2009-10 Energy Policy for Montana

Prepared by Sonja Nowakowski
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Part I of IX "Rebuilding and extending electric transmission lines"

Governor Schweitzer's Energy Policy statement on transmission:

"The transmission lines, pipelines, railroads and highways needed to move various energy products to market are vital if Montana is to compete in regional and global markets. We will commit state efforts to strengthening our energy delivery links internally and to the rest of the world."

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

In order to maximize Montana's energy potential, new and upgraded transmission lines will be needed to export to population centers with a high demand for energy. At the same time, Montana utilities must build and upgrade electric transmission to provide low-cost and reliable service to Montana customers. Private landowners also have a valuable role to play and a stake in efforts to expand and rebuild transmission lines.

Improving transmission infrastructure in Montana will require a significant financial investment. Innovative management of the electrical grid will need to increase efficiency. Coordination between private companies, government entities and the public is critical to develop new transmission lines and meet the needs of customers.

ETIC recommendations: ?

Examples from other state energy policies:

Idaho (During the 2006 session, the Idaho Legislature passed House Concurrent Resolution No. 62, directing the Legislative Council Interim Committee on Energy, Environment and Technology to develop an integrated state energy plan)

Idaho recommendations and policies:

- ☐ Idaho utilities should have the ability and the appropriate incentives to construct transmission facilities that are needed to provide reliable, low cost energy service to their customers, access to regional markets, and access to a diverse set of resources.
- ☐ The Idaho Public Utility Commission, Idaho's investor owned utilities and the Bonneville Power Administration should work together to ensure that Idaho's Consumer Owned Utilities have access to reliable transmission service for cost effectively integrating new resources.
- ☐ Idaho should participate in regional efforts aimed at increasing the capability of the western transmission grid and bringing to Idaho the benefits of cost effective remote resources.
- ☐ Idaho should support efforts to amend the Internal Revenue Code to provide that revenue bonds issued by state transmission entities be provided with tax exempt status to provide additional ability to construct needed transmission facilities.

Iowa ("Charting our own course: Today's challenges, tomorrow's opportunities" -- Iowa Energy Independence Plan produced by the Office of Energy Independence in December 2008. The Iowa Power Fund Board, which includes legislative representatives, also review the plan.)

Iowa recommendations and policies:

- ☐ To achieve energy independence, Iowa must modernize and upgrade its infrastructure.
- ☐ To successfully add wind power to Iowa's energy mix, more transmission and grid upgrades will be required. New policies should emphasize the real need for new transmission capacity to transport emerging and future wind generation, as well as power from current sources.
- ☐ Small-scale distributed generation from renewable resources frequently produces electricity near the load, thus reducing transmission and distribution costs and related energy losses.
- ☐ From financing incentives to load management to rights-of-way that may be needed for transmission corridors, regional planning is essential to ensuring Iowa is ready to become the national leader in large-scale wind energy generation and manufacturing.

Background

Ramping up energy production in Montana means more energy generation and more transmission to route that power to market---but not necessarily in that order. In the energy arena, in fact, production and transmission typically travel in tandem down the development path.

New energy generation, for example a wind farm or a natural gas plant, doesn't get financed or built without transmission lines to move that power to market. And big, new transmission lines don't go up overhead without new generation to send down those lines. Transmission lines are the arteries that take energy from generation sites to varying points of consumption. Since 1990, the demand for electricity in the United States increased by about 25% and construction of transmission facilities decreased by about 30%.[1] The western grid is congested and states are increasingly looking for new energy suppliers. Large population centers see promise in Montana's diverse energy resources, but channeling those resources will require a significant investment in transmission projects.

Historically in Montana investor-owned utilities like the former Montana Power Company and the federal government, such as the Western Area Power Administration (WAPA) and Bonneville Power Administration (BPA), have constructed major transmission lines. Those lines move large amounts of power from generation sources to markets. This information focuses on efforts related to lines that are generally operated at voltages of 100,000 volts (100 kV) to 500 kV. While NorthWestern Energy, WAPA, and BPA continue to build, rebuild, and upgrade transmission projects, publicly traded private companies also are entering the mix. Companies are considering constructing new independent, nonutility transmission lines in Montana. When these "merchant lines" are built, the company building the line does not generate its own electricity but sells contracts or rights to transport electricity on the lines. Utilities that own transmission lines also can propose projects in response to requests for new services from power marketers and independent generation developers. A mix of these "merchant lines," federal projects, and utility-driven efforts are underway throughout Montana.

Montana's strongest interconnections with other regions are two 500 kV lines from Colstrip to Spokane, a 500 kV line and a 230 kV line west of Hot Springs, interconnections from

[1] http://sites.energetics.com/gridworks/grid.html

Yellowtail Dam south to Wyoming, ties to the east at Miles City and Fort Peck, and a 161 kV line and a 230 kV line that runs south from Anaconda and Garrison into Idaho. [2] Montana's transmission system is part of the Western Interconnection Transmission System, and because transmission lines cross state boundaries, the federal government, through the Federal Energy Regulatory Commission, has primary regulatory jurisdiction. That jurisdiction centers around wholesale rate setting and siting issues if state efforts at interstate transmission siting are not complete within a year. Other federal agencies, such as the Bureau of Land Management and the U.S. Forest Service, have a role if transmission lines cross those federal lands. The Department of Energy plays a role in coordinating and reviewing projects.

Montana regulates transmission siting through the Montana Major Facility Siting Act (MFSA), and that requires certain proposed transmission projects to go through a review before construction. Typically transmission lines greater than 69 kV are covered under MFSA if they meet certain criteria. With some exceptions, electrical transmission lines of 230 kV or more and 10 miles or more in length or 10% of the existing right-of-way, whichever is greater, are covered under MFSA. "The Montana Legislature has found that the purposes of MFSA are to ensure the protection of the state's environmental resources, ensure the consideration of socioeconomic impacts from regulated facilities, provide citizens with an opportunity to participate in facility siting decisions, and establish a coordinated and efficient method for the processing of all authorizations required for regulated facilities."[3]

NorthWestern Energy and Montana-Dakota Utility distribution costs are regulated by the Montana Public Service Commission. Distribution costs of electric cooperatives are set by the governing boards of individual co-ops. In February 2007 the Federal Energy Regulatory Commission issued Order 890, which reforms aspects of the open access transmission tariff. The order mandates that transmission providers implement a coordinated, transparent, and participatory transmission planning process. Each transmission provider was required to develop a proposal describing a transmission planning process that complies with the order. Order 890 is geared at promoting reliability, sending accurate market signals, and encouraging the development of energy infrastructure.[4]

It is noteworthy that power generated on the grid must be consumed instantaneously on the grid. Unlike other sources of energy, electricity can't be stored on the grid. Transmission operators have to constantly balance electricity generation and demand. That balancing act is a complicated process involving significant manpower, technology, computers, equipment, numerous transmission jurisdictions, and federal and state oversight. There are several high-tech and human mechanisms for balancing supplies and demand on the entire western grid and within individual operating areas. There are also new technologies being developed to allow the storage of some electricity on the grid, but they are not currently available.

The congested portions of the transmission grid that serves Montana tend to be fully or heavily scheduled and loaded only a few hours to a few hundred hours of the year. The rest of

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[2] *Understanding Energy in Montana: A Guide to Electricity, Natural Gas, Coal, and Petroleum Produced in Montana*, DEQ report to the Environmental Quality Council, October 2004.

[3] Ibid.

[4] Federal Energy Regulatory Commission, Commissioner Philip Moeller, February 15, 2007.

the time excess capacity is available, however, it is a challenge to make use of it on a firm basis because of reliability requirements. High voltage transmission lines also are very expensive to build, with a typical single-circuit 500 kV line costing about $1 million per mile. Impediments to transmission construction and expansion also can include: competing land uses, uncertainty about cost recovery and financing, and jurisdiction and government agency overlap for siting and permitting.

Transmission Taxation and Incentives

Title 15, chapter 72, part 1, WET Tax

The "Wholesale Energy Transaction Tax", effective Jan. 1, 2000, was established to avoid placing a supplier engaged in the business of generating, supplying, or selling electricity at a competitive advantage or disadvantage. It is a tax imposed on the amount of electricity transmitted by a transmission services provider in the state.

In 1999, the Legislature reduced the tax rate on electrical generation property from 12% to 6%. To partly replace the reduction in the generation tax, a wholesale energy transaction tax was developed. The tax is imposed at a rate of 0.015 cents per kilowatt-hour on electricity that is transmitted by a transmission service provider in the state. It is deposited, 100%, into the state general fund.

Title 15, chapter 24, part 31, "Clean and Green"

The "Jobs and Energy Development Incentives Act" approved during the 2007 May Special Session, provides tax incentives for development and transmission of clean and renewable energy. It reduces the permanent property tax rate from 12% to 3% of market value for new investments in transmission lines that are constructed after June 2007 and that move "clean" power, such as wind, new hydro, biomass, natural gas combined cycle, and integrated gas combined cycle power with carbon sequestration.

New DC converter stations that direct power to two different regional power grids are taxed at 2.25% of market value, as opposed to 6%.

Energy Promotion Division

During the May 2007 Special Session, legislators provided funding to establish an Energy Infrastructure Promotion and Development program. The money is allocated to the Department of Commerce, Community Development Division. The division, now known as the Energy and Promotion Division, works "with private industry, local and regional economic development organizations, as well as with state, federal, and tribal governments to facilitate, promote and develop clean and green energy projects throughout Montana."

69-2-216, MCA Fiscal Impact Analysis Exemption

The Consumer Counsel must complete an analysis outlining the fiscal impacts of a project, such as a transmission line sited under the Major Facility Siting Act, on electricity customers in Montana. The analysis must include an estimation of how customers' rates may be impacted. Public utilities and affiliates are exempt, as long as necessary tariffs, rate schedules, and other information is filed with the Federal Energy Regulatory Commission.

75-20-104, MCA and SB 360, 2009 Legislature, Major Facility Siting Act Exemption

The Major Facility Siting Act was revised by the 2009 Legislature altering the definition of "facility" to exclude certain upgrades to transmission lines in existing right-of-ways and easements.

Transmission Projects Proposed in Montana	
Montana Alberta Tie Ltd.	Calgary-based Montana Alberta Tie Ltd. is proposing a 203-mile-long transmission line that ties into the Canadian grid at Lethbridge, Alberta, and the U.S. grid at Great Falls.
Mountain States Transmission Intertie	NorthWestern Energy intends to build and operate a new 350- to 390-mile, 500kV line between southwestern Montana and southeastern Idaho.
Chinook/Zephyr Project	TransCanada intends to build a 1,100-mile, 500 kV transmission line from Townsend to Idaho to Nevada and on to the Southwest. The line could be capable of moving as much as 3,000 megawatts of power.[5]
Increases from Montana to the Northwest	BPA, NorthWestern Energy, and Avista have conducted engineering studies to confirm a transmission plan to integrate about 1,000 megawatts of new energy to be transferred from Montana to the Northwest. Those high level studies have shown there is potential for 750 megawatts of additional capacity from the Colstrip area to Puget Sound area with no 500-kV line construction.

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[5]http://www.transcanada.com/company/zephyr_chinook.html