



Pacific Northwest Center of Excellence for Clean Energy

Smart Grid Governance Board Meeting Centralia College, PNCECE, Room 115

October 9, 2012

9:30 – 11:30 am

In Attendance:

Troy Nutter, PSE; Governance Board Chair
Brian Dale, Washington Dept. of Veterans Affairs
Ryan Davis, Regional Education and Training Center
Karen DeVenaro, Seattle City Light
Mark Fischer, Washington Dept. of Veterans Affairs/Veterans Conservation Corps
Bob Guenther, IBEW 77
Mike Hanson, Avista
Alan Hardcastle, WSU Extension Energy Program
Vicki Oakerman, Centralia College
Kairie Pierce, Washington State Labor Council
Pete Saflund, The Saflund Institute
Kevin Schneider, Pacific Northwest National Laboratory
Collin Sorensen, WestCAMP, Inc.
Dave Sorensen, WestCAMP, Inc.
Bob Topping, Regional Education and Training Center
Sally Zieger Hanson, WSU Extension Energy Program
PNCECE Staff: Monica Brummer, Barbara Hins-Turner, Jamie Krause

Call to Order and Introductions, Troy Nutter, Chair – 9:31 am

June 20, 2012, minutes were adopted with no corrections/no objections.

Grant Principal Investigator Update, Barbara Hins-Turner

- **Institute of Electrical and Electronics Engineers (IEEE) Power & Energy Society (PES):**
Barbara and John Hofman, Centralia College Electrical Pre-Engineering graduate, attended this conference at the end of July along with 3,033 engineering students. Result of attending the conference: John received a \$5,000 scholarship through IEEE - John is the first community college student in the country to receive the scholarship award. IEEE PES has historically focused on university electrical engineering programs students.
- **American Association of Community Colleges (AACC), Sustainable Education and Economic Development (SEED) Conference, Gateway Technical College, Racine, WI, Oct 12/13.**
Troy Nutter and Barbara presented on the industry/community college panel and shared the Washington State Center of Excellence model, Department of Energy grant, and occupational skill standards work. They were very well received at this first annual meeting. SEED was created by the American Association of Community Colleges, with partner ecoAmerica. It is a comprehensive initiative to advance sustainability and green workforce development practices at community colleges by identifying and sharing innovative models and resources. SEED membership includes more than 460 AACC colleges representing nearly 43 percent of all public community college enrollments (3.5 million students). Follow up: Dr. Walton approved Centralia College SEED membership.
- (TROY) Barbara and I met with Wanda Reder at S&C Electric. They have a smart grid product demonstration area that is very powerful. The national utility regulations commissioners should be invited for a tour.

- **NSF-PI Meeting (Oct. 23 – 26);** Alison Pugh, Alan Hardcastle, and Barbara are attending the meeting and will make office visits to Herrera, Murray and Cantwell to give updates on the smart grid project.
- **Staff update:** RETC and PNCECE continue to share staff. Andreas Keodara was hired as an instructional tech to assist students with General Physics and to help faculty.

Fiscal Report, Vicki Oakerman: Vicki summarized numbers of the first two years and submitted projections of Year 3. Year 3 is off to a good start. The following figures do not include a lot of September billings (it's early in the month).

Project Completion = 69.4%

Percent of Expenditures = 70.7%. Work is getting done and money is getting spent.

Percent of Match Submitted = 82%

Match: Year three projection is \$7.5 million, which is a smidge over what we need (\$7,381,096)

Please submit anything that applies – as match shows support for the project.

Labor Market Study, Alan Hardcastle: We launched the first study of energy workforce issues in WA and OR in 2008. Hiring challenges that utilities are facing have changed (we were collecting data before the recession hit). How has the economy affected the prior data? Have people chosen to stay in the workforce longer? We have an opportunity to look at retirement patterns and how the economy has affected the workforce. Energy is an industry that supports other industries as the foundation of economic development. The study will need to be designed before it is launched.

(Bob G): Pacific Mountain Workforce Development Council spent \$75,000 on a regional study including Lewis, Thurston, Grays Harbor, Mason and Pacific counties. Energy was not addressed in the study.

(Ryan): is there any way to connect that data to manufacturing? Local company is building tanks for oil and gas. Are they energy or not? How do you qualify that?

(Alan): Need to define the sectors

(Ryan): How many people does Boeing employ for energy efficiency in their manufacturing process?

(Bob): working with smaller PUDs – person managing accounts is 63 years old, there's no one trained to take his position. In regards to the workforce, we need to emphasize succession planning

(Troy): Can we afford the demand? Utilities are going to change more in the next 15 years than the last 150 years.

(Bob) –Dr. Christina Vogue – wood biomass. Found a company in Chehalis called Conrad Industries which is converting tires to energy through a pyrolysis machine. They are a company to consider when applying for new grants.

Careers in Energy Week (CIEW), Kairie Pierce: We have more events planned this year than last year. Diane Quincy is working with Mobius Science Center and Gonzaga University for ZagOps - which may be the only CIEW event for veterans in the country. New Market Skills Center needs help connecting with industry and will attend Avista's event (John Altman)

(Bob): Napavine 8th grade school teacher called and asked for someone to talk to class. They'll know how to read a micrometer.

(Mark Fisher): November 8: King county is holding a hire fair for veterans and soldiers. Only companies who have open jobs are allowed to participate. Participants who are ready to be hired today – can attend this fair.

(Ryan): job portals: We're researching 206 utilities in five states with links to employment pages. Links to job pages will be posted whether industry is actively hiring or not.

(Troy): Ask who the veteran contact is for those utilities.

National Training & Education Resource (NTER), Bob Topping: An amazing platform has been developed by the Dept. of Energy which will host more than 100 learning modules linked to the smart grid grant. Like Drop Box, NTER allows us to author, share and download training; and we'll have access to learning modules that are developed nationally. The first modules will be posted by the first of November. All will be installed by March.

(Jamie): passed along two hand outs about NTER and modules. DoE assures that the format will always be in beta form, a living platform. The first aggregation of training modules are being or have been developed. Avista has submitted transmission and substation modules and they have more.

(Alan): does the program take much modification or does it take what we have?

(Bob T): is testing the system. Taking something crude and is seeing how long it takes to submit and upload. He'll give a presentation in November. The main thing is to post and store; someone can go through and fix them to make them better.

(Barbara): This is a no-cost library (other than the cloud used to store the files) and we can access other material. Dept. of Defense, Energy and Education are using NTER.

(Ryan): If you have your own LMS system, you can download and use other modules.

(Bob T): Jamie will set out invitations to join NTER. There's an interactive way to chat and give instant feedback to the author – if information that has been posted is incorrect. There are two ways to correct information. There are some modules I'm going to control; some I'm not. Recommendations: post PDF files, which are more difficult to change.

(Dave): This library of modules really lets individual users go in and select the training that they want to provide.

Promoting Future Funding, Dave Sorensen: Dave reviewed the framework of Energy Independence & Security Act, Dec. 2007 and the background of NIST, which works Interoperability Standards in smart grid including cyber security. At Barbara's request, Dave discussed strategic planning and took a full-day seminar and condensed it into 10 minutes. How do we go about strategizing? The optimum methodology for achieving specific goals and vision = strategies. There are three decision operating systems (how you do the job, day-to-day):

1. Structural – how to organize the business, work flows, procedures, reporting
2. Operational
3. Strategic decisions - what the business is all about and basic courses of action. Made infrequently; difficult to make; often informal; often made without adequate information; not broadly communicated; basis for making structural and operating decisions

Nine steps of strategic planning

1. Define output
2. Define customers
3. Define motivation for customers to take advantage of your output
4. Define competition
5. Define strength
6. Define weaknesses
7. Define future market influence factors
8. Define alternative techniques – is there a new way of doing something that meets the needs?
9. Define a current and future strategy based on output, customers, motivation and competition which thrusts your strengths against your competition's weaknesses. Weigh this strategy in light of future market influence factors.

Fundamental issues: alignment of individuals, processes and decisions to the enterprise's strategies

There are three things that a client looks for that we need to be sensitive to

1. Uniquely meets client's needs
2. People want a solution now – what can we do that's ready now?
3. Is this a product in the customer's mind that adds value or at a lower cost?

Troy: will be reaching out to folks who represent key areas – a small group – to create a sustainability plan.

Smart Grid Project Final Evaluation, Pete Saflund – final project evaluation

1. Executive summary and relevant historical background – a diagnosis of need and rationale for treatment
2. Presentation of DOE end of project summary data request; summary of lessons learned; sparse discussion and success with greater detail
3. Major findings: including quantitative findings, qualitative findings and thicker interpretation related to lessons learned
4. Net partner benefits and discussion includes data gathered from Fall 2012 stakeholder meeting (previous evaluation); communications pathways and channels; relationships among stakeholder groups; validation
5. Conclusions and discussion of future directions – summary of evidence for success; why should this work be continued; possibilities for spread; who should be involved and in what ways?

Since we don't have a controlled study in this grant, we are using a set of descriptive instances and validations to support our claimed – supports “now with additional funding...we can do this...”

What have you done that's become the wide end of the funnel?

Need before/after photos of people as students as employees

Has the center produced a greater return over time for the investment?

The DoE has not put forth any requirements for evaluations of projects

(Alan): The evaluation will work as a strategic tool to seek out other funding

(Troy): This fits into the needs that Wanda Reder said in her report about addition funding

(Pete): Avoid dry impassionate conclusions; passion should be there.

(Mark Fischer): policy changes DoD and DoE need to discuss transferable skills

(Bob G): When you start “melting” there agencies together, you have a monumental task. Need to put pressures on delegations to work together.

(Pete): The report could/will be very valuable to speak to issues that are moving forward

(Alan): What can we not live without? What's our sweet spot here? Need strategies for going forward.

Meeting adjourned at 11:34 am

Upcoming Meetings

- *Oct. 24 – 26, NSF in Washington DC*
- *Nov. 2, CoE Advisory Board at Cowlitz Salmon Hatchery and Visitor's Center*
- *Nov 14 – 16, CEWD, Arlington, VA (Diane Quincy)*
- ***Dec. 18, Governance Board, VIRTUAL***