

# **2009-10 Energy Policy for Montana**

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September 2009

## **Part III of IX "Maximizing state land use for energy generation"**

### **Governor Schweitzer's Energy Policy statement on public resources:**

"Looking ahead, the use of public resources to promote new energy projects will follow a high standard, concentrating on the cleanest projects proposed by industry and those that find community acceptance."

**ETIC Energy Policy statement:** (This is a DRAFT statement that has not received ETIC approval. It is meant ONLY as a starting point for ETIC discussion)

### **Findings**

There are more than 5 million surface acres and 6.2 million mineral acres of state trust land scattered across the state. The law requires the Board of Land Commissioners manage the land to "secure the largest measure of legitimate and reasonable advantage to the state" and "provide for the long-term financial support of education."<sup>1</sup> Trust land revenues play a significant role in the funding of public schools, receiving the majority of the revenue generated by state trust land in the state.

State lands have historically been the source of varied energy riches in Montana, and the potential for even greater energy development is receiving increased attention. While a limited number of tracts of state land are used for energy generation, those that are used for such purposes, produce significant revenue for lessees and the state. Technological advancements also are increasing exploration and development opportunities. Royalty rates, as well as production taxes, are a key component to ensuring Montana's state trust lands are used appropriately for energy generation.

### **ETIC recommendations: ?**

### **Examples of state land use for energy generation in other states:**

The Western States Land Commissioners Association recently developed a report "Wind, Wave/Tidal, and In-river Flow Energy: A Review of the Decision Framework of State Land Management Agencies" that summarizes the decision-making framework surrounding alternative energy projects on state lands. The report finds that very few states have laws dealing directly with how land agency managers should approach alternative energy projects. It finds:

- Colorado and Louisiana have laws allowing the state to consider alternative energy projects, where that authority did not previously exist.
- South Dakota has laws providing for a severance of wind energy as a property interest through an easement.
- Idaho recently approved a resolution encouraging the Idaho Land Board to explore opportunities to develop alternative energy facilities on state endowment land.

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<sup>1</sup> 77-1-202, MCA

- Oregon has administrative rules governing the exploration and development of wave energy. The state is in the process of designing rules governing the use of wind turbines, solar energy installations, and biomass facilities.

While there are only limited state policies on the books, most state land managers recognize that interest in state lands is increasing with increases in conventional energy prices and a growing interest in renewable resources. The report includes a list of issues that most states must examine in advancing alternative energy policies on state lands. Fractured land ownership patterns and land management priorities and objectives are noted as barriers. The report finds that some states have structured phases into their authorizations to prevent speculation and to protect the state against non-performing lessees tying up state land for long periods of time. The role of the federal government, such as the Federal Energy Regulatory Commission and the Bureau of Land Management are also considerations. Lack of infrastructure, need for environmental baseline information, staff knowledge base, and a need for an understanding of the impacts of an emerging industry are also noteworthy.

Additional examples:

#### **Idaho**

- The State Board of Land Commissioners and the Idaho Department of Lands are charged with managing endowment lands in Idaho. The state must comply with the same fiduciary obligations as apply to private trustees when managing and administering trust lands. The board focuses on the interest of the beneficiaries of the endowment, as opposed to the general public interest.
- The Idaho Board of Land Commissioners acts as the Oil and Gas Commission and regulates the exploration, drilling, and production of oil and gas resources. Activities are monitored to protect the environment during drilling and operation at various sites.
- "There is a great opportunity to generate revenue for endowment beneficiaries through the leasing of trust lands for wind energy production. Idaho Department of Lands has drafted a wind lease and a Request for Proposal for wind energy development to facilitate the leasing of endowment lands for this purpose." <sup>2</sup>

#### **Colorado**

- During the 2007-08 fiscal year renewable energy income increased dramatically. The Colorado State Land Board approved a number of wind leases and is working on solar planning leases and geothermal leases in 2009. The Land Board has more than 10,000 acres (up from 940 in FY 2005-06) under lease for wind energy.
- Coal royalties declined because of a 6% decrease in production revenues. The board has nine active coal leases on about 29,000 acres. The combined production of the four major coal properties over the last four years has exceeded \$25 million in royalties.<sup>3</sup>

#### **Texas**

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<sup>2</sup> [http://www.idl.idaho.gov/bureau/smr/smr\\_index.htm#wind](http://www.idl.idaho.gov/bureau/smr/smr_index.htm#wind)

<sup>3</sup>

[http://www.trustlands.state.co.us/Documents/State%20Land%20Board%20Annual%20Report%2010-27-08%20Final%20Document2\\_web\\_ed.pdf](http://www.trustlands.state.co.us/Documents/State%20Land%20Board%20Annual%20Report%2010-27-08%20Final%20Document2_web_ed.pdf)

- The Texas General Land Office (GLO) manages an in-kind oil and natural gas program and a state electric power program. The programs benefit a Permanent School Fund and provide gas and electricity to state agencies and public school districts at a discounted cost. The GLO also markets wind and geothermal power. "This sustainable energy is an area where the GLO is turning natural resources into money for public education."<sup>4</sup>
- The Texas Wind Power Project has contributed about \$750,000 since installation in 1995 to the Permanent School Fund. Over the 25-year lease period, the wind farm is expected to generate more than \$3 million for state schools and provide \$300 million in increased economic activity.<sup>5</sup>
- Since 2001 the GLO has evaluated state lands for wind power development potential on upland and offshore sites. Towers have been installed on state lands and an analysis has been completed to provide information to wind development companies interested in leasing state lands.
- State lands dedicated to the Permanent School Fund in Texas include 13.3 million acres, about 65% of the state land and mineral rights that the GLO manages.

## **Background**

Trust land resources in Montana must be managed to produce revenue for the trust beneficiaries and take into account environmental factors while protecting the future income-generating capacity of the land. Historically, state lands have provided hydropower, wind power, coal production, and oil and gas production. State lands are now being looked at in a much broader context in terms of geothermal energy, biomass energy, and even carbon sequestration.

The Department of Natural Resources Minerals Management Bureau oversees the leasing, permitting and managing of about 4,802 oil and gas, coal, sand and gravel, and metalliferous and non-metalliferous agreements covering about 2 million acres of the 6.2 million acres of available school trust lands and 2,400 acres of additional state land. Multiple-use of trust lands is also mandated by law, meaning a grazing lease might also be used as a wind farm or even for carbon sequestration.<sup>6</sup>

Oil and gas exploration and development on state and private lands is regulated and bonded by the Montana Board of Oil and Gas Conservation Commission. Of the 6,653 oil and gas leases the department is now leasing and monitoring, about 606 are currently productive. Oil and gas leases that are managed are up about 7%, however, the number of producing leases increased by just 3.9%, compared to fiscal year 2007. Each year, there are four oral auctions of new oil and gas leases.

Each oil and gas leasee pays a rental rate of no less than \$1.50 for each acre of land leased, with some conditions, and no less than \$100 per year. Lessees also pay a royalty on oil

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<sup>4</sup> <http://www.glo.state.tx.us/energy/sem.html>

<sup>5</sup> [http://www.seco.cpa.state.tx.us/re\\_wind.htm](http://www.seco.cpa.state.tx.us/re_wind.htm)

<sup>6</sup> 77-1-203, MCA

and gas that is produced from the lease. The royalty rate may not be less than 12.5%. In 2005 it was increased to 16.67%, unless otherwise noted in a lease sale.

School trust grants received more than \$31.2 million attributed to oil and gas leasing in the 2008 fiscal year. And production showed nearly 2 million barrels of oil, 7.8 million MCF (thousand cubic feet) of natural gas, and 1.5 million gallons of condensate produced in that time period. It was the most successful royalty revenue year in the bureau's history -- largely due to record high oil prices.<sup>7</sup>

A portion of Montana's vast coal resources are also located on state land. The operating, rental, and royalty provisions are established by a lease, but that lease does not authorize a coal mine. Before mining occurs, the lessee must comply with the Montana Environmental Policy Act and secure the proper permits.

Lease counts for coal have remained constant since 2006, with about 29 leases on 13,841 acres.<sup>8</sup> Coal production on state trust lands increased 63.7% in fiscal year 2008 to 4,720,487 tons mined compared to 2,883,432 tons mined the previous year. The production totals were the highest recorded on state trust lands over the past decade.<sup>9</sup> Lessees pay no less than \$2 for each acre of land leased for coal resources. The royalty on all coal produced from the leased premises is no less than 10% of the value of the coal (currently 12.5% is collected). Royalties constitute the overwhelming majority of gross revenue generated from a producing coal lease. In fiscal year 2008, coal royalty revenues totaled \$5,865,071, an increase of 57.3% over the previous year.

During the last year, Montana's coal resources, particularly the Otter Creek Project area, has received much attention. the State's ownership totals over 9,500 acres, or roughly half of the Otter Creek area. The state's ownership is in a "checkerboard" pattern, and Great Northern Properties owns most of the other half of the coal estate. Surface ownership is a combination of state, federal, and fee. State recoverable coal totals 616 million tons at Otter Creek, or about one-half of the total 1.3 billion ton reserve.

A lease appraisal that covers the state's ownership of the area has been completed, and the Land Board is collecting public opinion and reviewing the appraisal. In the coming year, the Land Board will consider offering the state tracts for lease.

The appraisal established the following estimated value for the state property that may be considered for lease and development:

- Minimum Bonus Payment: \$37.3 million (\$57.2 million if rail line is separately financed)
- Annual Rentals (\$3/acre): \$1.0 million (over 40 years)
- Royalty Payments (12.5%): \$1.4 billion (over 40 years)<sup>10</sup>

Montana's first wind farm became fully operational in 2006. The Judith Gap Wind Farm is located on a combination of state school trust land private land. Of the 90 wind turbines, 13 are located on trust land and since fiscal year 2004, Judith Gap has generated about \$212,116 in revenue.

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<sup>7</sup> <http://dnrc.mt.gov/trust/MMB/Default.asp>

<sup>8</sup> [http://dnrc.mt.gov/About\\_Us/publications/2008/MMB.pdf](http://dnrc.mt.gov/About_Us/publications/2008/MMB.pdf)

<sup>9</sup> State of Montana DNRC Trust Land Management Division *Fiscal Year 2008 Annual Report*, page 11.

<sup>10</sup> [http://dnrc.mt.gov/trust/MMB/otter\\_creek/2009/FAQ.pdf](http://dnrc.mt.gov/trust/MMB/otter_creek/2009/FAQ.pdf)

A wind developer interested in state land can secure a land use license and place an anemometer on state land. It does not constitute a lease, and is issued at an administrative cost of \$25 plus a minimum annual fee of \$150 per year. If a site with strong wind potential is identified, the DNRC can then release a public request for proposals seeking developers to offer proposals for development. Montana, New Mexico, and Wyoming use a competitive process after the initial, unsolicited proposal.<sup>11</sup>

Currently, an Environmental Impact Statement is being completed for the proposed Springdale/Coyote Wind Farm. Coyote Wind, LLC, plans to erect six to ten wind turbines on school trust land in Sweet Grass County, between Big Timber and Livingston. The project would also include some adjoining private land.

Martinsdale Wind Farm LLC, a subsidiary of Horizon Wind Energy, is working in cooperation with the DNRC to develop the Martinsdale Wind Power Project. It would produce up to 300 megawatts and be located about 20 miles west of Harlowton. The project could include 36 turbines, possibly expanding to 100 wind turbines.<sup>12</sup>

Efforts to turn the Norris Hill area of Madison County into a wind farm also could include state lands. Madison Valley Renewable Energy LLC, was selected to use state school trust lands in a portion of its project, which is expected to cover 14,000 acres of state and private land and generate about 150 megawatts of electricity. The agreement with the state provides the energy company with 4,000 acres in exchange for 3.1% of the wind farm's electrical generation revenues.<sup>13</sup>

Wind related activities on state lands have generated a total of \$306,115 since 2004.

There is one hydropower facility on state-owned water projects. The Broadwater Power Project near Toston has been generating power since June 1989. Revenue supplements funds for state water project rehabilitation costs. The DNRC owns and operates the 10-megawatt facility, and contracts with NorthWestern Energy to sell the power. In a year with average runoff, the facility can generate about \$3.5 million in revenue from energy capacity sales. If debt payments and operating expenses are deducted, about \$1.3 million is left. Drought has reduced the power generated and revenue at the facility.<sup>14</sup>

State lands also have the potential to be used for biomass and geothermal energy. The DNRC and other state agencies are taking a closer look at lands where these types of developments might be considered in the future. The state is authorized to lease state land for geothermal development in accordance with Title 77, chapter 4, part 1, MCA. The annual rental rate is no less than \$1 per acre, and the royalty rate is no less than 10% of the amount or value of the steam or energy. The 2009 Legislature approved House Bill No. 333, which allows the Montana Bureau of Mines and Geology to characterize the geothermal resource base in

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<sup>11</sup> "Wind, Wave/Tidal, And In-River Flow Energy: A Review of the Decision Framework of State Land Management Agencies", Western States Land Commissioners Association.

<sup>12</sup> <http://dnrc.mt.gov/trust/wind/martinsdale.asp>

<sup>13</sup> "Companies vie to harness Norris Hill Wind Potential", Bozeman Daily Chronicle, Jodi Hausen, January 10, 2008.

<sup>14</sup> [http://www.dnrc.mt.gov/wrd/water\\_proj/hydro/hydropower.asp](http://www.dnrc.mt.gov/wrd/water_proj/hydro/hydropower.asp)

Montana. The ETIC will receive reports on their findings and any funding used for such resource.

With beetle-infestations in areas of Montana's forested lands, biomass also holds potential for the future. The state of Montana has about 4% of the live tree woody biomass of live tree woody biomass on Montana timberland, and there is an average of 5.61 tons per acre of standing dead tree woody biomass on state lands.<sup>15</sup>

The DNRC as well as the Montana Legislature have engaged in discussions about the role of state trust lands in a carbon trading system. Bill drafts were discussed but not advanced during the 2009 session, and the DNRC continues to look at its existing authority to provide such leases.

### **State Land Use for Energy Generation**

(Production taxes and general incentives are not included)

#### **Title 77, chapter 1, part 2, Land board**

Outlines the Board of Land Commissioners power and duties. Management of state lands under the multiple-use management concept are also outlined. Requirements for the disposition of revenue and profits derived from state lands are included.

#### **Title 77, chapter 1, parts 3 and 4, DNRC**

Outlines the role of the Department of Natural Resources and Conservation for appraising, leasing, and managing state lands. The classification of state lands are provided for.

#### **Title 77, chapter 3, minerals**

Authorizes mineral leases and outlines the disposition of royalties and other fees. Lease and royalty provisions, as well as restrictions are outlined. Coal leases are covered specifically in part 3. Oil and gas is outlined in part 4, and the underground storage of natural gas is outlined in part 5.

#### **77-4-102, geothermal**

Provides for the leasing of state-owned lands, including the beds of navigable streams and the beds of navigable bodies of water for prospecting, exploration, well construction, and the production of geothermal resources.

#### **77-4-201, MCA, hydropower**

Prohibits the state from selling or advertising for sale state lands constituting power sites or part of power sites capable of developing hydroelectric energy in commercial quantities. However, land commissioners may issue a lease or license for the development of power sites and the distribution, use, and disposition of the electrical energy generated on the sites.

#### **Title 77, chapter 5, part 2**

Outlines timber sales on state lands. If the department is addressing forest health concerns, the department may exceed the annual sustained harvest level by up to 10% (a change by the 2009 Legislature) using contract harvesting, provided that the contract harvest

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volume in excess of the annual sustained harvest level contains no more than 25% merchantable sawlog volume

**HB 529, 2009 Legislature, permitting**

The scope of environmental review under the Montana Environmental Policy Act for certain energy projects on state lands is limited. If more than 33% of the total land occupied by an energy development project is state land then the environmental review includes the total land area, including federal and private land.

**HB 674, 2009 Legislature, state land use**

Authorizes the creation of state debt through the issuance of general obligation bonds for purchase and management of real property and appurtenances for sustainable forest management, recreational use, and income-generating potential.

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