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June 29, 2006

## MEMORANDUM

**TO:** Power Committee

**FROM:** Jeff King

**SUBJECT:** Status of Regional Renewable Resource Integration Action Plan process

At its June meeting, the Council agreed to cosponsor with the Bonneville Power Administration, the development of a Regional Renewable Resource Integration Action Plan. This process, prompted by concerns regarding the ability to integrate the current rapid expansion of windpower and the call in the 5<sup>th</sup> Plan to resolve uncertainties associated with large-scale windpower development, will:

- Determine how much wind the regional system can accommodate given existing system resources and flexibility.
- Determine near-term and long-term options for integrating wind beyond the current physical limits of the regional system.
- Define the policy commitments needed from utility and regulatory decision-makers to implement a package of actions that will allow the region to meet its long-term renewable resource objectives in a reliable, least-cost fashion.

Over the next several months, Bonneville and the Council will coordinate and facilitate a series of policy and technical workshops to identify the policy, operational, and analytical components of a regional renewable resource integration strategy. The project will culminate in the release of an Action Plan for endorsement by the leaders of the major organizations involved in the effort. Some solutions may require longer-term analysis or may require several years to implement. However, to the extent possible, the action plan will define immediately practical solutions.

As an initial step, Bonneville and the Council will convene a Policy Steering Committee comprised of the leaders of the major organizations involved in renewable resource development in the Northwest. At this meeting, attendees will discuss and approve a scope of work and schedule for the effort, agree to dedicate staff for a 4-6 month period, and commit to review a

draft of the Action Plan prior to its release and broad endorsement in the fall. Confirmed Policy Steering Committee members as of this writing include:

1. Tom Karier, Chair, Northwest Power and Conservation Council
2. Steve Wright, Administrator and CEO, Bonneville Power Administration
3. Jim Kempton, Chair Northwest Power & Conservation Council Power Committee
4. Walt Pollock (Facilitator)
5. Stan Watters, President, Pacific Power
6. Eric Markell, Sr. Vice President, Energy Resources, Puget Sound Energy
7. Peggy Fowler, CEO and President or Jim Lobdell, Vice President Power Operations and Resource Planning, Portland General Electric
8. Tim Culbertson; Manager, Grant County PUD
9. Bill Gaines, Power Supply and Environmental Affairs Officer, Seattle City Light
10. Randy Berggren, General Manager, Eugene Water & Electric Board
11. Angus Duncan, President and CEO, Bonneville Environmental Foundation
12. Terry Hudgens, President and CEO, PPM Energy

Additional members may include representatives of one or more Northwest utility commissions, Avista, Idaho Power Co., State of Montana or a Montana utility, WECC and the Renewable Northwest Project.

The kickoff meeting of the Policy Steering Committee is tentatively scheduled for the afternoon of Tuesday July 18 or Wednesday July 19 at the Council's Central Office in Portland. Organization of the technical working group(s) will follow.

Bonneville and Council staff are preparing a detailed work plan for consideration by the Steering Committee. Among the issues that have been identified in conversation with steering committee members and other interested parties are:

- Cost and availability of regulation (within-hour) and load following (hour-to-hour) services available to integrate wind and other intermittent resources
- Near-term changes in system operational procedures, including generator dispatch, to expand intermittent resource integration capability
- Longer-term hardware (capacity, storage or transmission) additions to expand intermittent resource integration capability
- Planning and development of long-distance transmission
- Improved regional short-term wind forecasting capability

A webpage for this effort has been developed and will be accessible from the Energy page of the Council's website and the websites of Bonneville and other participating organizations. The webpage contains an overview of the effort, charter documents, schedules, agendas, publications, and contact information.

Additional progress is expected prior to the July Power Committee meeting and will be described at the meeting.

Status Briefing  
Northwest Renewable  
Resource Integration Initiative

Jeff King

Northwest Power and Conservation Council

Power Committee

Missoula, MT

July 11, 2006

# Northwest Renewable Resource Integration Initiative

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Collaborative regional effort to develop a strategy for optimizing and enhancing the ability to integrate wind and other renewable generating resources into the Northwest Power system

- Near-term needs (1000+ additional MW over next year or two)
- Long-term capability (6000 MW over longer-term)

Endorsement of the resulting strategy by organizations capable of securing its implementation

# Policy Steering Committee (July 7, 2006)

Tom Karier, Chair, Northwest Power and Conservation Council

Steve Wright, Administrator and CEO, BPA

Jim Kempton, Chair Northwest Power & Conservation Council Power Committee

Walt Pollock (Facilitator)

John Savage, Oregon PUC

Paul Kjellander, Idaho PUC

Greg Jergeson, Montana PUC

Stan Watters, President, Pacific Power

Eric Markell, Sr. Vice President, Energy Resources, Puget Sound Energy

J. LaMont Keen, CEO, Idaho Power Corp.

Peggy Fowler, CEO and President, Portland General Electric

Ron Peterson, Vice President Energy Resources, Avista

Teresa Conway, CEO, PowerEx

Tim Culbertson; Manager, Grant County PUD

Bill Gaines, Power Supply and Environmental Affairs Officer, Seattle City Light

Randy Berggren, General Manager, Eugene Water & Electric Board

Brian Skeahan, General Manager, Cowlitz Co. PUD

Angus Duncan, President and CEO, Bonneville Environmental Foundation

Rachel Shimshak, Executive Director, Renewable Northwest Project

Terry Hudgens, President and CEO, PPM Energy

Louise McCarren, CEO, WECC

# Key tasks

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## Regulation & load-following (within-hour, hour ahead, seasonal)

Current capability

Near-term & longer-term needs

Cost-effective augmentation (near-term & longer-term)

Capacity value of windpower

Value of a regional wind forecasting system

Impacts on hydro operations

Planning & implementation to secure needed system flexibility (incl. responsibilities, cost allocation)

## Transmission (Bulk)

Current capability

Near-term & longer-term needs

Cost-effective augmentation (near-term & longer-term)

Planning & implementation to secure needed transmission capacity (incl. responsibilities, cost allocation)

## Supporting Tasks

Data requirements

Wind development scenarios

Best practices elsewhere

# Analytical approach

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- Identify current integration capability
- Identify additional capability that might be secured through operational and market mechanisms (non-hardware solutions),
- Identify new transmission and generation resources required to integrate additional renewable resources in a reliable and geographically diversified manner (hardware solutions)

# Next up

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- Draft workplan to Policy Steering Committee
- First meeting of Policy Steering Committee
- First meeting of Technical Working Group
- Webpage