



**Pacific Northwest Center of Excellence for Clean Energy
Energy Career Center 1217 Mellen St, Centralia, WA
May, 9, 9:30 - 11:30 AM**

Attendees:

Alan Hardcastle, WSU Energy Program
Chuck Higgins, TransAlta
Daniel Kay, Lewis County PUD
Dick Larman, Lewis Economic Development Council
Jeremy Gall, Avista Utilities
Jim Lowery, Centralia College (Trustee)
Jim Walton, Centralia College
John Hofman, WSU – Vancouver Electrical Engineering (Student)
John B. Steidel, Centralia College
Judy Guenther, summit scholarship committee chair
Kairie Pierce, Washington State Labor Council
Lauren Hadley, South Seattle Community College
Mark Johnson, guest
Micah Goo, Centralia City Light
M.L. Norton, Centralia City Light
Nancy Estergard, Grays Harbor College
Pat McCarty, Tacoma Power
Rulon Crawford, Centralia College
Shana Peschek, Construction Center of Excellence
Travis Kinney, WSU – Vancouver Electrical Engineering (Student)

PNCECE:

Monica Brummer
Andreas Keodara

Teleconference:

Barbara Hins-Turner, PNCECE
Tom Lindmark, Portland General Electric
Troy Nutter, Puget Sound Energy

9:30 – 9:35 AM: Call to Order – Pat McCarty, Chair

- Introductions and welcome

9:30 – 9:35 AM: Last Meeting's Minutes (11-08-2013)

- P. McCarty called for a motion to approve minutes,
A. Hardcastle moved, K. Pierce seconded
 - Minutes approved.

9:40 – 9:55: WSU – Electrical Engineer Senior Project, John Hofman and Travis Kinney

- KNOLL Energy Lab Project Update
 - Inverters need to be updated to support new project.
 - New Inverters have been ordered and are to be installed within the next few weeks by the manufacturer's electrician.

- J. Hofman and T. Kinney working on collaboration between PNCECE and Lewis County PUD for senior project, that will upgrade the existing components of the KNOLL energy project
 - Voltage and current data from KNOLL project's V200 Energy Ball and Solar Panel will be monitored, gathered, and stored in a .csv file with a microcontroller
 - Transmit .csv file or a database from "KNOLL" to geology office computer where it can be combined with meteorological data.
 - The energy production will be displayed online along with weather data.
 - Next step is to come up with a design for approval.

9:55 – 10:10:

South Seattle Community College, Lauren Hadley

- SSCC BAS in Sustainable Building Science, first cohort beginning Fall 2014
 - Program is a result of industry demand of wanting to move away from years of on-the-job training for new employees.
 - The Bachelor of Applied Science (BAS) in Sustainable Building Science Technology (SBST) program prepares students who have completed an apprenticeship program, a two-year technical degree or approved associate degree and have 2-5 years of related work experience with commercial and residential high performance buildings.
www.southseattle.edu/sustainable-buildings
- Enhancements to this program were written into a grant to the National Science Foundation (NSF). That proposal is currently "recommended for funding." PNCECE is a partner on the grant and will be working to disseminate information and be an information hub.
 - Curriculum development
 - Industry relevant certificates
 - Benchmarking energy use
 - Competency based
 - Community learning laboratories
 - Recruit diverse students
 - Women and minorities
 - Veterans
 - Building trades
 - Grow the STEM pipeline

10:10 – 10:35:

Community College Program Reports

- Centralia College
 - R. Crawford reported that Fall 2014, the 1st year Energy Technology – Power Operations program will offer one traditional class, as well as an online class.
 - R. Crawford is seeing an upward trend of job openings .
 - J. Steidel attended the national GPiLEARN user conference and dispersed a handout marketing an opportunity for industry employees to gain college credit through Centralia College for

work experience and successful completion of online training modules.

- J. Steidel continues to improve the NERC courses, PPO 205 and 206.
- Grays Harbor College
 - N. Estergard reported that there are 10 second-year students in the Energy Technology – Power Operations program. She continues to promote the program as well as seek job opportunities for upcoming graduates.

10:35 – 10:50:

Apprenticeship Conference Report, Shana Peschek and Kairie Pierce

- In its third year, the event had over 300 attendees. The conference identified best practice models between industry and education for apprenticeship pathways.
- WSLC partnered with Construction, Clean Energy and Aerospace COEs for a K-12 STEM contest. Students presented four projects during the conference lunch. All of the students received scholarship awards.
 - The CoE for Clean Energy supported high school students from NewTech in Spokane (through the summit scholarship fund) – who built and presented a solar furnace project. A video of the project was reviewed at the conference as well as during advisory board meeting.

10:50 – 11:15:

9th Annual Summit Discussion

- Scholarship Auction
 - J. Guenther is requesting donations for the scholarship auction. Specifically, silent auction items are needed.
- Agenda
 - A. Hardcastle discussed the layout of the main summit day – breakout sessions that will discuss carbon constraints for sustainability, the economy, and the workforce in the context of individual industries: energy, construction, and advanced manufacturing.
- U.S. Army Corps of Engineers (2nd day)
 - Seattle and Portland USACE offices are collaborating and holding a readiness workshop for the next catastrophic earthquake for the Cascadia Region.

11:15 – 11:25:

Director's Report, Barbara Hins-Turner

- New Look and move to Mellen St location in April
- Monica redesigned PNCECE logo with similar look but removed five state geography, while keeping the PNW terminology
- DOE smart grid workforce training grant final report was submitted in late January; all deliverables were met and/or exceeded
- DOC energy entrepreneur grant has been spent out and ends June 30. Nancy Estergard and Sally Zeiger Hanson are beginning the final report work

- Edmonds NSF energy management grant ends June 30. The skills profile is in design now and will be printed in the next few weeks. Edmonds will submit final report mid-summer.
- PNCECE supported four NSF applications in the spring round with Columbia Basin, Spokane Falls, Bellingham Tech and South Seattle.
 - Bellingham Tech was funded and BHT is co-PI on that to expand the energy occupation data on interactive smart grid map. Project begins July 1
 - S. Seattle completed negotiation and is expected to be funded for the BAS in building science.
 - Columbia Basin and Spokane Falls were not funded.
- Dept. of Labor Round 4 TAACCCT grant for community colleges was released in April. The CoEs for energy, construction, aerospace and advanced mfg. are collaborating on a project that focuses on training of entry-level positions for CSR, pre-apprentice and ensuring college credit is awarded for apprenticeship and that the multi-occupational degree is an option.
 - This will be a Washington-only project (not multiple states)
 - Consortia colleges include the 3 CoE colleges - Centralia as lead, Renton, and Everett, as well as South Seattle, Bates Technical, Shoreline, Green River and Spokane
 - The concept paper is being formulated and first meeting of colleges is next Friday at Everett. We will be contacting industry and labor partners when we have more detail. Alan Hardcastle will be facilitating focus groups for industry and labor.
- We thank Jim Walton for all the years of support for the Center and the energy program.

11:25 – 11:30:

New Business

- M. Johnson proposed to the board an opportunity to publish curriculum that would include some of the products coming out of the partnerships within PNCECE – such as the industry Skill Standards.
 - P. McCarty, D. Kay, and A. Hardcastle volunteered to lead a subcommittee with a tentative first meeting date in June.
 - All present motioned and approved to form a subcommittee on the discussion of this exploratory opportunity.

11:30 AM:

Meeting was adjourned