Approved Minutes
Energy Facility Siting Council Meeting
Oregon Department of Energy
Jantzen Beach
February 2, 2007

Energy Facility Siting Council
David Ripma, Chair
Martha Dibblee, Vice Chair
Lori Brogoitti
Jacob Polvi
Robert Shiprack
Bryan Wolfe

Oregon Department of Energy:
Tom Stoops, Council Secretary
Adam Bless, Project Officer
John White, Project Officer
David Stevens, Senior Loan Officer
Shelley Carlson, Administrative Assistant

Oregon Department of Justice:
Carolyn Wade

Others:
John Larson, Pacific Energy Systems
Krista Kisch, UPC Wind
Ben Fairbanks, UPC Wind
Peter Mostow, Stoel Rives
Kevin Lynch, PPM Energy
Arya Behbehani-Divers, PGE

Chair David Ripma called the meeting to order at 9:30 a.m.

I. Consent Calendar:

A. Announcements.

Tom Stoops introduced Carol Wade, David Stephens and John Larson

B. Approval of the June 30, 2006 Energy Facility Siting Council Minutes

Bryan Wolfe moved to approve the June 30, 2006 minutes; Martha Dibblee seconded the motion and Council was polled:

Lori Brogoitti	**Yes**	**Bob Shiprack**	**Yes**
Martha Dibblee	**Yes**	**Bryan Wolfe**	**Yes**
Jacob Polvi	**Yes**		
David Ripma	**Yes**		

C. Approval of the November 3, 2006 Energy Facility Siting Council Minutes

Martha Dibblee moved to approve the November 3, 2006 minutes; Jacob Polvi seconded the motion and Council was polled:

Lori Brogoitti	**Yes**	**Bob Shiprack**	**Yes**
Martha Dibblee	**Yes**	**Bryan Wolfe**	**Yes**
Jacob Polvi	**Yes**		
David Ripma	**Yes**		

D. Approval of the December 15, 2006 Energy Facility Siting Council Minutes

Adam Bless, Oregon Department of Energy noted one change to be made on page 6, in the 5th paragraph, which should read "Mr. Bless said Mr. Redman stated his legal, regulatory and policy position why he believes in this project." Martha Dibblee noted her name misspelled in paragraph 2. Bryan Wolfe moved to approve the December 15, 2006 minutes with corrections; Martha Dibblee seconded the motion and Council was polled:

Lori Brogoitti	**Yes**	**Bob Shiprack**	**Yes**
Martha Dibblee	**Yes**	**Bryan Wolfe**	**Yes**
Jacob Polvi	**Yes**		
David Ripma	**Yes**		

II. Action Items:

A. Altra Biodiesel Request for Exemption

Adam Bless, Oregon Department of Justice, stated a request from Altra Biodiesel has been received for exemption from siting council jurisdiction, which is the second time this company has come before the Council for an exemption. The first project was a bio-ethanol facility located at the Port of Morrow Industrial Park near Boardman, which will be on an adjacent lot to the biodiesel project. The City of Boardman will be providing the water and wastewater discharge and utilities will be supplied by local companies, without any transmission lines or pipelines nearby that require a site certificate. The Morrow County Land Use Planning Department has stated the project is a permitted use in that zone.

Lori Brogoitti asked where their feedstock will be coming from. Mr. Bless said he didn't know the location but the source will be palm seeds and soy oil.

Jacob Polvi asked how traffic would be impacted. Mr. Bless said it should not impact the traffic significantly, stating that one of the exemption criteria is to commit to using rail and barge for shipping of the project. Mr. Bless said this will amount to five different facilities at the Port of Morrow Industrial Park. Tidewater Barge Lines is partnering with the Port of Morrow to build a docking facility that will be available to all of them.

Ms. Brogoitti asked if they have a plant already in Washington. Mr. Bless said their headquarters is in Vancouver, Washington, but he is not aware of what other plants they have in other states.

Chair Ripma asked if the biodiesel project being located next to the bio-ethanol project have anything to do with the exemption. Mr. Bless said it has a great deal because the Port is encouraging projects by developing the barge and rail facilities.

Chair Ripma said in terms of the request for exemptions on the two projects is there a connection because each one is under a certain size. Mr. Bless said there is a minimum size for EFSC jurisdiction and both of these are above that size. Pacific Ethanol is in the process of trying to get a site certificate so they will have the flexibility of using trucks.

Mr. Bless stated that ODOE is recommending approval of the request.

Martha Dibblee made a motion to approve the request for exemption by Altra Ethanol. Jacob Polvi seconded the motion and Council was polled:

Lori Brogoitti	**Yes**	**Bob Shiprack**	**Yes**
Martha Dibblee	**Yes**	**Bryan Wolfe**	**Yes**
Jake Polvi	**Yes**		
David Ripma	**Yes**		

B. Morrow Biodiesel Request for Exemption

Adam Bless, Oregon Department of Energy, stated the Morrow Biodiesel facility is similar to Altra but is larger. The total capacity is about 50 million gallons a year.

Bob Shiprack said he read about a farm in eastern Washington that has committed to a million gallons of canola oil because of these projects. Mr. Shiprack said along with farmers in eastern Oregon, he feels they will be trucking this, rather than using rail and barge. Mr. Bless stated that the statute requiring rail and barge transportation involves only the output of the product, not the feedstock coming in to the facilities.

Bob Shiprack made a motion to approve the Morrow Biodiesel request for exemption. Martha Dibblee seconded the motion and Council was polled:

Lori Brogoitti	**Yes**	**Bob Shiprack**	**Yes**
Martha Dibblee	**Yes**	**Bryan Wolfe**	**Yes**
Jake Polvi	**Yes**		
David Ripma	**Yes**		

III. Information Items:

A. Cascade Wind Project

Krista Kisch, Project Manager for UPC Wind Management, introduced herself. She thanked the Staff for inviting UPC Wind Management to give an overview of UPC Wind Management and the Cascade Wind Farm, which will have an application for a site certificate submitted in the next few weeks.

Ms. Kisch said UPC Wind is based out of Newton, Massachusetts, with a staff of approximately 55 people. UPC Wind started in the Italian market and has established over 600 megawatts of wind energy, which is more than 50% of Italy's renewable energy requirements.

In the United States, UPC's start was a 30 megawatt facility on the island of Maui, and has been operational approximately nine months. They also have a 20 megawatt wind farm in New York called Still Wind and a 42 megawatt farm in Maine called Mars Hill. Overall UPC has a portfolio of about 3,800 megawatts under development across North America. Ms. Kisch talked about the financial backing, management and the wind farm industry.

Ms. Kisch said there is more complexity in the permitting process in the east coast states, and UPC is a leader and innovator in permitting. The 30 megawatt wind farm in Maui has a habitat conservation plan that employs two full-time biologists over the 20-year life of the project with monitoring plans and programs in place.

The 20 megawatt facility in New York is based on the former Bethlehem Steel site. This was the first project that was permitted on a ground field redevelopment site, which was a much more complex permitting process. Ms. Kisch read letters from agencies that UPC has worked with, verifying the complex issues that UPC Wind Management has designed.

Next, Ms. Kisch reviewed the wind farm they have been developing in Wasco County, five miles west of The Dalles. In comparing this project with other wind projects in Oregon Ms. Kisch stated the UPC project is more complex because of the terrain, being closer to the population center, the wind speed is more complex and would be visible from a populated area. UPC's approach is to address all issues. They have been working with Northwest Wildlife Consultants since 2003, and also many other organizations involved in the industry. UPC is working with the community also to get input on how the wind farm should be designed.

Jacob Polvi asked how long wind farms last. Ms. Kisch said the wind turbines have a design life of twenty years but it depends on how they are operated. There was discussion about maintenance on turbines.

Martha Dibblee asked about the financial aspects, in particular the hedge funds (temporary funding). Ms. Kisch discussed the financial backing. Ms. Dibblee asked about ODOE requiring financial assurance. John White, Oregon Department of Energy, stated the financial assurance required is for the site restoration after the facility has reached its useful life.

Peter Mostow, Stoel Rives, said the restoration obligation is met through a bond or letter of credit, rather than the direct financial backing of a project sponsor.

Bob Shiprack asked questions about renewable energy credits and an explanation of the green tag. Ms. Kisch discussed the programs involving local utility companies and the purchase of renewable energy, which Mr. Shiprack stated he thought the local companies were exempt. She stated the Governor is promoting a renewable portfolio standard in Oregon which will mandate those utilities that serve a certain number of customers to be purchasing green energy to fulfill that obligation.

Tom Stoops, EFSC Secretary, stated the ODOE renewable group could come and talk to council members about the green tags and renewable programs that have been put forward in the Governor's Office.

Chair Ripma asked about the challenging areas that UPC has worked with and how Oregon compares with permitting processes.

Peter Mostow said the size of this project qualifies the applicant to go through the local process, below 105 megawatts as opposed to the EFSC process in which UPC has chosen to go through.

Chair Ripma asked about the scenic area and how it is to be handled. Peter Mostow answered by stating the Act doesn't directly regulate projects located outside the boundaries of the National Scenic area. The way the Act functioned is that it has been implemented by each of the counties in their zoning code. Mr. Mostow agreed with Ms. Kisch's statement about the issue that even though the project will not be in the National Scenic area and regulated, whenever you are near the neighborhood the issue is there is a heightened sensitivity of the people who live in and enjoy the Gorge.

Ms. Dibblee asked why UPC decided to go through the EFSC process rather than the local jurisdiction process since the project is below 105 megawatts. Ms. Kisch said the Wasco County land use ordinance which oversees energy facilities does not allow the county to permit more than 25 megawatts. They have not updated their land use ordinance to match the state so there is a gap between the 25 megawatts and 105 megawatts.

Jacob Polvi asked about energy load with the utility companies. Ms. Kisch stated UPC supplies the power and the utilities determine where and how it is distributed. The grid operators determine the interconnection.

Adam Bless said the topic being discussed is called wind integration, a subject all in itself. He said he would like to bring in wind integration people at a future meeting to help understand wind energy.

Chair Ripma asked more questions about the public's input on the view since the location will be visible by more people than the existing wind farms in the area. Mr. Bless said that issue will be addressed.

B. Discussion of Scrap Value In Retirement Calculations

Tom Stoops began the discussion, mentioning the council had directed staff to develop a decommissioning and dismantlement guide, which John Larson will be discussing.

Mr. Stoops stated a requirement of the site certificate is that a letter of credit or bond has to be posted, for financial assurance. A certificate holder is asked to estimate the cost of taking down all structures, taking out foundations down to three feet below grade, remove all laterals and restore the site to exclusive farm use. The ability to offset that dollar amount by the value of the scrap metal value, especially with wind projects, and assigning that dollar amount to the state is where the question is.

Chair Ripma said the people of the State of Oregon do not benefit from profits from these projects, and there is an obligation of the State to be sure the State does not lose money from termination of a facility.

John White, Oregon Department of Energy, said as part of the site certificate review staff estimates what a reasonable cost would be for site restoration. The applicant's estimate is also considered along with the staff's estimate. The letter of credit is not the only source the state has to restore the site. A primary obligation of the site certificate holder is to restore the site and pay the full cost no matter what that may be, which is an enforceable condition of the site certificate. There was discussion among council and staff regarding letters of credit.

Kevin Lynch, Director of Policy and Coordination for PPM Energy, introduced himself. The estimate of the scrap value for something twenty years into the future needs consideration, and also to be sure the scrap value will be applied to the restoration is another. Mr. Lynch said refreshing the data on a regular basis should occur.

Mr. Lynch said another scenario is if the site certificate holder files bankruptcy and nobody wants the project. If the scrap value has continually been updated this is more assurance, but another consideration is that other creditors may have access to this scrap value also. Mr. Lynch stated that one protection for this would be that on a regular basis the site certificate holder could provide information to the council on what the extent of unsecured creditors there may be on the project.

Lori Brogoitti asked about the scenario of calculating the value of scrap. She also stated that if the wind facilities all reach their useful life at the same time that could decrease the value of the scrap.

Mr. Lynch said the demand for turbines is huge. If there is a turbine not working it will be covered under the warranty, which the manufacturer will deal with. In the case of a company filing bankruptcy, the market for renewable energy is very strong so the likelihood of not having a successor step in is very low.

Chair Ripma asked if anyone would invest in a company if they knew they would get stuck with cleaning it up in the future, or the creditors that might take over, could they do the clean up.

Martha Dibblee asked if the restoration costs go up, there seems to be a need for some kind of funding between the actual bond and the various types of scrap that will relieve the state so the state doesn't have to deal with it.

Peter Mostow stated there isn't a financial product at the present time like that. The site certificate contemplates issues such as leakers or other problems that may occur. If a creditor stepped in and assumed ownership of the project, that creditor would be subject to the site certificate.

There was discussion about the cost of a letter of credit. David Stevens, Loan Officer for ODOE, stated you could use a market rate of about 1%.

Arya Behbehani-Divers, Project Manager for PGE, said PGE is an investor-owned utility. She reviewed some of the facilities that PGE operates and the history of what those

facilities have for retirement. The value of scrap metal has to be credited to customers through the retirement of the facility; it cannot be put into the company's books.
Ms. Behbehani-Divers said PGE's position is to take advantage of the financial instruments the state can put in place rather than charge the customers a second time. She also discussed the process of letters of credit and a proposal in using the letters of credit, rather than creating new financial requirements.

Martha Dibblee asked about the cost to the customers for letters of credit. Ms. Behbehani-Divers said the cost is paid by the rate payers. Chair Ripma asked if the rate payers are the citizens of Oregon, and if the scrap is not available to the state what happens. Ms. Behbehani-Divers said each facility has to be analyzed on their merit.

IV. <u>Working Lunch:</u>

Carolyn Wade, Senior Assistant Attorney General with the Oregon Department of Justice introduced herself.

Chair Ripma asked Ms. Wade if the scrap value will be available to the state for sure in the case of a certificate holder filing bankruptcy. Ms. Wade answered it would not be under the current system. She further stated the first entity that will say they have the right to the value would be the lender who has a security interest in all of the equipment, including the scrap; if they have been paid in full, there is a bankruptcy trustee to oversee the unsecured creditors; there could also be tax liens which would have priority over the unsecured creditors. The trustee's job is to take all of the other assets, liquidate them and distribute them pro rata.

Chair Ripma asked if it is correct to conclude that if the mandate is to eliminate risk, it is not prudent to offset the letters of credit with scrap value. Ms. Wade agreed. Chair Ripma asked for comments from others why the scrap value should not be considered with the letter of credit.

Bryan Wolfe said in the total picture the letter of credit seems like a small amount to put up for the project.

Jacob Polvi said he felt a decision should be made to not allow the scrap value.

David Stevens, Loan Officer for Oregon Department of Energy, reviewed some of the history in the process of letters of credit and stressed that with the letter of credit the money is in the bank for the state. Mr. Stevens also stated the volatile nature of metals, implies risk.

Bryan Wolfe said a distribution utility is PUC regulated in the State of Oregon, and then there are power marketers building plants that are different entities and have different responsibilities and goals.

John Larson, Pacific Energy Systems, stated their concern whether they have access to the value of the scrap. Ms. Wade said to the extent that someone is going to take the scrap. John White said the value is there but from the state has no title to the scrap.

Jacob Polvi said the state should not have to be involved in the fight for the value when there is a clean method in place already. Ms. Brogoitti agreed.

Adam Bless said one thing to keep in mind is that not all applicants are wind facilities. There was further discussion by staff and council members about the rules required to just use the financial assurance put into place. Staff will pursue this topic further.

V. <u>Information Items (continued):</u>

C. Primer on Electrical Transmission

Adam Bless began the presentation discussing transmission lines that are under EFSC jurisdiction. He reviewed criteria, one important factor being the need. Bryan Wolfe asked what qualifies as need. Mr. Bless said that proof has to be given to the Public Utility Commission (PUC) that spending money on this transmission line is the most economically prudent way to serve their customers. Some facilities don't go through the PUC process, like an electric co-op or public utility like Columbia River PUD. The Energy Facility Siting Council (EFSC) would have to find need, and the Council has to look at this carefully. The last time a stand-a-lone power line was sited was about 20 years ago, from Eugene to Medford. Power lines that have been related to generating plants have been sited, but that is simpler and the need is there to serve the generating plant.

One of the major reasons EFSC has not sited transmission lines is because Bonneville Power Administration (BPA) is dominant, which is a federal agency and EFSC does not have jurisdiction over federal agencies. Another valid reason is the high cost - $1½ million per mile is a general range, depending on where the line would be located.

Mr. Bless next reviewed proposed lines: Seabreeze, which is a 500 kv line that would be underwater. Pacific Gas & Electric, 500 kv, maybe 765 kv Canada to California. Mr. Bless said these are big lines for the northwest but they are normal back east.

Bryan Wolfe asked about the size of the lines. Mr. Bless explained that the larger lines allow more power to be transmitted but the real advantage is because of reduced line losses. Wire has resistance and even thick copper wire has some resistance, which creates heat that is wasted energy. Electricity then dissipates into the atmosphere, which in hundreds of miles of line the loss will be 10-15%. Line losses are proportional to current not voltage. The ohms law says that for the same amount of power, power is current times voltage; so if you want to transmit more power you can either raise the current or raise the voltage. If it is a fixed amount of power, if you raise the voltage you can lower the current. It's the product of current times voltage that is power. So if you raise the voltage you can transmit the same amount of electricity with less current. Line losses rise with current.

Martha Dibblee asked about DC power. Mr. Bless said DC is used also to control line losses in a different way. There was a brief description of AC and DC power.

Chair Ripma asked why should 230 or 115 lines be built if 500 and 765 kv are so much better. Mr. Bless said when transmission lines are built, they are a system. When systems are built, you can plug in one part in one location but if it is not compatible with the other parts it is not a system anymore. A 500 kv system could be built but if you want to introduce a different size line you have to transition in a planned way.

Mr. Bless reviewed the maps, showing the lines from Canada to California and Canada to Celilo. The main company is TransCanada, a consortium of Canadian companies.

There has been new interest in transmission, which Mr. Bless reviewed. The blackout in 1996 was caused by a BPA line in the Columbia Gorge that was overloaded. The system was outdated at that time. The 1996 blackout happened in Southern California, and in 2003 the eastern coast had a blackout, which did get the attention of Congress. The structural changes in the industry were discussed, and also how power is sold by power brokers. In the industry today, wholesale power transmission across regional lines is called "wheeling" and is driven by federal legislation

The Federal Energy Regulatory Commission (FERC), compares to the PUC except FERC is over the United States. Most of FERC's regulation is economic, not siting. In the past, out of state customers paid more for power. FERC Order 888 required non-discriminatory access, basically charging all customers uniformly. There are structural protections to be sure in house generation doesn't get favorable treatment. PGE is an example of this, which is called unbundling.

Another point the FERC Order 888 did was to recognize public utilities used to have excess generation plants to make sure they had enough; now they are able to buy power at the lowest price on the interstate market. Some power plants that weren't used much before are not used at all now. Those are called stranded costs. FERC Order 888 made a federal framework for recovering the stranded costs.

The Energy Policy Act of 1992 led to sweeping legislation which is still having an impact today. This created a class called exempt full-scale generators, independent power producers (IPP). These companies (like Calpine and Seabreeze) are entrepreneurs and merchants, not regulated. Transmission owners are now required to provide them with transmission service. The generators can charge what the market will bear but the market is public utilities, which are limited in what they can pay.

Mr. Bless noted that wind is a wholesale generator and equal treatment of wind facilities in terms of access to transmission is one part of the Policy Act of 1992 which has made wind energy possible.

Next in the presentation was an overview of the Western Interconnect. North America is divided into three distinct grids call interconnects – 1) Eastern Interconnect, 2) Western Interconnect and 3) Texas. All power within one interconnect is called a synchronized grid. Between the three sections wholesale power can be traded through DC lines, but is not synchronized. Mr. Bless discussed the benefits of regional interconnect and also the challenges.

Among the challenges are:

1) Stability. This is the first priority of North American Reliability Council (NERC) and Regional Reliability Councils, which includes eight regional Councils that police the PUCs of each region. Western Electric Coordinating Council (WECC) is the one that concerns Oregon. These are corporations that have members that pay dues, $20,000-$30,000 per year. The Oregon Department of Energy is a member, along with transmission providers, generation providers, federal agencies, which includes Bonneville Power Administration, and other agencies. WECC does have rules that they can enforce and fine violators.
2) Paths and Flowgates. For planning and operating, transmission lines are organized in "paths." Mr. Bless presented a map showing paths and flowgates. Each path has a rating approved by WECC based on studies and criteria.
3) Path Rating. This is the maximum amount of power allowed, which can be thermal or stability. With N-1 criterion, the path must be able to withstand failure of the largest single component. The rating can vary depending on the direction of the power. Ratings are assigned in the WECC process.
4) Congestion. This results when low cost power cannot get to high cost load because of inadequate transmission. Models up to ten years ahead are based on assumptions of fuel cost, load, renewables and available generation. Congestion has no universally accepted definition, and is hard to quantify or put a price on. Quantitative measures are important because transmission costs about $1.5 million per mile to construct.

The Energy Policy Act of 2005 (EPACT 2005) created incentives for renewables, created incentives for transmission and incentives for integrated coal gasification. Section 1221 created the National Interest Electric Transmission Corridors (NIETC) and Section 368 created federal energy corridors on federal lands.

Section 368 is mainly on U.S. Forest Service and Bureau of Land Management (BLM) land. Washington doesn't have much federal land, so there are not many of the federal energy corridors.

Lori Brogoitti asked Mr. Bless about private land in the corridor areas. Mr. Bless discussed this topic, in particular tribal lands. Corridors have to go around tribal land or have arrangements with the tribes. Mr. Bless said there are more senators in the eastern states that don't consider all situations in the west; therefore the need to speak out with comments from the west.

Jacob Polvi referred to National Parks not being considered U.S. Forest Service or BLM land. Mr. Bless pointed out on the map the areas where no corridors would be located around National Park land.

Mr. Bless stated that under Section 368, the Department of Energy, U.S. Forest Service and the Bureau of Land Management jointly designate the federal energy corridors on federal lands and perform environmental reviews. These corridors are for all forms of energy. The environmental reviews (EIS) are due for the west in 2007.

In Section 1221 Mr. Bless said the U.S. Department of Energy was required to issue a congestion study. Also this section may designate National Interest Electric Transmission Corridors (NIETC). NIETC are for electricity only and are on both public and private land, requiring no environmental review. This also creates FERC "Backstop" siting authority.

Mr. Bless reviewed the differences between Section 368 and Section 1221. The Department of Energy can designate a NIETC corridor, where a project is already in permitting and where no project is proposed. In reviewing corridors, Mr. Bless said there is no similarity to EFSC corridors, they can be any width, and the U.S. Department of Energy designation as a corridor does not mean the corridor meets standards. It only means there is congestion.

Mr. Bless explained further what backstop authority means. EFSC still has jurisdiction if USDOE creates a national interest corridor in Oregon on private land and somebody proposes to put a power line there, it is an EFSC line. EFSC has siting authority but the site certificate has to be issued within one year or FERC can come in and take the authority from EFSC.

Mr. Bless stressed there are some projects for which EFSC has one year and if EFSC is not done within the year FERC will take the jurisdiction, as they did with the LNG project. There was discussion among council and staff about when the one-year period starts and the history behind the time limit being set.

Mr. Bless said what makes transmission lines expensive is the construction, not the conditions imposed. If EFSC approves the site certificate with conditions within the one year period, the applicant would have to show proof of burden that EFSC is onerous in order for FERC to take jurisdiction.

Mr. Bless summarized by outlining the next steps for EFSC. EFSC needs to consider interstate impacts in siting transmission; the need standard for transmission should be updated and must consider regional benefits; and special topics for consideration should be wind integration, hydro-management and others.

Council and Staff discussed other topics that would be good to study. One item mentioned would be green tags and green power.

Bryan Wolfe stated that as rate payers, low cost power has nothing to do with renewables, green tags, wind and other items added are all more expensive.

There was discussion about the next meeting date, which will probably be the last part of April.

Chair Ripma asked for other comments; there were none.

Chair Ripma adjourned the meeting at __________ p.m.