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SB 415 -- THE MONTANA RENEWABLE POWER PRODUCTION AND RURAL ECONOMIC DEVELOPMENT ACT

by Patrick Judge, MEIC 406/443-2520

BACKGROUND / PROBLEM

Montana is blessed with a vast, untapped renewable energy resource. In fact, we are home to the fifth-best wind resource in the nation, with enough potential to meet our own needs 70 times over.[1] Unfortunately, this resource has thus far been largely ignored. We have yet to develop a single utility-scale wind project in the state, and trail twenty-three other states in terms of installed capacity.[2] Taken together, wind, solar, biomass, and geothermal account for less than 1% of Montana's statewide energy production.[3]

Many of Montana's neighbors in the great plains states, the Rocky Mountain West, and the Pacific Northwest have already begun to realize the substantial economic and environmental benefits of wind development. At a time when the state is looking for new sources of clean and affordable energy, and new strategies for economic development for our rural communities, Montana can no longer afford to let this important opportunity languish.

SOLUTION

One of the principal barriers facing wind development in Montana has been the absence of established markets. To remedy this problem, eighteen other states have adopted "renewable energy standards" requiring utilities to incorporate a certain percentage of renewable power into the mix by a certain date. SB 415 proposes that Montana utilities obtain 15% of their energy from wind, solar, biomass, or geothermal sources by the year 2015. The bill also includes two benchmarks leading up to that date -- 5% by 2008, and 10% by 2010. And it stimulates geographically diverse rural economic development by also requiring a mix of small, locally-owned projects. Importantly, the bill also includes a preference for Montana workers. Cooperative utilities are exempt from the standards in this bill, but those co-ops with more than 5,000 members are directed to develop their own renewable energy standards.

WIND POTENTIAL -- TOP 5 STATES[1]

1. North Dakota	138,000 aMW
2. Texas	136,000 aMW
3. Kansas	122,000 aMW
4. South Dakota	118,000 aMW
5. Montana	116,000 aMW

DEVELOPED WIND (End of 2004)[2]

1. California	2,096 MW	Renewable Energy Standard
2. Texas	1,293 MW	Renewable Energy Standard
3. Iowa	632 MW	Renewable Energy Standard
4. Minnesota	615 MW	Renewable Energy Standard
5. Wyoming	285 MW	
6. New Mexico	267 MW	Renewable Energy Standard
7. Oregon	263 MW	
8. Washington	240 MW	
9. Colorado	229 MW	Renewable Energy Standard
24. Montana	2 MW	

FOOTNOTES

1 According to the American Wind Energy Association, Montana could develop 116,000 aMW (1020 billion kwh/yr). Montana's current total electrical demand is 1,600 aMW.
http://www.awea.org/pubs/factsheets/WindEnergyAnUntappedResource.pdf
http://leg.state.mt.us/css/publications/lepo/2005_deq_energy_report/2005deqenergytoc.asp

2 http://www.eere.energy.gov/windandhydro/windpoweringamerica/images/windmaps/installed_capacity_2004.jpg

3 http://leg.state.mt.us/css/publications/lepo/2005_deq_energy_report/2005deqenergytoc.asp

RENEWABLE ENERGY STANDARDS -- 18 STATES + DC

Collectively, these standards cover approximately 40% of U.S. electricity load:

Arizona	1.1% by 2007
California	20% by 2010
Colorado	10% by 2015
Connecticut	10% by 2010
Hawaii	20% by 2020
Iowa	105 aMW
Maine	30% by 2000
Maryland	7.5% by 2019
Massachusetts	4% new by 2009
Minnesota	(Xcel) 825 MW wind by 2007 + 10% by 2015
Nevada	15% by 2013
New Jersey	6.5% by 2008
New Mexico	10% by 2011
New York	24% by 2013
Pennsylvania	8% by 2020
Rhode Island	16% by 2019
Texas	2880 MW by 2009
Wisconsin	2.2% by 2011
DC	11% by 2022

Information from Ryan H. Wiser, Lawrence Berkeley National Laboratory, rhwiser@lbl.gov, 510/486-5474.

UNDER THIS BILL, HOW MUCH WIND POWER WOULD BE INSTALLED IN MT?

Assuming a statewide electricity load of 1010 aMW (IOUs & Power Marketers only)*, 8% line losses and a capacity factor of 33%, the standards in this bill would lead to the following quantities of installed wind capacity:

5% by 2008	=	165 MW
10% by 2010	=	330 MW (including 50 MW of community wind, from 10+ projects)
15% by 2015	=	495 MW (including 75 MW of community wind, from 15+ projects)

** Information from Understanding Energy in Montana, Table E8, http://leg.state.mt.us/css/publications/lepo/2005_deq_energy_report/2005deqenergytoc.asp*

WHAT ABOUT COST?

Wind is not only the fastest growing energy source in the world, but rapidly becoming one of the cheapest. In recent bid requests by NorthWestern Energy, the price of power from wind projects has been lower than the average cost of the default supply portfolio -- even after including integration and firming costs.

In other states, the effect of renewable energy standards on rates has been extremely modest -- less than $5 per year for the average residential customer. And in states with good wind resources, that effect has been positive -- producing savings rather than costs.

Information from Larry Flowers, National Renewable Energy Laboratory, larry_flowers@nrel.gov, 303/384-6910.

HOW CAN WE BE SURE?

Under this bill, the Montana Public Service Commission retains all of its traditional authority to review power purchase contracts to ensure that they are in the public interest. It also directs the commission to develop cost-caps above which the standards would not be enforced.

WHAT ABOUT RELIABILITY?

A similar "off ramp" also exists for reliability concerns. A utility can petition the commission for a waiver from the requirements of the Act, if it can demonstrate that additional renewable resources would threaten the reliability of the electrical system.