



## **Renewable Portfolio Standards Position Paper**

Northwest utilities have decades of experience with renewable energy thanks to the region's abundant supply of hydropower. Two states, Washington and Montana, now require utilities to acquire new renewables to meet mandated targets. PNUCC launched an effort in 2006 to identify the issues and examine the possible impacts of renewable portfolio standards. A progress report on renewable portfolio standards was released by PNUCC in January 2007. You can find that report at [www.pnucc.org](http://www.pnucc.org).

### **Key Messages**

#### **We support renewable energy and a diversified mix of cost-effective resources, but do not believe mandates are necessary**

Northwest utilities are taking steps pursuant to existing integrated resource planning processes to increase the diversity of their power supply by adding cost-effective renewables and to develop new electricity generating technologies. Before any renewable standards were adopted, plans were underway to complement our hydro-based system with more wind resources and other methods to reduce greenhouse gas emissions. The existing process is working. Mandates will cause unnecessary inefficiencies and inequities.

#### **The Northwest is already over 50 percent renewable, thanks to our hydropower system**

Hydropower does not emit greenhouse gases. It is renewable, produced domestically, offers stable fuel costs and long-term price stability, and generally is situated in rural areas. The US Department of Energy identified hydropower as the nation's largest source of renewable energy. We already have a lower-carbon emitting generating base than other regions of the country. Setting a high requirement, such as 10 to 30 percent of load, might make sense in states where the overwhelming majority of generation is fossil fuel based, but not in the Northwest. We have also been leaders in promotion of energy conservation.

#### **If RPS requirement targets are mandated, hydropower must be taken into account**

Existing hydropower should be counted toward targets under RPS policies to put the Northwest on an equal footing nationally. At a minimum, the load served by hydro resources should be excluded from a mandatory renewable portfolio standards load target. The Northwest would still be achieving the same proportionate reduction in fossil-fuels generation as other states with similar targets.

### **High-cost resources should not be mandated ahead of need**

If hydropower resources are not counted as renewables then the target should be based on load growth. Keeping in mind the interests of the public, the Northwest should develop and integrate all new renewable resources that are practical, cost effective and required to meet the demand for electricity. The Northwest should take credit for what it has already achieved and not force consumers to pay for high-cost resources ahead of need.

### **Reliably integrating large amounts of intermittent resources, such as wind, into the power system will be uncertain and expensive**

Wind generation is our only current viable option to meet these aggressive RPS targets. If over the next 20 years all new renewable energy came from wind generation (current estimates are 6000 MWa would be needed), then due to low capacity factors, approximately 18,000 MW of wind generating capacity would need to be built. This is more than the capacity that the Northwest Power and Conservation Council has estimated as potentially available in the region. Energy from wind generation is only available when the wind blows, so backup sources, ultimately new thermal generating capacity, are needed to meet the actual customer demand for electricity. For that reason, wind generation (and other intermittent resources) should be counted only as energy producing, as opposed to providing a known capacity for planning and operating purposes.

Transmission bottlenecks are already a problem. Providing adequate transmission capacity for new wind sites, particularly in remote areas where the greatest potential exists, is a significant challenge. The transmission cost to integrate wind can be three times more than with other types of resources since the transmission must be sized to the maximum capacity of the resource. The region must work together to solve these issues and determine who pays for these transmission costs.

### **Policy makers and customers need to understand the costs, benefits, and realities of renewables**

If Oregon follows the path set by Washington and adopts an RPS, it is likely that most load growth in Oregon and Washington would have to be met with new renewable energy sources. Customer rates will rise as a result of the cost difference between new renewables and alternative resources, even with cost cap mechanisms in place. The costs related to transmission planning and expansions needed to support all the new wind generation need careful scrutiny and need to be included for a fair analysis.

### **New technologies**

All technologies that support the stated goals of any renewable portfolio standard mandates should be considered. These include conservation, expanded hydro and, at some future date, carbon-sequestered coal and nuclear. If the goals are to be met in the most cost-effective manner, research must continue into promising technologies such as ocean energy and energy storage.