

NOTES Southern Oregon Renewable Energy Project

Meeting I May 5, 2009 Roseburg, Oregon

In attendance: Karen Castner, Nick Furman, Patricia Gouvera, Jeff Griffin, Craig Harper, Simon Kechloian, Joe Laurance, Mike McArthur, Georgia Yee Nowlin, George Rhodes, Jeff Robertson, Lenny Schussel, Pete Smart, Shannon Souza, Cynthia Stone, Marc Strauch, Faye Stewart, Craig Sweet, Bill Thorndike, Dave Toler, Tim Vrendenberg, Jim Walls, Nikki Whitty, and Wendy Willis

Notes:

I. Welcomes & Summary of the Project

At 12:00 noon, co-conveners Mike McArthur & Bill Thorndike welcomed the group and everyone introduced themselves.

Coos County Commissioner Nikki Whitty introduced the project to the group and explained how the six Southern Oregon counties gathered last summer to brainstorm about how they might mitigate the damage done by the of the county timber payments. After having an initial discussion of consolidated services, Lane County Commissioner Faye Stewart suggested that those counties collaborate around an economic development strategy. The commissioners from the six counties agreed that there was strength in working together around renewable energy, beginning with an inventory of opportunities and challenges. Commissioner Stewart noted that the counties in the Columbia Gorge were keeping their budgets whole due to wind power and that he would like to see Southwestern Oregon take advantage of similar opportunities.

Douglas County Commissioner Joe Laurance welcomed the group to Douglas County and said he is hopeful for a "solution for one that will serve all."

Wendy Willis introduced the Oregon Solutions process and Jeff Griffin of the Governor's Office spoke about Governor Kulongoski's enthusiasm for the project.

II. Updates on Existing County Projects

A. Lane County

Commissioner Stewart reported on the following projects in Lane County.:

- 1. A pilot anaerobic digester to convert solid waste, sewage, and rye grass straw into energy as part of the effort to reduce field burning;
- 2. An energy park at the University of Oregon;
- 3. A co-generation plant at Seneca Lumber;
- 4. A Department of Agriculture pilot to convert 100-150 tons of green biomass to burnable pellets;
- 5. A few small scale solar projects;
- 6. Test sites for wave energy; and
- 7. A few small scale hydro pilots (i.e. Dorena Lake)

B. Jackson County

Commissioner C.W. Smith sent his regrets that he had to miss the meeting. Bill Thorndike reported on the following projects in Jackson County:

- 1. A small scale hydro project at Applegate Dam (generating about 10 megawatts);
- 2. A methane collector on the landfill;
- 3. A solar collector on the wastewater treatment facility;

- 4. Efforts by the Soil & Water Conservation District to convert municipal waste to energy;
- 5. Aggressive efforts to increase solar power; and
- 6. Biomass One and ongoing efforts to increase use of woody biomass

C. Curry County

Commissioner Georgia Nowlin reported that Curry County traditionally has very low electrical rates and, as a result, has been a little slower in developing renewables. Commissioner Nowlin reported on the following projects:

- 1. South Coast Lumber looking into creating a cogeneration facility;
- 2. Efforts to develop biomass bricks to convert waste created by sudden oak death syndrome;
- 3. Private land owners exploring opportunities in wind.

Commissioner Nowlin noted that there is substantial opposition to wave energy in Curry County.

D. Coos County

Commissioner Whitty reported on the following projects in Coos County:

- 1. Private landowners are considering small wind opportunities;
- 2. Coos County burns its trash and would like to convert some of that heat to energy;
- 3. There are two or three larger wind projects in the works;
- 4. There are two potential biomass plants; and
- 5. There are two wave projects in Coos County.

Commissioner Whitty and Nick Furman also noted the opposition to wave energy in Coos County.

E. Douglas County

Commissioner Laurance reported on the following projects in Douglas County:

- 1. A pilot project to be demonstrated this summer converting woody biomass into biofuel;
- 2. Wave energy project on the coast;
- 3. Three cogeneration projects;
- 4. Exploring pilot with Clean Solutions to convert municipal waste into liquid fuels.

Commissioner Laurance noted that Douglas County does not have significant wind.

F. Josephine County

Commissioner Dave Toler reported on the following projects in Josephine County:

- 1. Josephine County has a renewable energy workgroup;
- 2. A solar project on county property;
- 3. An energy efficiency block grant;
- 4. A small-scale hydro project;
- 5. 300 acres in production of canola for biofuel; and (noted that canola does not need prime soil & can be grown as a rotation crop)
- 6. A multi-county effort to produce woody biomass bricks

Commissioner Toler noted that there is a conflict between PacifiCorp and Rough & Ready around the co-generation plant because the production costs have been a lot higher than initially anticipated.

III. Opportunities & Challenges in Renewable Energy Production

A. Woody Biomass

The group heard from both Tim Vrendenberg from the Coquille Tribe and Jim Walls of Lake County Resources.

Mr. Vrendenberg reported that the Coquille Tribe is making efforts to install a biomass facility on tribal lands. The resource and site analysis looks favorable so far but that the sources of feedstock are fairly dispersed. Mr. Vrendenberg reported that they assessed mostly state and private lands because federal forests have been an unreliable source of feedstock. He also reported some of the challenges in removing feedstock from the coast range and that they are testing "roll up bins" as a mechanism to get wood out of the forest. Because the source material is somewhat difficult to obtain, it will have the potential to create jobs.

Mr. Walls reported that Lake County has been working collaboratively on forest management, renewable energy and job creation since 2002. By 1996, five of the six mills in Lake County were closed. In 2002, several Lake County partners worked with Collins Forest Products to develop a business plan for a small diameter mill and a 13 megawatt woody biomass plant. Environmental interests were at the table from the beginning to reduce the risk of litigation. In the end, they negotiated a 10-year contract with the federal government to obtain feedstock, and Collins put in \$6 million into a small diameter mill. The project took full advantage of BETSE credits. Lake County Resources is still working with developers to develop the biomass plant.

Mr. Walls noted that the 2007 Energy Bill is a significant impediment to woody biomass development because it does not recognize woody biomass as a renewable energy source. Mike McArthur noted that National Association of Counties and Rural Voices for Conservation to change that. Mr. Walls also noted that pending legislation on cap and trade does not include woody biomass.

Mr. Walls also noted that woody biomass energy generation is not the only option for wood waste and noted the work of University of Washington

professor, Christine Volk, who is working to convert woody biomass to clean gas.

Mr. Walls encouraged the group to work as regionally and collaboratively as possible. He also urged the group *not* to stretch capacity and to be realistic about what feedstock is available.

B. Solar

Shannon Souza, from SolCoast, presented on solar energy. (Her presentation is attached & available). Shannon Souza noted that brownfields can be used for solar arrays and put significant energy back on the grid. She also noted that domestic solar panels can offset 50 to 60% of heating costs for a household in the winter, and if just 1% of the population participated, it would meet all of the state's renewable energy portfolio standards. Ms. Souza noted that the time is opportune for solar energy because of increased demand for electricity and diminishing returns on long-term conservation programs. Ms. Souza noted that the commercial return on investment is much better than either residential or non-profit. The primary challenges associated with solar energy are that there is no baseline way of storing the energy and that it requires substantial upfront investment.

C. Wind

Mike McArthur shared with the group his experience in wind energy in Sherman County. He noted that one of the initial wind experiments in Oregon was conducted just north of Bandon. Mr. McArthur noted that the state has renewable energy portfolios standards that utilities must meet. Though they are on track to meet the 2010 standards, the 2015 and 2020 standards will be a stretch. As a result, renewables such as wind are very attractive to large utility companies. Sherman County was very successful in negotiating favorable tax rates and community contributions from wind companies. While Gilliam and Morrow Counties have had great success, some of the potential issues involve impacted species of birds and bats, DEQ noise standards, and transmission capacity. In the end, many people in Umatilla County wish that they would have paid more attention to "cultural resources" issues under Goal 5 of Oregon land use law and planned sitting of wind turbines more carefully.

Mr. McArthur estimated that a feasible wind project requires one-half acre per megawatt. Mr. McArthur also noted that each turbine creates a "wind shadow" requiring that no other turbine be closer than one-half mile to another. He has heard of small community-scale projects that cover about 20 acres.

Mr. McArthur recently learned that the BLM has leased approximate 400,000 acres leased for wind-related projects though he hasn't heard of any wind projects on O & C lands.

D. Conversion of Municipal Waste

A team from Clean Solutions in Ashland introduced a concept where by solid municipal waste can be converted to liquid fuel. (See attached PowerPoint presentation.) The technology converts the waste into one-third premium grade diesel, one-third kerosene, and one-third light crude. The technology is based on low-temperature pyrolysis and is a closed-loop system. Each site creates 25-45 jobs. The business model does not include federal or state subsidies and is paid off within five to seven years of the initial investment. The technology requires 165 tons of sorted waste per day.

Clean Solutions is look at a staged series of investments through Southern and Southwestern Oregon. There is a research and development site in Pasco Washington that interested communities can visit.

Next Steps:

Following the presentations, the group discussed potential next steps. The group concluded that the counties have similar challenges and often times similar assets.

The group also concluded that they might have a very compelling Oregon Way application for stimulus funding but that they would have to move fast and will have to revisit the question once the Oregon Way application becomes available.

The group decided it needs some additional information before it can begin to narrow in on the project. As a result, the group decided to meet again in Roseburg, early in June. The preferred date is June 9, depending on the availability of possible presenters. At that meeting, the group would like to hear

from: 1) a representative of the Oregon Department of Energy on renewable energy; 2) a representative of BPA and/or Pacific Power on transmission issues; and 3) a representative on the economics of renewable energy. The team also would like to include federal agencies (i.e., BLM and Forest Service) and the Oregon Department of Agriculture at the next meeting. Members of the group agreed to send proposed additional team members to Wendy Willis.

Adjournment:

Co-conveners McArthur and Thorndike adjourned the meeting at 4:00 p.m.