



Preliminary Renewable Energy Action Plan September 21, 2006

Background

MidAmerican Energy Holdings Company (MEHC) made a commitment to work with the states to produce a preliminary Renewable Energy Action Plan ("the Renewable Plan") as part of its acquisition of PacifiCorp. PacifiCorp committed to filing a ten-year plan, concurrent with its next Integrated Resource Plan filing to acquire 1,400 megawatts of new cost-effective renewable energy, including specific milestones over a ten year planning period as to when resources will be added. The Renewable Plan will also include a ten-year plan for installing transmission that will facilitate the delivery of renewable energy and the achievement of PacifiCorp's goal of acquiring at least 1,400 megawatts of cost-effective renewable resources by 2015. It was also committed that, within six (6) months after the close of the transaction, MEHC and PacifiCorp will file with the Commission a preliminary plan for achieving the 1,400 megawatt renewable target. This document is the preliminary plan and is subject to change. An updated plan will be filed concurrent with PacifiCorp's 2006 Integrated Resource Plan in December 2006.

Overview

PacifiCorp's 2003 Integrated Resource Plan found that 1,400 megawatts of renewable resources, using generic wind projects as a proxy, formed part of the least cost portfolio of resources. This was reaffirmed in the 2004 IRP and the 2004 IRP Update (both filed in 2005) and was subsequently adopted by MEHC as part of the transaction commitments. This plan reviews progress toward the goal of acquiring 1,400 megawatts of renewable resources by 2015, and sets forth the Renewable Plan objectives and action items outlined to meet the MEHC commitment.

This Renewable Plan defines what PacifiCorp intends to consider as renewable resources in meeting the objective, identifies renewable resource acquisitions to date and broadly characterizes negotiations currently underway (without revealing confidential commercially sensitive information). The Renewable Plan is divided into four categories: Resource Acquisition, Institutional, System Operations and Transmission. These components were designed to provide a foundation for the acquisition of cost-effective renewable resources by the target date. Finally, a summary is provided with a table showing the components of the plan together.

Renewable Resources Definition for meeting the 1,400 Megawatt Target

For the purposes of this document, PacifiCorp adopts a definition of renewable resources as follows:

Renewable energy resources means electricity generation facilities fueled by solar; wind; geothermal; solid, liquid, or gaseous forms of biomass (including co-firing, wood mill waste and forest waste); landfill, coal mine, or digester methane; wave or tidal power; new fresh water hydroelectric facilities or upgrades to existing hydroelectric facilities where the additional generation in either case does not result in new water diversions or

impoundments; or hydrogen derived from either electrolysis or a non-hydrocarbon derivation process¹.

For the purposes of meeting the 1,400 megawatt target, PacifiCorp will utilize the nameplate generating capability of any renewable resource added to PacifiCorp's portfolio beginning in January 2003 (the date that PacifiCorp first committed to acquiring 1,400 megawatts of cost-effective renewable resources). These renewable resource additions will include all renewable resources as defined by the Renewable Resource definition. Purchases from PURPA Qualifying Facilities ("QFs") will count towards satisfaction of the capacity goal even if PacifiCorp is unable to secure the renewable energy credit tags associated with the QF production. Refer to the QF discussion later in this Plan.

Renewable Resource Acquisitions and Active Negotiations

The table below shows a snapshot of the renewable resource capacity additions since January 1, 2003 that are either in service or have been committed to by the company. Based on the table, PacifiCorp needs to acquire approximately 850 megawatts more generating capability to meet the 1,400 megawatt target by 2015.

¹ This definition addresses MEHC commitments c22b, O26b and Wy21b which specify: "PacifiCorp commits to address as part of its next IRP the appropriate role of incremental hydropower projects in meeting the 1,400 MW renewables target."

Preliminary “1400 MW” Renewable Energy Action Plan (Sept. 2006)

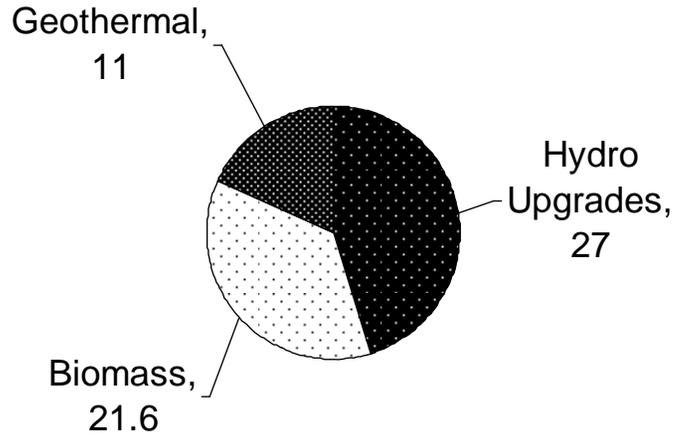
Renewable Resource Acquisitions (Nameplate MW)													
Agreements signed, or nearing completion													
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hydro Upgrades													
Lemolo #1		4											
JC Boyle #1				3									
JC Boyle #2				19									
Swift 11 Upgrade									25				
Swift 12 Upgrade										25			
Swift 13 Upgrade											25		
Rocky Reach					1								
Biomass													
Rickreal Dairy				0.9									
Dry Creek Landfill					3.2								
Douglas County Forest Products				6.3									
Freres Lumber					10.0								
DeRuyter Dairy				1.2									
Geothermal													
Blundell Upgrade					11								
Blundell II								32					
Cove Fort						42							
Wind													
Wolverine Creek			65										
Leaning Juniper				101									
Schwendiman Farms					20								
Pioneer Ridge Wind					70								
Alan Barkley 1 (Wasco)					10								
Alan Barkley 2 (The Dalles)					10								
Wasatch Wind					19								
Mountain Wind						60							

- Need to add 140.4-MW Marengo wind project (Oct. 2006)

November 8, 2006

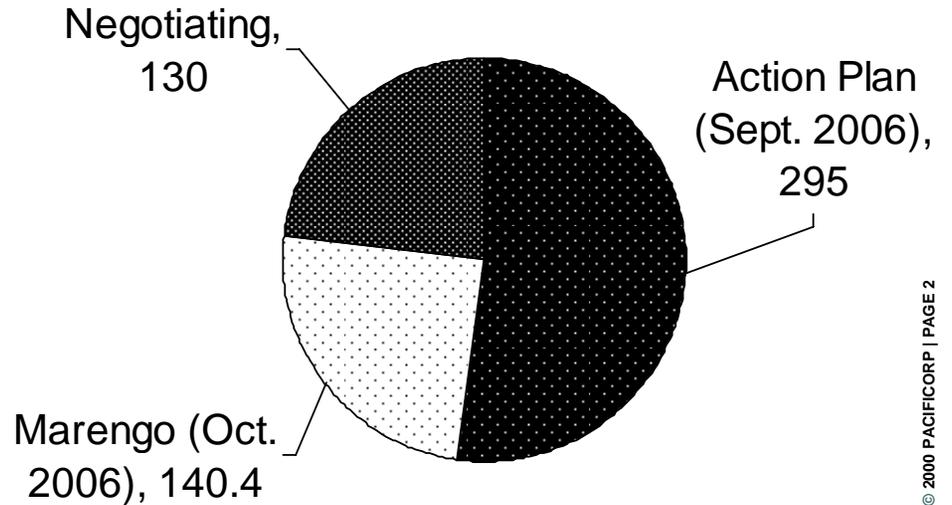


Progress To Date (Expect Signed Agreement or Completion in 2007)



59.6 Nameplate MW

Utility-Scale Wind



565.4 Nameplate MW

November 8, 2006

**Renewable Resource Acquisitions
(Nameplate MW)**

Agreements signed, or nearing completion

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hydro Upgrades													
Lemolo #1		4											
JC Boyle #1				3									
JC Boyle #2				19									
Swift 11 Upgrade									25				
Swift 12 Upgrade										25			
Swift 13 Upgrade											25		
Rocky Reach					1								
Biomass													
Rickreal Dairy				0.9									
Dry Creek Landfill					3.2								
Douglas County Forest Products				6.3									
Freres Lumber					10.0								
DeRuyter Dairy				1.2									
Geothermal													
Blundell Upgrade					11								
Blundell II								32					
Cove Fort						42							
Wind													
Wolverine Creek			65										
Leaning Juniper				101									
Schwendiman Farms					20								
Pioneer Ridge Wind					70								
Alan Barkley 1 (Wasco)					10								
Alan Barkley 2 (The Dalles)					10								
Wasatch Wind					19								
Mountain Wind						60							
Cumulative Total	0	4	69	199	353	455	455	487	512	537	562	562	562

This table will likely change, since PacifiCorp is engaged in negotiations for more than 200 megawatts of additional renewable resources for commercial operation prior to the end of 2007 when the current production tax credit is set to expire. The remainder of this paper describes the additional activities PacifiCorp proposes to ensure acquisition of sufficient generating and transmission capability to meet the 1,400 megawatt objective.

Action Items

Resource Acquisition Action Items

The primary objective of the Renewable Plan is to acquire the remaining renewable generation not shown in the table above to achieve the 1,400 megawatt commitment by the 2015 target date. PacifiCorp's 2003 and 2004 Integrated Resource Plans showed an acquisition rate of 200 megawatts per calendar year through 2012. However, the overriding criterion is that the renewables be cost-effective, and it may not be cost-effective to secure additional resources in a

pre-determined amount each year. Issues that may affect attaining a systematic and constant rate of cost-effective acquisition is the unpredictable nature of the production tax credit (PTC) (which is dependent on Congressional legislation), uncertainty around Federal and/or state-specific renewable portfolio standards, carbon regulations, and other commodity prices.

Although the PTC has consistently been extended since its inception, the extension has not always happened prior to the end of the previous term. This has caused major boom and bust cycles as the industry waits for Congressional action on extending the PTC. The current PTC is set to expire at the end of 2007, with no certainty that it will continue past this date or, if it does, that it will be renewed at current levels.

As long as acquisition of additional renewable resources remains cost-effective, PacifiCorp plans to continue to adhering to its acquisition schedule, targeting an average 200 megawatts in each of the years 2007 through the end of the extension (most probably 2009). PacifiCorp will continue to engage in current negotiations for commercially operable projects which are cost-effective and can reach commercial operation by the end of 2007. Any project which requires transmission line construction is not expected to be available by the end of 2007 due to the long lead-time requirements for siting, permitting, and constructing new transmission facilities.

Action Item: Continue to negotiate for the acquisition of cost-effective renewable resources until such time as either the 1,400 megawatt goal is achieved or acquisition is not cost-effective.

PacifiCorp maintains ownership or leases on properties throughout its system. Given the proximity of most of the company's holdings to transmission facilities, the company proposes to engage in an assessment of wind resources on the existing properties that may have the potential for cost-effective resource development.

Action Item: Perform a wind resource inventory and assessment on PacifiCorp property holdings by June 30, 2007.

Renewable resources can face important impediments relating to the high voltage transmission system. Most renewable resources are located far from population centers where the power must ultimately be delivered. In addition, transmission lines are constructed to transfer the maximum capability of a power plant and wind projects usually have relatively low load factors, often generating about a third of the maximum capability on average. This can have the effect of tripling the cost of transmission service on a dollar-per-megawatt-hour basis. Another issue is that long distance transmission line construction may bring substantially more capacity than an individual project can use. This means that individual power project proposals cannot absorb the costs of a full transmission construction project. Finally, the time required to site, permit, design, and construct new transmission lines does not align with the time frame new wind sites can be developed. Transmission can require up to five years, whereas new wind generation sites can be developed in less than two years.

PacifiCorp can help facilitate developing new areas for renewable resource development that are currently constrained by transmission transfer capability. This can be done through PacifiCorp's Integrated Resource Plan in which competing regions are evaluated against one another—including the cost of transmission and the relative value of power from renewable resources in the regions due to projected capacity factors and timing of generation (e.g., winter/summer, day/night). Once the most economic regions are determined, PacifiCorp can evaluate project proposals in those regions, and combine them with appropriate transmission facilities, if appropriate.

Action Item: Identify likely regions for new renewable resource development through the IRP and evaluate potential resources within those regions.

As part of its renewables acquisition plan, PacifiCorp intends to conduct an economic assessment of biomass project opportunities, focusing on the Oregon biomass market segments. The main biomass market segments are wood mill waste and forest waste resulting from timber residue and forest thinning in the Pacific Northwest. The initial focus on Oregon biomass opportunities is a result of: 1) the greater number of economic incentives available in Oregon than other surrounding states and 2) the greater quantity of biomass generation that exists or is planned in Oregon than other surrounding states. Additional opportunities in the areas of sewage treatment plant digesters, dairy-based anaerobic digesters, and landfill gas to energy will be pursued as they are identified by the company. The overall objective of the economic assessment is to determine if a business case can be made for biomass project investments or power purchases by addressing project development potential, feasibility, risks, and environmental attributes and benefits. So far, PacifiCorp has identified up to 25 megawatts of new biomass procurement opportunities.

Action Item: Perform an economic assessment of biomass project opportunities, focusing on the Oregon biomass market segment.

Institutional Action Items

PacifiCorp recognizes that a successful renewable resource acquisition plan necessitates active measures to lay a framework for continued progress. PacifiCorp's ability to meet the 1,400 megawatt target has been enhanced by the MEHC acquisition by MEHC's commitment to include own/operate alternative in any commission-approved Request for Proposal for resources with a dependable life greater than ten years and greater than 100 megawatts.

Action Item: Evaluate staffing needs with regard to renewable resource acquisition, project management, and/or development by March 1, 2007.

As described previously, the uncertainty around the PTC extension tends to elevate prices and disrupt the systematic addition of renewable resources through time. It is incumbent on

PacifiCorp to maintain a political presence in support of efforts to reduce the uncertainty surrounding renewal of PTC legislation.

Action Item: Support efforts by renewable resource advocacy groups to reduce uncertainty in PTC extension and directly contact influential individuals to express PacifiCorp’s support of certainty in the federal renewable resource production tax credit.

An important mechanism for PacifiCorp’s acquisition of renewable resources is through the acquisition of qualifying facilities (QFs) under the Public Utility Regulatory Policies Act (PURPA) of 1978. Under PURPA, utilities must purchase power from certain qualifying facilities at their avoided costs. The avoided cost methodologies are set by the various states, and the Federal Energy Regulatory Commission has deferred to the states the issue of whether the QF, or the purchasing utility, owns the renewable energy credits under QF contracts. Some states have granted ownership of renewable energy credits to the utilities, other states have granted ownership to the QF seller, and still others have not yet addressed the ownership issue at all. PacifiCorp’s service territory encompasses states in all three of those conditions.

As part of the contracting process, PacifiCorp will make a good faith effort to secure the energy credits associated with a QF. However, those credits are a function of production (i.e., kWh output); while PacifiCorp’s commitment is a function of capacity (i.e., MW). Thus, if the QF otherwise satisfies the definition of a renewable resource, the QF capacity will count towards the satisfaction of the 1400 MW commitment even if PacifiCorp is unsuccessful in securing the renewable energy credits.²

	Utah	Oregon	Idaho	Washington	Wyoming	California
Renewable Energy Certificates position	PacifiCorp owns but QF can buy back	QF owns but PacifiCorp can buy if not over market	No decision on any of PacifiCorp’s QF contracts.	No decision	No decision PPW has opened a Docket to determine	PacifiCorp owns renewable but not decided on QF

Action Item: Work with state regulators to clarify renewable energy credit ownership for PURPA QF contracts and applicability toward Federal and/or state-specific RPS standards.

Operational Action Items

Much concern has been expressed regarding operational issues surrounding the relatively volatile and less-predictable nature of some renewable resources. Considerable progress has been made

² PacifiCorp acknowledges that for the purpose of certain regulatory reporting and customer disclosure provisions, it may not be able to identify the production of such QF resources as renewable if PacifiCorp does not own the renewable credits. The absence of renewable credit ownership, however, does not change the underlying fact that the generation capacity in PacifiCorp’s portfolio is powered by a renewable “fuel.”

at PacifiCorp and in the industry generally in understanding the interactions between wind resources and utility systems. PacifiCorp has worked since the 2003 IRP to quantify the costs associated with integrating wind into its system. As the amount of wind on the system increases, it becomes ever more important for the utility to take operational actions to ensure that the system is capable of reliably integrating the amount of intermittent power anticipated. Resource variability can increase the intra hour regulation and load following requirements of the control area and increase overall ancillary service costs. As large blocks of variable resources are added to the system, new reserve resources capable of compensating for the intra hour variability may be required to insure system reliability.

Toward that end, the following action items are proposed:

- Action Item: Continue an active role in the regional Northwest Power and Conservation Council Wind Integration efforts, and support the work of the American Wind Energy Association (AWEA) and the Utility Wind Integration Group.
- Action Item: Continue to refine day-ahead hourly wind forecasts into daily system planning and scheduling.
- Action Item: A wind penetration study to reappraise wind integration costs and cost-effective renewable energy levels will be completed in the 2006 IRP.

Transmission Action Items

PacifiCorp plans to facilitate the acquisition of wind projects through construction of new cost-effective transmission facilities. Two transmission paths have been identified: Path C from southeast Idaho into northern Utah, and Walla Walla to Yakima area loads. These paths are potentially cost-effective projects that can help to facilitate the development of economic wind projects.

- Action Item: Complete Walla Walla to Yakima area transmission upgrade by end of 2010 if cost-effective.
- Action Item: Complete Path C upgrade by end of 2010 if cost-effective.
- Action Item: PacifiCorp system identified in the RMATS scenario 1 related to facilitating additional generation at Jim Bridger and, on equal footing, new cost-effective wind resources. An assessment of transmission options will be completed in the 2006 IRP

Action Plan Summary

The following table lists the action items identified above, and associated milestones.

Identifier	Action Items	Milestones
RA1	Continue to negotiate renewable resources until such time as either the 1,400 megawatt goal is achieved or the PTC ends.	Minimum of 400 megawatts of new renewable resources in PacifiCorp's portfolio by end of 2007.
RA3	Perform an inventory and assessment on PacifiCorp property holdings.	June 30, 2007
RA4	Identify likely regions for new wind development through the IRP and evaluate resource opportunities from those regions.	Wind Development regions identified in IRP filing December 31, 2006
RA5	Perform an economic assessment of biomass project opportunities, focusing on the Oregon biomass market segment.	Biomass opportunities identified by December 31, 2006
IA1	Evaluate staffing needs with regard to renewable resource acquisition, project management, and/or development by March 1, 2007.	March 1, 2007
IA2	Support efforts by renewable resource advocacy groups to reduce uncertainty in PTC extension and directly contact influential individuals to express PacifiCorp's support of certainty in the federal renewable resource production tax credit.	Ongoing advocacy of PTC extension, maintain membership in AWEA.
IA3	Work with state regulators to clarify renewable energy credit ownership for PURPA QF contracts and applicability toward Federal and/or state-specific RPS requirements.	Meet with Commission staff of every state in service territory by December 2006.
OA1	Continue an active role in the regional Northwest Power and Conservation Council Wind Integration efforts, and support the work of the American Wind Energy Association and the Utility Wind Integration Group.	Ongoing participation in wind integration meetings.
OA2	Incorporate day-ahead hourly wind forecasts into preschedules for wind projects as part of the PacifiCorp system.	December 2006
OA3	A wind penetration study to reappraise wind integration costs and costs effective renewable energy levels will be completed in the 2006 IRP	December 2006
TA1	Complete Walla Walla to Yakima area	December 2010

	transmission upgrade	
TA2	Complete Path C upgrade	December 2010
TA3	Transmission assessment of additional generation on equal footing as wind resources	December 2006