

EXHIBIT 1  
DATE 3/7/11  
SB 109

Testimony on SB-109

Steve Jennings

I am currently the president of the Beaverhead Outdoors Association, and live in Dillon. I am retired from Qwest Communications after a 31 year career with Mountain Bell, U S West, and finally Qwest.

I authored SB-109 with the support and encouragement of Senator Barrett. The purpose of this legislation is to bring some common sense to the energy debate and to recognize the importance of hydro-electric power to Montana's economy. Currently 9 states and the District of Columbia recognize all hydro-electric generation as renewable energy, 14 states have no "Renewable Portfolio Standards" with regard to hydro-power. The remaining states have allowances from 5 to 100 mega-watts of nameplate rating.

In August of 2010 I forwarded my assessment of Governor Schweitzer's "Energy Policy" to the Governor and the members of the ETIC Committee. In that letter I pointed out that his "Policy" left out hydro-power entirely. I also noted that hydro-power could provide for 25% of the states renewable energy by 2025. To become competitive, Montana must allow industry access to cheap, clean renewable energy.

The opponents of this bill will claim that allowing hydro-power to be granted renewable status will upset the Renewable Energy Portfolio Standards and the Renewable Energy Credit market. With the failure of SB-332 to clear Committee does the first argument become moot? During testimony before the Senate Energy and Telecommunications Committee it was pointed out that every company doing business in Montana had already secured enough renewable energy credits to meet the current demand. If the market is satisfied then there will be no market for the renewable energy credits created by the passage of this bill. Thank You.



## **Beaverhead Outdoors Association**

**P.O. Box 1401  
Dillon, Montana 59725**

**Governor Brian Schweitzer  
Governor's Office  
P/O Box 200801  
Helena, MT. 59620-0801**

**2 August 2010**

**Dear Governor Schweitzer;**

After reading your "Energy Policy" I felt the need to comment on this document and offer some of my suggestions. Being born and raised in Montana I know that the State was known as "The Treasure State". We still have an abundance of untapped mineral wealth, yet we are now "Big Sky Country". The current policies of the state leave no doubt that we will be neither unless some corrections are made. Any energy policy must take time to assess the unintended consequences of all policy decisions made. With that in mind I would like to discuss your "Energy Policy Specifics" in order listed in your policy statement.

**Diversified Energy Development:** I agree that Montana has vast and diverse energy resources. The problem is that only wind is given any credence. The tax and environmental/regulatory burden placed on oil, gas, and coal have made Montana a place where investment is not encouraged. Currently there are 119 oil development projects in North Dakota and 11 in Montana. At a cost of +-\$5 million to develop a single well that is approximately \$595 million spent in North Dakota and \$55 Million in Montana. At a time when you have been talking possible budget shortfalls of \$400 million, wouldn't that much investment by oil companies, not to mention the individual income tax revenues from lease bonuses and royalties from those leases could balance the budget? All that is need is your administration to become more business friendly.

**Renewable Energy Development:** Your policy statement lists wind generation, biomass and biodiesel as renewable energy sources yet leave out hydro-power. Hydro-power in Montana has already put Montana beyond the 25% goal for 2025. We don't need the others to lead the way. Wind generation is the current "Next Great Failure" waiting for its unintended consequences to rear its ugly head. As a sportsman I look to the damage to migratory bird flyways and the resultant loss of water fowl, due to propeller strikes. In addition the number of new transmission lines criss-crossing big game habitat and following the best Blue Ribbon Trout

Streams in the country will kill tourism and the outfitting businesses in Southwestern Montana. MSTI is such a project that will ruin my way of life. According to the July 2010 "Rural Montana Magazine" page 7, wind is the second most expensive 'Green' energy while being the most unreliable at the same time. Wind must have firm (base load) generation as back up. This back up produces CO2 thus defeating the purpose of wind. We need to drop wind and focus on co-generation with biomass and natural gas from the new wells that will be drilled in the Bakken as soon as you fix the tax and regulatory problems. Win-win for Montana! I am a proponent of biomass to heat our college campuses and other large facilities. The University of Montana-Western has a wonderful biomass system funded thru the "Fuels for Schools Program". It is too bad that this worthwhile program was not funded this year. With all the beetle killed trees in Montana combined with natural gas from the Bakken we could generate enough electricity to support Montana for a long time. In a study I authored last year I determined that the 1.6 million acres of dead trees on the Beaverhead-Deerlodge National Forest could replace \$3.35 Billion worth of natural gas or \$6.6 Billion worth of propane. How much energy is contained in all the dead trees in Montana?

Cleaner Energy Development: You state that California is a large market that has established standards for clean energy to be delivered to that state. Why are we in Montana destroying our beautiful environment with inefficient windmills and ugly transmission lines? If California needs electricity they need to step up to the plate and start building tide generators along the coast or better yet a nuclear plant in every major city. Nuclear energy is cheaper than natural gas, biomass or wind generation. Additionally if we reduced our coal severance tax we could ship trainloads of Montana coal to California to run coal plants and let them pay for their own carbon sequestration systems. After all coal is still the cheapest electric generation fuel after hydro-power. Wyoming is sending trainloads of coal to market while Montana places roadblocks to coal mining at the same time you are talking about clean coal technology.

Development with Clean Coal Technologies: Before you can develop technology you need coal from Montana Mines and oil wells in Montana in which to sequester the CO2. A more business friendly tax and regulatory climate would need to be the first step to develop all forms of energy. Montana should not only look at the tax structure and environmental regulations of Wyoming and North Dakota but go to these states and see how the rules are applied and their results. Conversation with the citizens of these states to determine if the rules and taxes have benefited all of the citizens of those states would be helpful as well.

Value-adding Energy Development: As I previously stated, the people do not want the "Big Sky Country" spider webbed with transmission lines. Europe has already learned that wind energy is a financial disaster and now has abandoned new construction of wind farms. With the current state and federal environmental regulations and threats of law suits by radical

environmental groups no refineries or coal fired plants are feasible. Value adding, while a good idea, is going to be a steep road to climb.

**Energy Efficiency and Conservation:** With no building codes in place in Montana let alone energy efficiency standards how do we improve energy efficiency? Currently the cost of new construction has place a new home out of reach for most Montanans. Previously owned homes are often less than energy efficient. The cost to update these homes would also place these homes out of reach for the average citizen. Many citizens rely on wood to keep the cost of heating down. The Forest Service has been placing more and more regulations on the wood cutter at the same time the DNRC charges twice the F. S. rate per cord of wood. Energy efficient cars rely on the most complicated and extremely expensive electronic controls to manage the engine. Combine the electronics with smaller lighter construction and you have a car that is expensive to purchase, expensive to repair and disposable. Energy produced by a fuel is related to weight. It does not matter if it is wood or motor fuel. Alcohol, propane, natural gas and hydrogen will never produce the energy per gallon than diesel fuel. The push to natural gas to operate semi-trucks is at best fools play. Those making this decision never operated a tractor or truck.

**Energy Availability and Affordability:** I agree that the manner in which electricity deregulation was handled by the legislature is abysmal. Some regulation is necessary. However oppressive regulation simply drives up cost to the consumer. Montana produces at this time, more electricity than we consume. The people of Montana simply do not have access to the power we produce because the transmission lines leave the state. The Energy Policy for the State of Montana should be concerned with Montana first and the rest of the nation later. All forms of energy that Montana could produce are being held hostage by high taxes and over reaching environmental regulation.

**Adherence to Environmental Laws and Community Acceptance:** Having environmental laws that prevent some of the abuses of past mining that left Montana with Super Fund sites are necessary. Having oppressive laws in place that stifle the economy are counterproductive. We need to look at not only the laws of North Dakota and Wyoming but the resultant economies of those states. Only when the laws, environmental concerns and the economy are looked at equally and together can we balance the needs of Montana. If you could hear the cries of the people in Eastern Montana who want energy development and a vibrant economy it would be a step in the right direction for Montana. While you not only listen but hear what the people are trying to tell you, we in Southwestern Montana don't want MSTI. To destroy ranches and Blue Ribbon Trout Streams does not conform to environmental quality we expect. An old oil well can be capped and covered never to be seen again. A 500kv power line is forever.

Supportive Infrastructure Development: Massive transmission lines that spider-web the state will become the worst environmental disaster looming in Montana's future. Currently we have a corridor going south from Colstrip yet new corridors are being proposed to destroy more and more of our environment. Building transmission lines to support expensive and inefficient wind energy because California has standards is wrong for Montana. Properly engineered and installed pipelines to carry the oil produced by the new Bakken wells can be a plus for Montana. You can look out over the prairies of Montana and not see a buried pipeline but a transmission line can be seen for miles. We currently have an excellent rail system in Montana. Now we just need to produce the products to be shipped on that rail system. The Interstate Highway System has a few problems that were created by politics. Only a politician could have traffic cross the Continental Divide three times between Boulder and the Idaho border. If you wanted to increase fuel efficiency of long-haul trucking you would insist that our Senators fund a I-15A route between Whitehall and Dillon that bypasses Butte. In addition there are several routes that seem to follow a more mountainous path.

Conclusion: Montana has vast resources that should be developed for the benefit of the State's economy. By restricting energy development to politically "targeted" areas will prevent the economic vitality that our neighbors enjoy. Wind energy development is a loser that has been made evident by the change of direction in Europe. We must look at the regulatory as well as the tax climate in Montana to see why we lag behind North Dakota by 119 to 11 in oil well construction and would a lower coal severance tax boost Montana coal production to that of Wyoming? You talk of community acceptance but do the opposite of the wishes of the people. When can the People expect to be listened to and heard? The People are tired of being run over by government at every level. We need a new respect for "The Will of the People" to be put in place. As a budget saving measure the State should end all subsidies to energy producers and use the savings to fund the "Fuels for Schools Program" which would cut the State's Educational System's non-renewable energy consumption.

Thank You for accepting this letter concerning Your Energy Policy.



Steve Jennings

President

**State Renewable Portfolio Standards (RPS) And Hydropower Provisions**

Note: This table gives an overview of the Renewable Portfolio Standards and the hydropower provisions for various states. The information contained here is current as of February 2010

STATE	RPS GOAL	ADOPTED ON	IMPLEMENTING AGENCY	BILL	NOTES	HYDRO PROVISION
1 Alabama	None					
2 Alaska	None					
Arizona	15 by 2025 (Mandatory)	Feb-06	Arizona Corporate Commission	AAC R14-2		<p>1. "Eligible Hydropower Facilities" are hydropower generators that were in existence prior to 1997 and that satisfy one of the following two criteria:</p> <ul style="list-style-type: none"> <li>i) New increased capacity of existing hydropower facilities due to improved technological or operational efficiencies or operational improvements resulting from improved or modified turbine design, improved or modified wicket gate assembly design, improved hydrological flow conditions, improved generator windings, improved electrical excitation systems, increases in transformation capacity, and improved system control and operating limit modifications. The electricity kWh that are eligible to meet the Annual Renewable Energy Requirements shall be limited to the new, incremental kWh output resulting from the capacity increase that is delivered to Arizona customers to meet the Annual Renewable Energy Requirement.</li> <li>ii) Generation from pre-1997 hydropower facilities that is used to firm or regulate the output of other eligible, intermittent renewable resources. The electricity kWh that are eligible to meet the Annual Renewable Energy Requirements shall be limited to the kWh actually generated to firm</li> </ul> <p>2. "New Hydropower Generator of 10 MW or Less" is a generator, installed after January 1, 2001</p> <ul style="list-style-type: none"> <li>i) A low-head, micro hydro run-of-the-river system that does not require any new damming of the river</li> <li>ii) An existing dam that adds power generation equipment without requiring a new dam, diversions, or other modifications</li> <li>iii) Generation using canals or other irrigation systems</li> </ul>
3 Arkansas	None					
California	33 by 2020 (Mandatory)	Sep-09	CA Energy Commission; CA Public Utilities Commission	SB107		<p>(IV) Renewable Energy Sources" means solar, wind, geothermal, biomass, new hydroelectricity with a nameplate rating of ten megawatts or less, and hydroelectricity in existence on January 1, 2005, with a nameplate rating of thirty megawatts or less.</p>
Colorado	30 by 2020 (Mandatory)	Mar-07, Modified Feb-10	CO Public Utilities Commission	HB-10-1001		<p>For large investor-owned utilities- New hydroelectricity with a nameplate rating of 10 MW or less, and hydroelectricity in existence on January 1, 2005, with a nameplate rating of 30 MW or less.</p> <p>Note: Pumped Storage hydro is excluded</p> <p>For municipal utilities and rural electric providers- 10% by 2020.</p>

STATE RPS GOAL ADOPTED IMPLEMENTING BILL NOTES HYDRO PROVISION

ON AGENCY

Connecticut	27 by 2020 (Mandatory)	Jun-07	Department of Public Utility	<u>HB7432</u>	Class I - 20 % Class I or II - 3% Class III - 4%	Class I i) Wave or tidal power ii) A run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation after July 1, 2003
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Delaware	20 by 2019 (Mandatory)	Jul-07	Delaware DNR	<u>SB19</u>	2% has to be solar photovoltaics	Class II i) A run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the riverflow, and began operation prior to July 1, 2003 Electricity derived from ocean energy including wave or tidal action, currents, or thermal differences
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District of Columbia	20 by 2022	Jan-05	DC Public Services Commission	<u>AS-755</u>	In 2022 and later, 11% from Tier 1, 0 % from Tier 2, and at least 0.386 % from solar	Electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNERC Hydropower (other than pumped-storage generation)
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Florida	None	To be developed by 2009				Tier 1 Solar, wind, biomass, landfill gas, wastewater-treatment gas, geothermal, ocean (mechanical and thermal) and fuel cells fueled by tier one resources. Tier 2 Hydropower (other than pumped-storage generation) and municipal solid waste
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Georgia	None					
Hawaii	20 by 2020 70 by 2030 (Mandatory)		Public Utilities Commission	<u>SB2474</u>		Energy from "falling water" Ocean water, currents and waves & Electrical energy savings brought about by the use of energy efficiency technologies, including heat pump water heating

Idaho	None					
Illinois	25 by 2025 (Mandatory)	Aug-07	Commerce Commission	<u>Public Act 095-0481</u>	75% of the electricity used to meet Hydropower that does not involve new construction or significant expansion of hydropower from wind power generation	

Indiana	None					
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STATE RPS GOAL ADOPTED IMPLEMENTING BILL AGENCY NOTES HYDRO PROVISION

Iowa 105 MW by 1983 Iowa Utilities Board Iowa Code 105 MW by 1999 Small hydro facilities- not specifically defined.  
 1999 (-2% of Revised in Code  
 1999 sales) 2003 §476  
 (Mandatory)

Kansas 20 by 2020 May-09 HB2369 All existing hydropower:  
 All new hydropower <10 MW except new pumped storage.

Kentucky None By 2009 Public Utilities Title 35-  
 Louisiana None Commission A  
 (Mandatory)

Maryland 20 by 2022 Apr-07 Public Service Commission SB595 Tier 1: 20% in 2022 and beyond  
 (Mandatory) Commission Tier 2: 2.5% in 2006 through 2018  
 Less than 100 MW

Tier 1: Small hydroelectric power plant of less than 30 megawatts in capacity that is licensed or exempt from licensing by the Federal Energy Regulatory Commission if it is generated at a dam that existed as of January 1, 2004, even if a system or facility that is capable of generating electricity did not exist on that date.  
 Tier 2: Hydroelectric power other than pump storage generation if it is generated at a system or facility that existed and was operational as of January 1, 2004, even if the facility or system was not capable of generating electricity on that date

STATE RPS GOAL ADOPTED IMPLEMENTING BILL NOTES HYDRO PROVISION

ON AGENCY

Massachusetts 15 by 2020 Jul-08 Division of Energy Resources S.2768

Class I- 4% by 2009 with additional 1 % increase every year 1. Marine and Hydrokinetic Energy with no end-date

Class II- 3.6 % by 2009

- 2. Class I Hydroelectric.
  - i) The Unit has a nameplate capacity up to 25 megawatts, or increased capacity installed or efficiency improvements implemented after December 31, 1997.
  - ii) The Unit does not involve pumped storage of water or any dam or water diversion structure constructed after December 31, 1997.
  - iii) The Unit does not generate Marine or Hydrokinetic Energy.
  - iv) The Unit meets appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed, as determined by the Department in consultation with Relevant Hydroelectric Agencies. The Unit shall demonstrate compliance with such standards by submitting the documentation required in either 225 CMR 14.05(1)(a) 6.d.i or ii.
- a. LIHJ Certification of the Unit;

- 3. Class II Hydroelectric
  - An Generation Unit that uses Hydroelectric Energy may qualify as an RPS Class II Generation Unit, subject to the limitations in 225 CMR 15.05(1)(a)6.
  - a. The Unit has a nameplate capacity up to 5 MW;
  - b. The Unit does not involve pumped storage of water or any dam or water diversion structure constructed after December 31, 1997.
  - c. The Unit does not generate Marine or Hydrokinetic Energy.
  - d. The Unit meets appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed, as determined by the Department in consultation with Relevant Hydroelectric Agencies. The Unit shall demonstrate compliance with such standards by submitting the documentation required in either 225 CMR 14.05(1)(a)6.d.i or ii.

i. LIHJ Certification of the Unit;

Kinetic energy of moving water, including all of the following:

- i) Waves, tides, or currents.
- ii) Water released through a dam

Renewable energy system does not include any of the following:

- i) A hydroelectric pumped storage facility.
- ii) A hydroelectric facility that uses a dam constructed after the effective date of this act unless the dam is a repair or replacement of a dam in existence on the effective date of this act or an upgrade of a dam in existence on the effective date of this act that increases its energy efficiency

Michigan 3 10 by 2015 Oct-08 Michigan Public Service Commission SB213



NEW HAMPSHIRE AGENCY

New Hampshire	25 by 2025 (Mandatory)	May-07	New Hampshire Public Utilities Commission	<u>HB873</u>	Class I- 16% Class II- 0.3% Class III- 6.5% Class IV- 1%	Class I The incremental new production of electricity in any year from an eligible biomass or methane source or any hydroelectric generating facility licensed or exempted by Federal Energy Regulatory Commission (FERC), regardless of gross nameplate capacity, over its historical generation baseline, provided the commission certifies demonstrable completion of capital investments attributable to the efficiency improvements, additions of capacity, or increased renewable energy output that are sufficient to, were intended to, and can be demonstrated to increase annual renewable electricity output. The determination of incremental production shall not be based on any operational changes at such facility but rather on capital investments in efficiency improvements or additions of capacity.
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New Jersey	22.5 by 2021 (Mandatory)	Apr-06	Board of Public Utilities	<u>N.J. Stat. § 48:3-49</u>	2.12% from solar; 17.88% from Class I; 2.5% from Class II or additional Class I	Class I- Wave or Tidal and other "Class II renewable energy" means electric energy produced at a resource recovery facility or hydropower facility, provided that such facility is located where retail competition is permitted and provided further that the Commissioner of Environmental Protection has determined that such facility meets the highest environmental standards and minimizes any impacts to the environment and local communities;
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New Mexico	20 by 2020 (Mandatory)	Mar-07	Public Regulation Commission	<u>SB418</u>	All hydro	Hydroelectric upgrades with no new storage impoundments, with eligibility limited to the incremental production associated with the upgrade; new low-impact run-of-river hydroelectric facilities limited to 30 MW or less, with no new storage impoundment;
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New York	25 by 2013 (Mandatory)	Sep-04	Public Service Commission	<u>CASE 03-E-0188</u>	Main tier- Mandatory, 24%; includes biogas, biomass, liquid biofuel, fuel cells, hydroelectric, solar, ocean or tidal power, and wind. Customer-sited tier- 1% from voluntary green market programs.	In-State run-of-river hydroelectric facilities of 5MWs or less in commercial operation at any time prior to January 1, 2003 that demonstrate need to receive RPS financial support to operate
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STATE RPS GOAL ADOPTED IMPLEMENTING BILL NOTES HYDRO PROVISION  
ON AGENCY

North Carolina	10 by 2018 12.5 by 2021 (Mandatory)	Aug-07	North Carolina Utilities Commission	S.L. 2007-397	Public utilities must meet 12.5% of retail electricity demand through renewable energy or energy efficiency measures, and electric membership corporations and municipalities that sell electric power in the state would have to meet a standard of 10% by 2018.	Less than 10 MW
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North Dakota	10 by 2015 25 by 2025 (Mandatory)	Mar-07 May-08	Public Utilities Commission of Ohio	HB 1506 SB 221	Voluntary RPS Known as Alternative Energy Portfolio Standards (AEPS)	All hydro "hydroelectric facility" means a hydroelectric generating facility that is located at a dam on a river, or on any water discharged to a river, that is within or bordering this state or within or bordering an adjoining state and meets all of the following standards:
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At least 12.5 percent of electricity sold, must be generated by renewable sources such as wind, solar (which must account for at least 0.5 percent of electricity use by 2025), hydropower, geothermal, or biomass. At least half of this renewable energy must be generated in-state. The additional 12.5 percent can also be met through alternative energy resources like third-generation nuclear power plants, fuel cells, energy-efficiency programs, and clean coal technology that can control or prevent carbon dioxide emissions.

i) The facility provides for river flows that are not detrimental for fish, wildlife, and water quality, including seasonal flow fluctuations as defined by the applicable licensing agency for the facility.

ii) The facility demonstrates that it complies with the water quality standards of this state, which compliance may consist of certification under Section 401 of the "Clean Water Act of 1977," 91 Stat. 1598, 1599, 33 U.S.C. 1341, and demonstrates that it has not contributed to a finding by this state that the river has impaired water quality under Section 303(d) of the "Clean Water Act of 1977," 114 Stat. 870, 33 U.S.C. 1313.

iii) The facility complies with mandatory prescriptions regarding fish passage as required by the additional 12.5 percent can also be federal energy regulatory commission license issued for the project, regarding fish protection for riverine, anadromous, and catadromus fish.

iv) The facility complies with the recommendations of the Ohio environmental protection agency nuclear power plants, fuel cells, energy-efficiency programs, and clean coal technology that can control or prevent carbon dioxide emissions.

v) The facility does not harm cultural resources of the area. This can be shown through compliance with the terms of its federal energy regulatory commission license or

vi) The facility complies with the terms of its federal energy regulatory commission license or

vii) The facility is not recommended for removal by any federal agency or agency of any state, emissions.

Oklahoma	15% by 2015 May-10		Oklahoma Corporation Commission	HB 3028	All hydro
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STATE RPS GOAL ADOPTED IMPLEMENTING BILL NOTES HYDRO PROVISION

AGENCY

Oregon 25 by 2025 (Mandatory) Jun-07 Oregon Public Utility Commission SB 838 Sources of energy that count toward the standard include wind, solar, wave, geothermal, biomass, new hydro or efficiency upgrades to existing hydro facilities

Electricity generated by a hydroelectric facility other than a hydroelectric facility that became operational before January 1, 1995, may be used to comply with a renewable portfolio standard only if:  
 i) The facility is located outside any protected area designated by the Pacific Northwest Electric Power and Conservation Planning Council as of July 23, 1999, or any area protected under the federal Wild and Scenic Rivers Act, Public Law 90-542, or the Oregon Scenic Waterways Act, ORS 390.805 to 390.925; or  
 ii) The electricity is attributable to efficiency upgrades made to the facility on or after January 1, 1995.

iii) Up to 50 average megawatts of electricity per year generated by an electric utility from certified low-impact hydroelectric facilities described in section 3 (4) of this 2007 Act may be used to comply with a renewable portfolio standard, without regard to the number of certified facilities operated by the electric utility or the generating capacity of those facilities. A hydroelectric facility described in this subsection is not subject to the requirements of subsection (4) of this section.

Pennsylvania 18 by 2020 (Mandatory) Dec-04 Public Utility Commission Senate Bill No. 1030 Tier 1 sources must make up 8% of the portfolio, and include wind, solar, coalmine methane, small hydropower, geothermal, and biomass. Solar sources must provide 0.5 percent of generation by 2020.

Tier 1  
 TIER 1  
 Low-impact hydropower, consisting of any technology that produces less than 50 megawatts of electric power and that harnesses the hydroelectric potential of moving water impoundments, provided such incremental hydroelectric development:  
 i) does not adversely change existing impacts to aquatic systems;  
 ii) meets the certification standards established by the Low Impact Hydropower Institute and American Rivers, Inc. or their successors;  
 iii) provides an adequate water flow for protection of aquatic life and for safe and effective fish passage;  
 iv) protects against erosion; and  
 v) protects cultural and historic resources

TIER 2  
 Large-scale hydropower, which shall mean the production of electric power by harnessing the hydroelectric potential of moving water impoundments, including pumped storage that does not meet the requirements of Low-impact hydropower

Rhode Island 16 by 2020 (Mandatory) Jun-04 Public Utility Commission HB375A Small hydro facility: means a facility employing one or more hydroelectric turbine generators and with an aggregate capacity not exceeding thirty (30) megawatts.

South Carolina None South Dakota 10 by 2015 Feb-08 HB1272 Voluntary RPS Small hydro facility- a facility employing one or more hydroelectric turbine generators and with an aggregate capacity not exceeding thirty megawatts

Tennessee None Texas 5 5,880 MW by Aug-06 Public Utility Commission SB20 5,880 MW (Approx. 5%) by 2015, 10,000 MW by 2025, 500 MW of the 2025 target with non-wind renewable generation. All hydro (Renewable sources not specifically defined) (Mandatory)

STATE	RPS GOAL	ADOPTED ON	IMPLEMENTING AGENCY	BILL	NOTES	HYDRO PROVISION
Utah	20 by 2025	Mar-08		SB202	Voluntary- to the extent that it is cost effective.	Up to 50 average megawatts of electricity per year per municipal electric utility from a certified low-impact hydroelectric facility, without regard to the date upon which the facility becomes operational, if the facility is certified as a low-impact hydroelectric facility on or after January 1 1995, by a national certification organization;
						Efficiency upgrades to a hydroelectric facility, without regard to the date upon which the facility became operational, if the upgrades become operational on or after January 1, 1995;
Vermont	25 by 2025 (Mandatory)	Jun-05	Public Service Board	Title 30- Chapter 89	Three separate goals: (1) total increase in retail electricity sales between 2005-2012 to be met using qualifying renewables; (2) 20% of total statewide electric retail sales generated by qualifying renewables and CHP by 2017; (3) 25% of all energy consumed within the state produced through the use of renewables by 2025.	For purposes of this chapter, the only energy produced by a hydroelectric facility to be considered renewable shall be from a hydroelectric facility with a generating capacity of 200 MW or less
Virginia	12% of base year (2007) by 2022	Apr-07		SB1416	Voluntary RPS	All hydro
Washington	15 by 2020 (Mandatory)	Nov-06	Washington State Utilities and Transportation Commission	Initiative 937	Applicable for all utilities serving at least 25,000 people	Incremental electricity produced as a result of efficiency improvements completed after March 31, 1999, to a hydroelectric generation project owned by one or more qualifying utilities and located in the Pacific Northwest or to hydroelectric generation in irrigation pipes and canals located in the Pacific Northwest, where the additional electricity generated in either case is not a result of new water diversions or impoundments
13 West Virginia	None					All hydro
Wisconsin	10 by 2015 (Mandatory)	Mar-06	Public Service Commission	SB450		Tidal or wave
14 Wyoming	None					

DEVELOPED BY:  
The Hydropower Reform Coalition

- SOURCES:
1. Pew Center for Climate Change at <http://www.pewclimate.org/states-regions>
  2. DSIRE at <http://www.dsireusa.org/>
  3. U.S. Renewable Electricity Standards Toolkit at <http://go.usa.gov/gcgl-4hm> RI: S. state standards\_search.php?template=main