the future and continue monitoring. Alison will be contacting each partner individually to validate the matrix. Also, she will work with COE to discuss disseminating the information. Monica Brummer will connect with Alison on dissemination.

Curriculum Development Committee, Bob Topping & Jay Pickett

Charter adoption: Bob Topping discussed the background of the curriculum development committee. What has arisen thus far is focusing in on the learning modules that enhance curriculum development and create a dialogue and language in our region that gives us the competitiveness advantage. The charter was put together to identify the objectives related to the project. Bob Topping asked the Education Taskforce to adopt the charter. Ed Bowen moved to approve the Charter. Alan Hardcastle seconded the motion. The motion to adopt the Curriculum Development Committee charter was approved.

Smart Grid definition adoption: Bob Topping relayed that 17 smart grid definitions were identified that came together to make the working smart grid definition for the purpose of the project. The smart grid definition was approved in a previous meeting.

Curriculum review process: A curriculum review process was discussed and is being developed.

Smart Grid Course Matrix: The draft smart grid Module Matrix was created so there is an understanding of where smart technologies are needed in training courses. Avista has set the benchmark for training/module identification by developing the framework for the Module Matrix that will be used by the Committee. The curriculum development committee wanted to ensure content validity and incorporate individual partner specialist savvy in new modules (i.e. Cascadia – energy efficiency; Avista – Craft Trades). In September a map of how the process will be done will be reviewed to enable identification of deliverables.

Upcoming Meetings

Jamie Krause announced that the next Education Taskforce meeting will be in September at Idaho Power, Boise, ID. ESTEC will be our host. Bob Topping relayed that URS Construction is in Idaho and is part of ESTEC advisory committee. A tour of their facility would be beneficial.

Barbara Hins-Turner discussed the Careers In Energy Week proclamation from the Governor's office that PNCECE is working on for October 17-21, 2011. Look for more information as we move forward.

Adjourn at 12:45 p.m.