

COMMUNITY ENERGY TASK FORCE (CETF) MEETING; Thursday, May 28, 2009

Minutes Prepared by Jaco ten Hove, temporary scribe

CETF met in the Fellowship Hall of the Eagle Harbor Congregational Church, 105 Winslow Way West, Bainbridge Island, Washington, from 7:00 pm to 9:00 pm, Thursday, May 28, 2009

Attendees: Hilary Franz, Tammy Deets (*Community Energy Solutions*), Joe Deets (*Community Energy Solutions*), Eric Moe (*Community Energy Solutions*), David Rapp (*Community Energy Solutions*), Larry Koss, Jaco ten Hove (*Interfaith Council*), Maradale Gale (*Sustainable Bainbridge*); Charles Higgins (*Distributed Energy Management, Inc.*); Glen Tyrrell (*Bainbridge Island School District*); Gerlind Jenkner (*Transition Town*); Chris McMasters (*Cool Moms*); Jessica Geenen (*Puget Sound Energy*), Megan O'Brien (*Puget Sound Energy*) and Linda Streissguth (*Puget Sound Energy*); Dale Perry; Douglas Rauh; Bea Dixon; Matt Olson; Charles Thatcher and Eric Rehm

Important reminder: Please use the CETF Google Groups email lists for subcommittee and main group communication, where appropriate. Files (e.g., PowerPoint, Word docs, PDFs, etc.) can be posted on the Google Groups web sites.

A. Openings

Amid brief introductions, we especially welcomed **Dale Perry** to our circle (with his considerable international experience in energy systems). There was no public comment, but we restated our mission/objectives:

1. Increase conservation and energy efficiency
2. Reduce peak load demand
3. Increase reliability
4. Reduce greenhouse gas emissions
5. Educate the community as to how our individual and collective actions make an impact, and about opportunities for achieving objectives #1 through #4.

B. Review of work so far

1. Established (above) goals
2. Set-up and empowered four sub-committee working groups
 - i. Technology
 - ii. Partnership Development
 - iii. Marketing and Communication Strategy
 - iv. Funding
3. Developed a list of proposed technology actions (50) and then narrowed it to 25
(to be winnowed down further at this meeting)
4. Built list of metrics to use in evaluating possible actions:
 - i. Useful life of measure
 - ii. Total cost
 - iii. Utility Incentive
 - iv. How it addresses one or more of our goals
 - v. Project start and duration
 - vi. Impact on community energy
 - vii. Likelihood of community adoption
 - viii. Likely partners

C. Acknowledgement of Impending Deadline(s)

While many if not most Federal Stimulus applications are still in formation (an exception being EECBG—Energy Efficiency & Conservation Block Grants), we expect things to start popping open by late June. Responding to these opportunities for funding will require very different and demanding work at a rapid rate, with high clarity about our projects and rationales, and will generally require collaboration on a regional basis. **Hilary Franz** is headed to The Other Washington next week to pursue political resources and cooperation. (Not to worry, she'll be back here by Thursday.)

D. Sub-committee Working Group Report — Partnership (Joe Deets)

1. Actively looking for commitments from local groups, esp. ones already connected w/us
2. Created a template; building a list of organizations to contact
3. Such partnerships are important to show wide support and provide fertile ground for both further funding and action toward change

E. Report on and Consideration of Some Possible Actions

Eric Moe led us in using various metrics for evaluation, and we crunched a few of the remaining 25 ideas (see B.3. above) that would further our goals by either reducing peak energy demand, increasing conservation, or both. (Some do one but not the other.) By running ideas through economic screens, we can determine priorities, scale, etc.

We await further info from PSE (such as conversions of apples and oranges using power factors, trended data, etc., to get proper benchmarks) before setting final goals. PSE is has a new internal committee (**Dale Robinson**) to respond.

The possible actions fall into four general categories: Demand Side Management (i.e., peak load reduction), Energy Efficiency, Distributed Energy Generation and Storage, and Fuel Switching, which will be outlined below.

1. DSM (Demand Side Management) — possible actions

- a. Island-wide energy use & demand visibility program (**Chris McMasters & Matt Olson**)
 - i. Concept: a display in ferry terminal of real time usage data and education about conservation
 - Showing individual and collective patterns related to times, temperature, weather, etc.
 - ii. Same material also web-based (including widgets, RSS, etc.)
 - iii. Demonstrate a model of peak use projection, with an alert mechanism for reduction response
 - iv. Awaiting more data from PSE to customize to our setting
- ACTION** v. **Eric Moe** will (by Monday) collect and summarize all the various info needed from PSE
- vi. NOTE: **Charles Higgins** has a prototype model for display function
- b. Water heater (WH) timers (**David Rapp**)
 - i. Concept: stagger morning come-on times of many WHs to lower peak load
 - ii. Potential reduction is large: 30-45 megawatts (NOTE: 30% of all energy use is to heat water!)
 - iii. Total cost would be \$150 per unit (\$40 for mechanism, under an hour of labor to install)
 - iv. Requires no altering of lifestyle, just a delay in reheating water, but also does not conserve
 - v. Proposal: 1,000 WHs in Winslow zone retrofitted by Nov. 1
 - vi. Also need education about proper temperature to set WHs at, plus water conservation options

- c. Smart controls on appliances—thermostats, WHs, etc. (**Charles Higgins**)
 - i. Concept: benign control (via computers) from outside home for more efficient timing of usage
 - Devices capable of “external communication” about energy use patterns
 - ii. Consumers would receive compensation for participation
 - iii. PSE pilot of 600 homes offers only one-time \$50 payback (plus reduced energy costs)
 - But ultimately “Negawatts” could be sold back to the system at significant value
 - iv. A private company electronic “platform” interfaces between utility and consumer
 - PSE installing in August; platform software ready to go by 4th quarter (October?)

There was healthy debate about divergent merits of b. and c. (above), including inquiry about where money is actually being expended or saved and who deserves what kind of rate reduction because of savings.

NOTE suggestion to run separate programs off different sub-stations, to improve tracking of effectiveness

- d. Back-up generators and programmable thermostats are also in the mix
 - i. Air-quality issues arise with auxiliary generators
 - ii. Programmable thermostats provide an excellent way to recoup costs
 - iii. NOTE: PSE has rebate offers for installation of such thermostats, plus WHs, heat pumps
- e. Phone tree (telephone and/or electronic media) to quickly educate about need to drop peak load
- f. “Grid-wise” chunks
 - i. Concept: large appliances, city water pumps, etc., targeted for reduction campaign
 - ii. Auction-like program, utilizing “spot market” for energy
 - iii. Good longer-term project

2. Energy Efficiency — possible actions

- a. Self-education: user tools to self-score and encourage conserving behaviors, such as:
 - i. PSE online spreadsheet (already up and in use)
 - ii. ENERGY STAR yardstick (already up and in use)
 - iii. Oregon Energy Trust model (would need further development for use in WA)
- b. Island-wise Resource Conservation Manager (RCM)
 - i. To coordinate efforts of city, parks, schools, business, etc.
 - ACTION** ii. Addressing top 10 users — PSE?
 - ACTION** iii. Addressing multi-family units (typically very hard to access for change) — PSE?
 - iv. Positive Energy Program (building incentive by comparing self to neighbors)
- c. Solar hot water heating (also counts as Fuel Switching)
- d. Large-scale lighting upgrades
 - i. Street lamps, block lighting targeted for more efficiency
 - ii. PSE has lighting rebate program for small businesses
 - Can do more but needs assured appointments for contractors
 - Use of “performance contracting” avoids out-of-pocket costs
 - iii. Perhaps B.I. Chamber can help organize this further
 - ACTION** • **Hilary** will connect with **Kevin**, our Chamber rep on further development

3. Distributed Energy Generation and Storage — possible actions

Installing a large-scale photovoltaic system on the roof of the City Hall building is an example of the possibilities in a general focus on the downtown zone. **Joe Deets** is in discussions with City. More details to follow next week.

4. Fuel Switching — possible actions

We are importing lots of propane, a dirty fossil fuel, but meanwhile exporting huge biomass that could be converted into energy. We need such alternative sources, especially if we intend to be, by 2050, not just energy neutral but energy negative (see “Negawatts” above, 1.C.iii)

ACTION **Joe Deets** will pull Tech team together, since **Eric Moe** will be away all next week.

Next MEETING: Thurs., June 4, presumably at same location, but stay tuned for confirmation.

Adjourned at 9:10 pm.