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Final Report and Recommendations
Wind Energy Task Force

2009 Wyoming Session Laws, Chapter 159, Section 348

Legislative Service Office
Room 213, State Capitol Building
Cheyenne, Wyoming 82002

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Position Statement

The Wind Energy Task Force believes there are significant benefits to Wyoming from the responsible development of a substantial wind energy industry. Wind energy development could help bring Wyoming from a transitional phase to a transformational stage in energy development. Wind energy development could help maintain Wyoming's status as one of the energy capitals of the United States. The Task Force believes that Wyoming must work to diversify its energy portfolio in response to a market which is placing increasing value on energy supplies created by renewable sources. Mindful of the benefits of wind energy development, the Task Force recognizes that a lack of appropriate regulation may impact Wyoming's quality of life and its wildlife and environmental resources. Wind development in Wyoming should be promoted and regulated in a way that maintains the fledgling industry's competitiveness, which promotes job opportunities and economic development and which addresses its impact on Wyoming's communities, wildlife and landscapes.

Wind Energy Task Force Background

2009 Session Laws, Chapter 159, Section 348 created a Wind Energy Task Force to study the current status of wind energy development, including regulation, taxation, siting, public service commission authority, county zoning, federal policies and authorities, funding and the decommissioning of facilities. The Task Force was directed to report its findings and recommendations to the Governor, the State of Wyoming Legislature and the citizens of Wyoming no later than November 1, 2009. The Task Force's findings and recommendations will further the knowledge of the state and provide information to legislators and industry for consideration during the 2010 Budget Session.

A. Task Force Membership

The Task Force was comprised of nine members; two appointed by the Governor, three appointed by the President of the Senate and four appointed by the Speaker of the House. The Task Force selected Senator Jim Anderson as its chairman. Other members of the Task Force were Senators Marty Martin, Drew Perkins, Representatives Seth Carson, William "Jeb" Steward, Tim Stubson and at large private sector members Kent Connelly and William "Bill" Miller.

B. Task Force Tasks

The 2009 Session Laws, Chapter 159, Section 348 outlined and specified the following:

- (c) The Task Force shall study the following, as they relate to the regulation and taxation of the wind energy conversion industry;
 - (i) Statutes relating to the authority of the industrial siting division of the department of the environmental quality;
 - (ii) Statutes relating to the authority of the public service commission;
 - (ii) Statutes relating to county zoning;

(iv) Any relevant federal statutes that may preempt or limit state or county authority; and

(v) Other issues relating to the wind energy conversion industry the Task Force may determine to be relevant, including the appropriate agency, or agencies as may be necessary, to regulate the industry, how such regulation of the industry should be funded, the process for decommissioning of facilities, and wind generation tax policies, avoiding duplication of conflicting requirements and effects on state trust lands.

C. Task Force Activities

The Task Force met May 20th, August 26-27th and October 12th, 2009. The minutes for each of these meetings are included in the appendix to this report and are available on-line at <http://legisweb.state.wy.us>. At all meetings, the public was invited to provide public comment, address issues and provide information. At the first meeting in May, the Task Force organized itself, identified the relevant issues and designed an action plan. The second meeting in August consisted of one and one-half days of informational presentations by state and federal agencies, industry experts, interest groups and concerned citizens. The schedule for this meeting included considerable time for public comment. During the last half of the second day, the Task Force assigned members individual research assignments and asked the members to prepare proposed recommendations for the third meeting. The third meeting was October 12, 2009. During this meeting, the Task Force received additional information and public comment. The Task Force then received reports from its members regarding the topics to which they were assigned and their proposed recommendations. Upon hearing the presentations and proposed recommendations, the Task Force formulated formal recommendations and voted to adopt or reject those recommendations. At the end of the third meeting, the Task Force had adopted by a majority vote of its members the recommendations contained in this report.

In completing its study of wind energy development, the Task Force received valuable assistance from a number of people and organizations. The Task Force would specifically like to recognize the Governor's Office for providing valuable technical and logistical support to the Task Force and thank the state agencies that provided information and testimony. In addition, the Task Force would like to thank the University of Wyoming for providing significant support and research for the Task Force's studies. Specifically, the Task Force recognizes the efforts of the University of Wyoming Law School, the School of Energy Resources, the Ruckelshaus Institute and the Economics Department. Finally, the Task Force would like to thank the wind energy industry for providing helpful information, research, testimony and access to its wind farm facilities.

The Market for Green Energy

The demand for wind generated electricity and other forms of renewable energy is increasing across the United States and the world. This increased demand for renewable energy is generated, in part, by state and federal energy policies that are focused on reducing America's dependence on fossil fuels, managing carbon outputs and addressing the increasing demand for electricity.

Numerous states are implementing renewable energy portfolio standards which dictate the proportions of their energy portfolios which must come from renewable energy. In addition to

state renewable energy standards, there is the possibility of the federal government adopting a nationwide renewable energy standard and implementing regulations. Demand for wind generated electricity likely will increase in the future because of these standards and because wind energy presents an attractive renewable energy technology which is available to supplement traditional energy sources and provide increased generation capacity.

Wind Resource Information

Wyoming has some of the nation’s best wind resources. The Western Governors Association in partnership with the National Renewable Energy Laboratory (NREL), in its report entitled “*Western Renewable Energy Zones – Phase 1 Report*,” found that over 50% of the developable Class 5 and above wind sites in the west are located in southern Wyoming. NREL estimates that there are 116,670 MW of developable Class 5-7 winds in Wyoming and that Wyoming has over two-thirds of the developable Class 7 wind and over one-half of the developable Class 6 wind located onshore in the United States. The American Wind Energy Association (AWEA) ranks Wyoming 7th in terms of its future wind potential, with 85,200 MW of potential capacity. When considering Class 6 & 7 developable wind, Wyoming ranks 1st in the U.S. **Figure 1** provides a detailed map of the different classes of wind resources available in Wyoming.

Figure 1: Wyoming Wind Power Resource Estimates

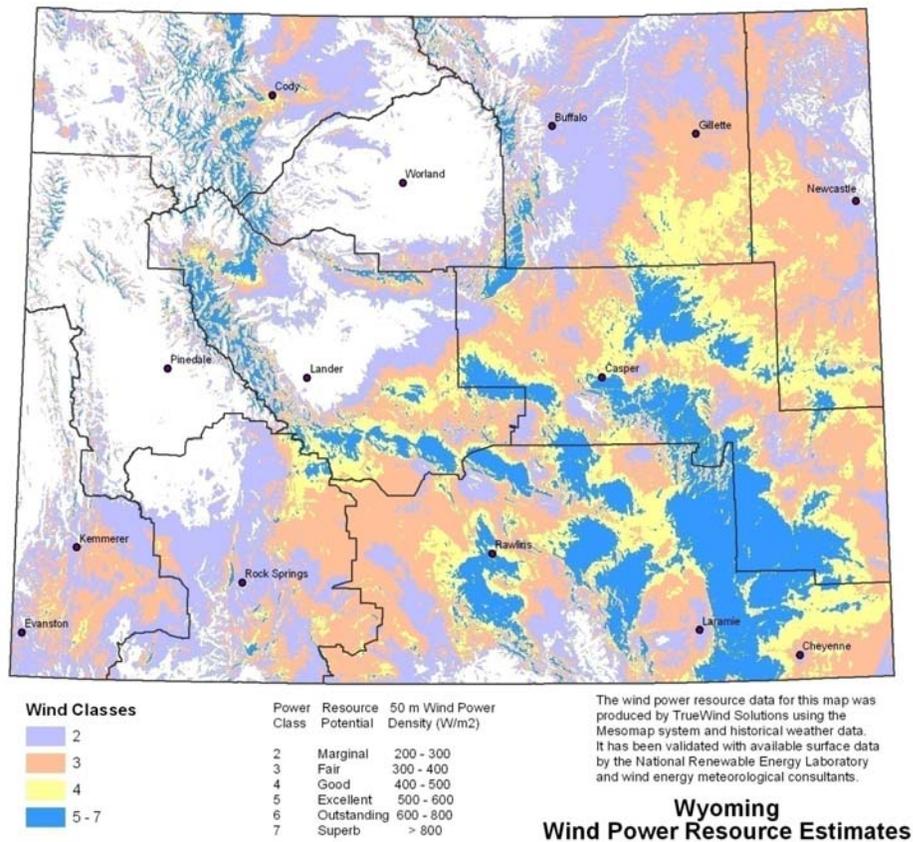


Figure provided by Janelle Wrigley’s presentation *See Appendix No. XX.*

Note that Figure 1 does not indicate which resources are developable. Testimony before the Task Force indicated that it may not be economically or environmentally feasible to construct wind turbines in certain portions of Wyoming.

According to the Wyoming Wind Collector and Transmission Task Force, it is important to recognize that lower air densities found at higher elevations in Wyoming will reduce the production capacities of all wind resources in Wyoming. Testimony before the Task Force indicated that elevation could impact production capacities, also known as "capacity factors," as much as 20% to 25% when compared to the same turbine located in the same wind class at sea level.

Status of Wind Development in Wyoming

Wyoming's wind development can be assessed and predicted by several indicators. Current wind development leases on in-state federal lands, state lands and private estates is one measuring gauge. The Task Force, however, received no data indicating the total wind development acreage leased in Wyoming. A second indicator of the wind industry's future is overall wind class acreage available and which is located in areas that are buildable. A critical third indicator is transmission and collector system availability.

According to the American Wind Energy Association, there is 985MW of installed nameplate wind energy capacity in Wyoming. This ranks Wyoming 11th nationally, with a national installed total of 31,109MW as of June 2009.

Several groups have estimated the potential and realistic build out of Wyoming's wind energy. According to National Renewable Energy Laboratory ("NREL"), there are roughly 116,670MW of Class 5-7 winds developable in Wyoming. The American Wind Energy Association ranks Wyoming 7th in terms of its 85,200 MW of future potential wind capacity. The Western Renewable Energy Zones initiative, under the wing of the Western Governors Association, estimates that about 14,239 MW of Class 5+ winds will be developed, but identifies 3.5 wind energy zones or "hubs" in Wyoming with a potential of 49,104MW.

There is approximately 12MW of planned transmission expansion in Wyoming. According to estimates from the Department of Energy, one 2 MW wind turbine has a 1-2 acre development footprint. Consequently, a build out of 12,000 MW would result in less than 20 square miles of permanent land use, or roughly the footprint of the City of Cheyenne. Under this scenario, less than 1% of Wyoming's total land would be developed for wind energy. This build out is estimated to take roughly 10-12 years.

With regard to federal BLM lands, testimony indicates that roughly one-quarter of the 1.5 million acres leased for wind measurement and testing could reach the development phase, totaling as much as 375,000 acres. As of August 2009, there are 91 test and measurement applications filed, 34 of which have been approved. Six full development applications are pending BLM approval, not including the Chokecherry and Sierra Madre wind energy projects which comprise 98,477 total acres, roughly half of which are BLM lands.

Of the 3,574,487 acres of Wyoming state lands, a total of 19 wind development projects, on 45,052 acres, have been approved by the State Lands and Investment Board. Of these projects, four are in operation, one is under construction and 14 are in the planning stages. These projects

are located across 10 counties. 33 lease applications are in negotiation stages, totaling 271,496 acres.

When considering the development estimates above, caution must be exercised for lands which have been identified by the state as "core population areas" for the Greater Sage-Grouse. As discussed later in this report, development in these areas is potentially limited. Further, according to the Wyoming Wind Collector and Transmission Task Force, the amount of wind that actually will be developed in Wyoming is far lower than estimates provided by NREL or AWEA, due to a mix of environmental and economic factors. The Wyoming Wind Collector and Transmission Task Force estimates a realistic estimated build out of 10,000-15,000MW, based on planned transmission capacity additions. The Western Renewable Energy Zones initiative estimates that about 14,200 MW of Class 5 and above wind resources will likely be developed in Wyoming.

Current Regulation of Wind Energy in Wyoming

Regulation of the wind energy industry can be divided into three major areas. The first area is regulations that control how wind energy can be developed on federal land. There is a substantial amount of federally owned land in Wyoming that has the potential to be developed for wind energy. A number of federal agencies are involved in permitting on federal land but the Bureau of Land Management (BLM) serves as the lead agency in consultation with other federal agencies. The BLM manages two major types of right-of-way applications and grants for wind energy development. The first is the Site Testing and Monitoring Right-of-Way Grant which allows a company the use of the land to determine development potential. These grants are generally for a three year term and allow activities such as the erection of meteorological towers.

The second is the full field development right-of-way which gives the developer the long-term (30-35 years) ability to develop the land for use as an operating wind energy generation project. It should be noted that any transmission lines that cross federal land must also receive a right-of-way grant.

Prior to granting any rights-of-way on federal lands, federal agencies must perform an environmental analysis pursuant to the National Environmental Policy Act (NEPA). This environmental analysis may include an environmental impact statement ("EIS") to determine the impacts of a proposed development. In addition to complying with NEPA, wind energy projects must also comply with other federal laws including the National Historic Preservation Act and the Migratory Bird Treaty Act.

The second major area of wind regulation is at the state level. State regulation of wind energy is conducted by the Department of Environmental Quality, Industrial Siting Council ("ISC") and the Public Service Commission ("PSC"). The ISC is responsible for permitting processes and the PSC regulates wind energy producers who provide and sell wind electricity directly to Wyoming consumers. The PSC's jurisdiction is limited because the Task Force is aware of few wind energy producers in Wyoming who sell energy directly to Wyoming customers. Consequently, the majority of wind producers are not regulated by the PSC.

The ISC provides the state permitting function for wind energy projects if they are of a size sufficient to trigger the ISC's jurisdiction. Projects must be \$138.6 million to call for an ISC jurisdictional permit and \$173.2 million to trigger the normal ISC permitting process. The jurisdictional permit requires a review of a project since it may be relatively close to the threshold

for the normal ISC permitting process. The ISC also provides permitting for electric transmission lines over 500 kV. Other state agencies and regulators are involved in the process, including the Game and Fish Department, the Department of Health, The Office of State Engineer and the Wyoming State Geologist.

County regulation is the most localized level of wind energy regulation. Currently, seven counties have zoning standards, including Albany, Natrona, Platte, Laramie, Sweetwater, Park and Carbon counties. Although many counties have chosen to regulate and analyze similar issues under their zoning regulations, there is considerable variance in the standards applied and there are no statewide minimum standards in place.

Issues Identified as Relevant to Wind Energy Development

In its work, the Task Force identified a number of issues that impact the development of a wind energy industry in Wyoming. Without placing them in any specific order of importance, these issues included:

Sage Grouse

Wyoming is home to approximately 54% of the world's Greater Sage-Grouse ("sage grouse") population. While Wyoming currently enjoys robust populations of sage grouse in its sagebrush-steppe habitat, sage grouse populations have begun to fall in the western United States. As a result of the declining populations, the U.S. Department of Interior has been petitioned to consider listing the sage grouse as a threatened or endangered species under the Endangered Species Act. The U.S. Fish and Wildlife Service is scheduled to make their decision regarding the listing of the sage grouse in February of 2010.

The listing of the sage grouse as a threatened or endangered species might have a significant adverse affect on Wyoming's economy. Listing of the sage grouse would remove Wyoming's authority to manage the species, would threaten both future and existing industry in Wyoming and could significantly curtail Wyoming's ability to generate revenues from its state lands. A significant portion of Wyoming's energy industry is located within sage grouse habitat. This over-lap of sage grouse habitat is not limited to wind energy development and includes virtually every facet of Wyoming's energy production, including transportation/transmission, oil, coal, natural gas, uranium and other minerals. In addition, the listing could have a material effect on Wyoming's ranching, farming and recreation industries and on communities throughout Wyoming.

In response to declining sage grouse populations and the overlap of development and habitat, the Governor's Sage Grouse Implementation Team has developed a "Core Population Area" strategy. The U.S. Fish and Wildlife Service has responded to a review request and stated that the core population area strategy "is a sound framework for a policy by which to conserve the greater sage grouse in Wyoming." **Figure 2** is a map showing the location of Wyoming's core areas as most recently determined by the Implementation Team. Testimony before the Task Force indicates that the location of core areas may be modified as additional information becomes available.

Figure 2: Greater Sage-Grouse Population Core Areas

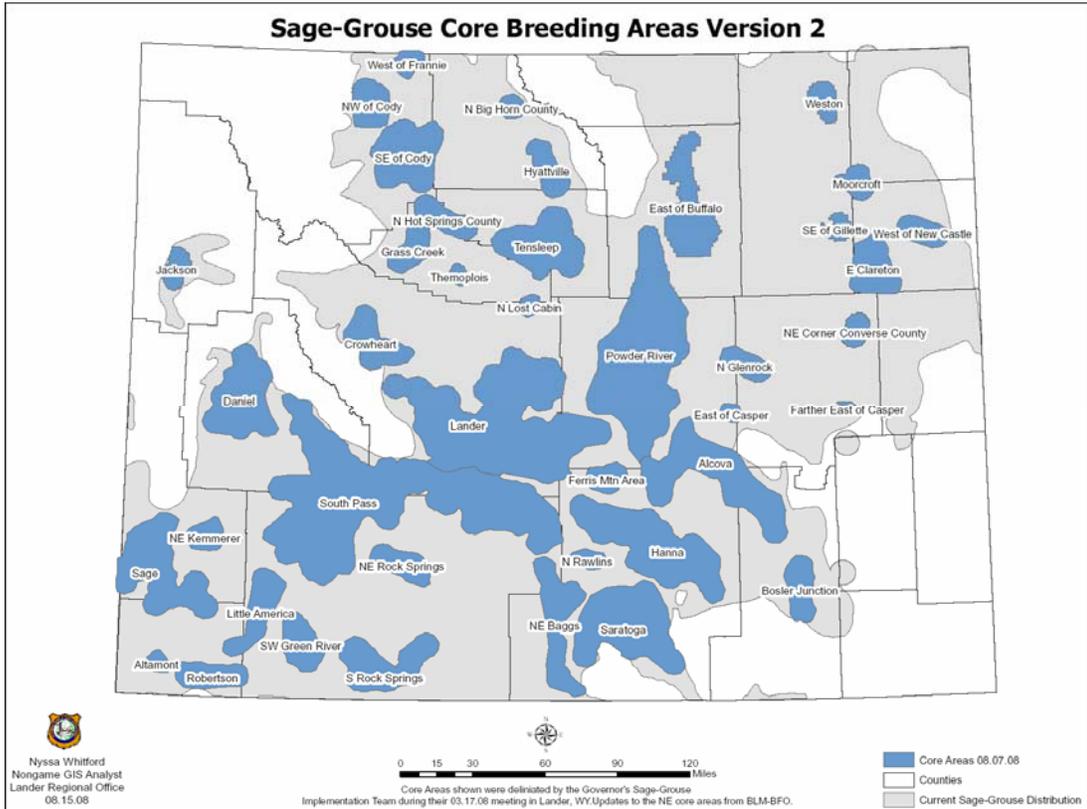


Figure provided by Bob Budd presentation. See Appendix No. XX.

Figure 3 demonstrates the overlap between sage grouse core areas and wind energy resources in Wyoming.

Figure 3: Core Areas and Wind Resources

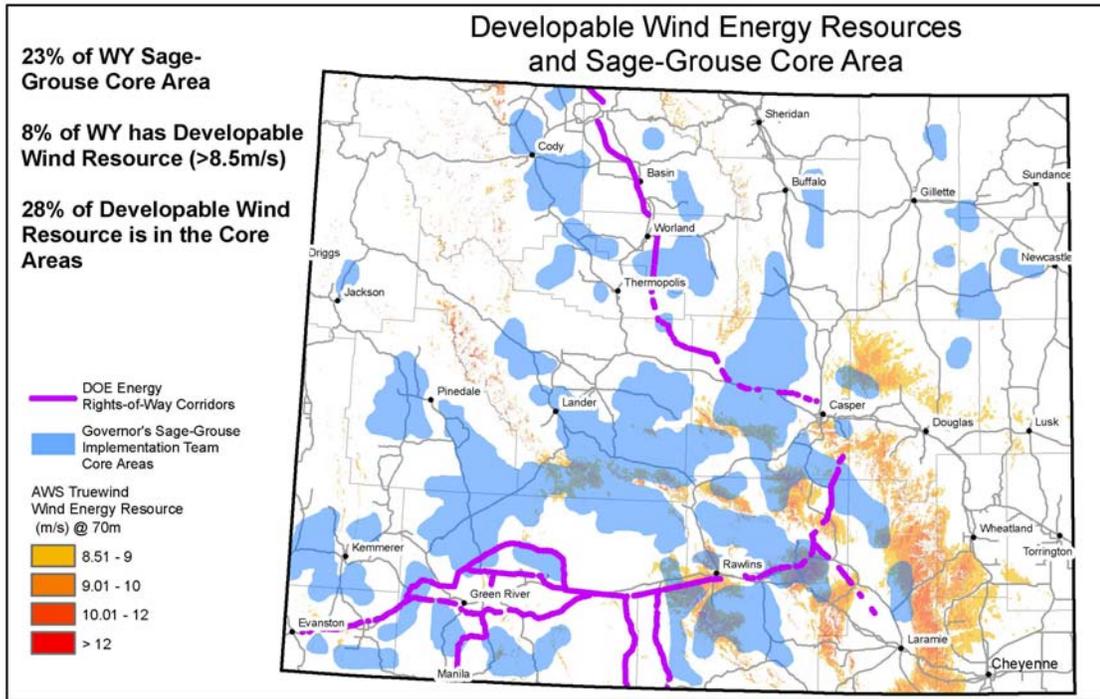


Figure provided by John Emmerich presentation. See Appendix No. XX.

Figure 4 shows the overlap of potential and existing wind energy development in Wyoming with core areas.

Figure 4: Core Areas and ISD, G&F, OSLI, and BLM Wind Projects

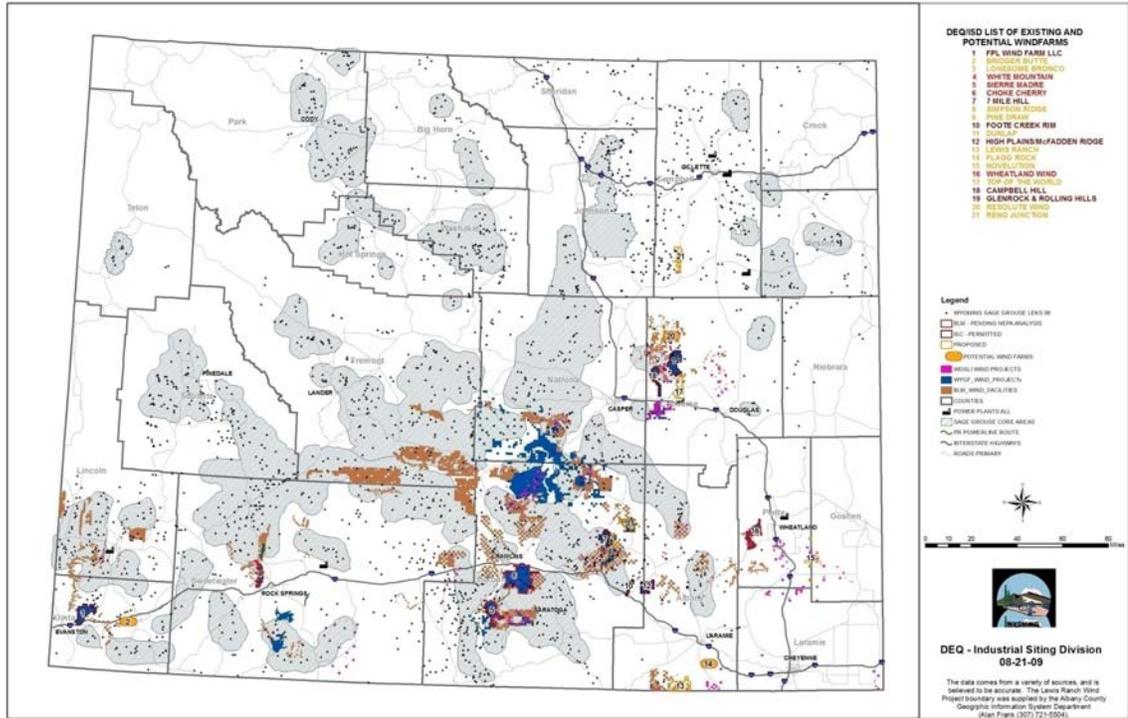


Figure provided by Todd Parfitt presentation. *See Appendix No. XX*

As a result of the overlap between Wyoming's energy industry and sage grouse population core areas, and the need for Wyoming to proactively manage sage grouse populations to prevent the federal government from taking over their management, the Governor issued Executive Order 2008-2. A copy of that executive order is included as **Exhibit 1**. The Governor's order substantially limits new development within core areas.

Transmission

The Task Force received considerable testimony and information concerning the transmission issues that surround the development of wind energy in Wyoming. Much of this information is included within the report offered to the Task Force by its transmission sub-committee, comprised of Senator Martin and Mr. Miller. [See **Exhibit 2.**] According to testimony received by the Task Force, wind energy potential in Wyoming exceeds current total electricity sales in Wyoming by a factor of 220. Further, the existing electrical transmission system in Wyoming is filled to capacity. As a result, industry has indicated that the development of transmission capacity is one of the top, if not the top, challenge facing wind energy development.

Wyoming would need additional capacity of between 10,000 megawatts and 15,000 megawatts to handle the likely commercial-scale development of wind energy. This capacity would need to come both in the form of high voltage interstate transmission lines, capable of carrying Wyoming wind energy to load centers in the south and south-west, and an intrastate collector system to connect wind generation projects to the interstate system. Currently, six (6) large interstate

projects are in development to provide export capacity from Wyoming to places where renewable energy demand exists. **Figure 5** shows the approximate locations of these projects.

Figure 5: Proposed Interstate Electric Transmission Lines

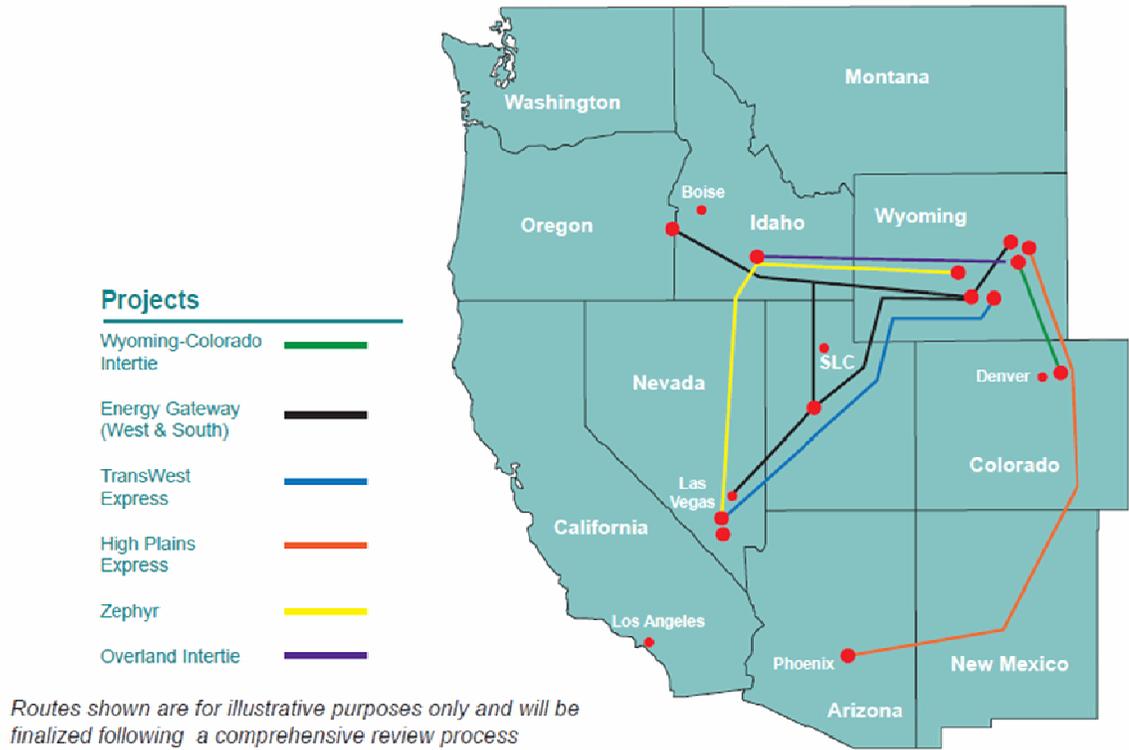


Figure provided by WIA presentation. See Appendix No. XX

To funnel electricity into these interstate systems, a significant collector infrastructure is necessary. According to information provided to the Task Force by its transmission subcommittee, a comprehensive collector system might consist of up to ten (10) 500kV lines with up to forty (40) 230kV lines connecting widely dispersed wind generation facilities. The collector system, alone, might require investments in the magnitude of \$5 billion. The six large capacity, interstate transmission lines would cost significantly more.

Information provided to the Task Force indicates that the planning and installation of this transmission system will be expensive and complex. If each project is developed independently and without coordination, the benefits of economies of scale will be limited and the system likely will be less efficient and less reliable. Further, there is a need to plan a long-term, coordinated system that will avoid chaotic or unsightly development.

There are various means for achieving this goal. The Task Force heard testimony about the Wyoming Wind Collector and Transmission Task Force, a collaborative effort to promote a regional approach to transmission development. Various regulatory schemes also exist. Presently, transmission line permitting is subject to state and local regulators. Developers must

comply with county zoning regulations as well as the requirements of the Wyoming Industrial Siting and Development Act, if their lines exceed 500kV. Developers must negotiate rights-of-way and easements for the placement of their lines, but are granted the power of eminent domain under specified circumstances See W.S. 1-26-815. When transmission lines cross state or federal lands, as most transmission projects will have to in Wyoming, developers must receive rights-of-way grants from state and federal governments. As a result, a transmission line developer can be required to work with state land boards and all the federal land management agencies (Bureau of Land Management, Forest Service, Fish and Wildlife Service, National Park Service, Bureau of Reclamation) to site and permit their projects. These agencies oversee complex regulatory schemes, including the National Environmental Policy Act, the Endangered Species Act, the Migratory Bird Treaty Act and various state laws and regulations.

If a well-planned transmission system can be developed in Wyoming, it will benefit not only the wind energy industry, but could provide significant ancillary benefits and help Wyoming strengthen its energy portfolio. These benefits include substantial capital investment in Wyoming and the increased economic activity associated with construction. Wyoming's traditional energy providers also may benefit from having a new pathway for exporting electricity. For example, increased electrical transmission capacity could ease depressed local natural gas prices by allowing natural gas producers a way to export their natural gas in the form of electricity. Further, because the intermittent nature of wind requires wind energy producers to provide supplemental , intermittent electricity support, wind energy development may create additional demand for traditional energy sources.

Landowners

During its study of wind energy development, the Task Force took testimony from many land owners. The Task Force heard few landowners who are opposed to all development. There were suggestions that no development occur within pristine scenic areas and mountainous areas. Many landowners support wind energy development if it is conducted in an environmentally sensitive way that fully compensates them for the burdens and benefits associated with the development. Landowners strongly favor an approach to development which preserves their individual rights to negotiate the uses of their land. Some landowners consider wind energy development to be a means of preserving their way of life by making their lands economically productive. Landowners do tend to support siting regulations and laws which require wind farm set-back requirements and view-shed requirements.

The Task Force did receive copies of petitions signed by many landowners who live in or near the Laramie Range, expressing opposition to wind energy development and transmission line siting on or near their properties. The Task Force also learned of specific instances of land owner resistance which have impacted the development of wind farms and transmission line projects. For this reason, industry has suggested exploring development corridors for transmission lines and better avenues for efficiently considering all landowner issues within one forum. Industry expressed its concern that the current system represents a fragmented process that increases the cost and time necessary for development without a corresponding benefit to landowners' ability to vet their concerns.

Regulatory Certainty

The clearest message from industry during the Task Force's study was the fact that industry needs certainty in order to fully develop Wyoming's wind energy potential. Certainty must include both an established regulatory pathway, as well as uniformity between entities which have regulatory authority. Industry strongly encourages the Task Force to consider the benefits of consolidating and streamlining regulatory authority to prevent the uncertainty and increased costs associated with having to comply with multiple regulatory schemes in front of multiple regulatory bodies. The certainty sought by wind energy developers also includes certainty in taxation. Without both regulatory certainty and certainty over tax treatment, businesses do not believe that they have the facts necessary to engage in appropriate business planning and risk assessment. Regulatory certainty and consolidation, combined with settled tax policy, will encourage wind development in Wyoming and would reduce the costs associated with such development, making the developers' product more competitive in the renewable energy marketplace.

Community Impact

Commercial-scale development of wind has substantial impacts on the communities near where wind farms are constructed. The impacts can include positive benefits like increased economic activity, jobs, increased property tax revenues and increased sales tax revenues. The Task Force received testimony indicating that these benefits might be substantial given the large capital investments and substantial work forces needed to construct wind farms and transmission systems.

There also can be negative community impacts associated with wind development. These impacts can include the costs born by counties and cities who may be responsible for maintaining roads that service wind farms and who experience increased costs associated with medical and ambulance services, housing, law enforcement, schools and the provision of other services. Some of these costs may continue after the construction of a wind project and during the long-term operation and maintenance phases. However, with regard to the construction of wind farms, testimony before the Task Force indicated that the community impacts likely are not as great as they are for some other types of development, including natural gas development. Preliminary studies indicate that wind farms are constructed in relatively short bursts of intense construction, employing mostly out-of-state laborers who perform their jobs and then leave. Construction of a typical 100MW wind project can require more than two hundred (200) workers. Ongoing operation and maintenance of a 100MW wind project can create approximately ten (10) permanent jobs. Preliminary studies indicate that large-scale wind projects enjoy economies of scale and do not hire proportionately more employees.

Part of the impact costs are covered by property taxes paid by wind energy companies. However, the testimony of several Wyoming county commissioners indicated that the depreciation schedules followed by wind energy developers significantly depreciate their taxable property within a short time. The commissioners' testimony indicated that property taxes, after as little as five (5) years, do not cover continuing impact costs.

Impact assistance payments, available for projects permitted by the Wyoming Industrial Siting Council, also can help local governments cover the costs of development impacts. These payments are, however, based on increases in sales tax collections once construction has commenced. Currently, wind energy projects enjoy an exemption from sales tax which will not

continue after 2011. Further, despite industrial development in the state, the current nation-wide economic downturn has significantly decreased Wyoming sales tax receipts. As a result of these factors and the formula used to calculate impact assistance payments, counties have experienced significant decreases in impact assistance payments with no corresponding decrease in impact costs.

Wind As A Property Right

The contours of the legal right to the wind are not specifically defined in Wyoming. In considering the nature of wind as a property right and the question of who owns the right to develop wind resources, the Task Force benefited from the assistance of both private attorneys and an extensive research paper drafted by the University of Wyoming Law School. A more complete discussion of this issue is contained within the legal memorandum and reports included in the appendix. [See John MacPherson Memorandum; UW Law School report Defining Wind Rights in Wyoming: A Practical Solution, drafted by Benjamin A. Kinney and Brian Marvel.]

There are two primary issues involved. The first is the fundamental question of whether wind can be considered a property right. The testimony before the Task Force indicated that wind generally is treated as a property right attached to the surface estate and which runs with the surface estate. See W.S. 10-4-301 and 34-20-102. However, the Task Force considered whether wind might be statutorily assigned rights similar to those of water or of diffused surface water. The testimony suggested that the Legislature consider providing certainty by statutorily defining the right to wind.

The second question follows from the first and asks whether, if wind is a legal right associated with a legal estate, is it severable from that estate? Although the answer to this question is not clear, wind rights in Wyoming, to the extent they exist, already have been contractually severed. Various companies have entered into contractual arrangements with land owners for the development, or eventual development, of wind energy projects. Further, development has begun to occur on state lands and the State Lands and Investment Board has adopted a process for leasing these lands for the specific purpose of wind energy development. In considering this issue, and despite the existing treatment of wind, the Task Force recognizes that there are broad-reaching legal and policy concerns with potential unintended consequences. The Task Force recognizes that there may be substantial benefit from defining wind rights in Wyoming, but equally recognizes the complex questions involved and the consequences which might attend an uninformed rush to provide certainty.

Taxation

During its study, the Task Force heard considerable testimony concerning taxation of the wind energy industry in Wyoming. The question has been posed, "What's in it for Wyoming." Clearly, one of the answers is a diversified tax base. However, taxation of the wind energy industry is complex both in determining the means of taxation and in determining the rate.

Wind energy projects currently pay property taxes and, after 2011, likely will pay sales and use taxes on renewable energy equipment. The Task Force considered various additional tax schemes that could be applied to the wind industry. Among others, these schemes could include treating wind energy production like a severance and applying a severance tax, imposing a power generation tax or allowing payment in lieu of taxes. The Task Force heard considerable

testimony about the merits and challenges of imposing a power generation tax on all power producers, but which would prevent an additional tax on those who already pay severance taxes by allowing tax credits.

In considering the appropriate tax burden to place on the wind energy industry, the Task Force is aware of a variety of factors that must be considered. In addition to the questions of fundamental fairness that must accompany any tax policy analysis, the Task Force is aware that a tax imposed on the wind industry should not defeat the industry's competitiveness in the national market in which it must compete. It is possible to tax the wind energy industry out of Wyoming. At the same time, the industry should bear its burden and promote the economic well being of Wyoming's people. Determining the balance of these two factors is difficult.

Wyoming enjoys wind resources that are among the best in the nation. As a result, Wyoming wind energy producers will enjoy some level of production from their wind turbines which will be incrementally higher than the same turbine placed in a state with less quality wind resources. The Task Force heard no testimony which quantified this advantage. The Task Force did hear testimony explaining the reduced efficiencies caused by Wyoming's higher elevations and the costs associated with transporting Wyoming's wind energy long distances to demand centers.

The Task Force considered substantial testimony from wind energy developers indicating that taxation will play a significant roll in wind energy development. Industry leaders strongly encouraged a taxation policy which is based on an accurate and comprehensive understanding of the costs and burdens faced by the industry, as well as the direct and indirect benefits that will be realized by Wyoming from wind energy development.

TASK FORCE RECOMMENDATIONS

Having studied the issues required and having expended its full appropriated budget, the Task Force is prepared to make recommendations. These recommendations do not purport to address every issue related to wind energy development. Rather the Task Force has focused its recommendations on the issues to which it gave considerable attention and the issues upon which the Task Force gained an understanding and expertise necessary to make a recommendation. The Task Force believes that these recommendations are consistent with the Position Statement of the Task Force

State-Wide Standards for Wind Energy Development

The Task Force recommends that the Wyoming Legislature pass legislation adopting state-wide minimum standards which local governments must follow when regulating the placement of wind energy facilities. The standards should not interfere or replace existing regulatory schemes, but should simply assure that there are minimum standards below which no regulatory authority may drop. The specific recommendations of the Task Force are represented within Representative Stubson's proposed recommendations, included here as **Exhibit 3**. Although Representative Stubson's proposed recommendations include two standards for the decommissioning of and financial assurances for wind farms, the Task Force affirmatively voted to adopt a specific approach. The Task Force recommends that the Wyoming Industrial Siting Council be given statutory authority to promulgate rules and regulations establishing decommissioning standards and financial assurance requirements for all wind farms, whether under local or state-wide regulatory jurisdiction.

Greater Sage-Grouse Populations and Wildlife Impacts

The Task Force acknowledges the potentially significant detrimental impact of having the Greater Sage-Grouse listed as a threatened or endangered species. The listing of the Greater Sage-Grouse as an endangered species could not only halt a significant part of Wyoming's future wind energy development, but might significantly impact Wyoming's economy and its way of life. As a result, the Task Force recommends the adoption of a joint resolution by both houses of the Wyoming Legislature supporting the "Core Population Area" strategy for Greater Sage-Grouse population management. The Task Force further recommends that the joint resolution support scientifically valid research to better analyze the impact of wind energy development on Wyoming's wildlife. The Task Force affirmatively voted to adopt a draft joint resolution prepared by Chairman Anderson as a model for this recommendation. Chairman Anderson agreed to modify the resolution to accurately reflect the groups who participated in designing the population core area concept and to encourage scientific research by all entities capable of such research. A copy of the unmodified resolution is included as **Exhibit 4**.

Wyoming Industrial Development and Information Siting Act

The Task Force recognizes the Wyoming Industrial Development and Information Siting Act ("the Act") and the Wyoming Industrial Siting Council ("ISC") as valuable tools in assuring the responsible siting and development of wind energy facilities. The effectiveness of the ISC is currently impacted by its restrictive jurisdictional authority. Consequently, the Task Force recommends that the ISC's jurisdiction be expanded so that it can act as a more comprehensive regulatory body for wind energy development. This expansion should include: 1) allowing smaller facilities to be regulated; 2) reducing the size of transmission lines which are within the ISC's jurisdiction; and 3) expanding the ISC's jurisdiction to facilities which are associated with jurisdictional projects, but which do not qualify for jurisdiction independently. The Task Force also recommends that county commissioners be given the option to refer the permitting of wind energy facilities which are otherwise not within the ISC's jurisdictional minimums to the ISC. The Task Force further recommends expanded notice provisions be adopted to provide time for local governments to respond to industrial siting applications and to require that additional state agencies be consulted in the siting process. Finally, the Task Force recommends that the Legislature adopt changes to the Act which would allow the ISC to collect fees to pay the reasonable costs of permit compliance proceedings. Currently, fees are authorized for the permitting process only.

The exact nature of these recommendations are contained in a draft recommendation presented to the Task Force by Senator Perkins. A copy of that proposal is included as **Exhibit 5**. The Task Force affirmatively voted to adopt Senator Perkins draft as its recommendation on this issue.

Upon suggestion by Senator Perkins, the Task Force also affirmatively voted to recommend that W.S. 35-12-110(a)(i), a part of the Act, be amended to require permit applicants to provide a copy of their industrial siting application to local governing bodies, rather than requiring some undefined type of "serving notice."

Consistent with the Task Force's recommendations regarding state-wide standards for wind development, the Task Force recommends that the ISC be given the authority to promulgate rules

and regulations for decommissioning standards and financial assurance requirements for all commercial wind energy facilities.

Taxation of the Wind Energy Industry

With regard to taxation of the wind energy industry, the Task Force makes no specific recommendations regarding any additional taxes which might be imposed on the wind energy industry or the rate that might be appropriate to apply. The Task Force does recommend that the Joint Revenue Committee comprehensively study the issues surrounding taxation of the wind energy industry. The Task Force recommends that any proposed new tax be imposed in a way so as to encourage the diversification of Wyoming's economy and so as not to force the wind energy industry out of Wyoming. Any tax should be designed to encourage the development of employment opportunities for Wyoming's people and to encourage the development of businesses ancillary to the wind energy industry. To this end, the Task Force recommends that the Legislature conduct a careful examination of all burdens placed on wind energy producers and weigh those burdens against any benefits the producers realize by harnessing Wyoming's high quality wind resources. The Task Force recommends that any tax burden proposed be calculated to maintain some competitive advantage for Wyoming's wind energy producers as they deliver electricity to distance markets where a demand for their product exists.

Impact Assistance Payments

The Task Force acknowledges that, once the sales tax exemption for renewable energy projects ends, sales taxes paid by wind energy developers will benefit counties impacted by wind energy development by increasing the impact assistance funds paid to those counties. However, the Task Force also recognizes that the formula used to calculate impact assistance payments can lead to unfair results which under-compensate impacted counties. The Task Force recommends that the Legislature further study the impact assistance formula and consider amending the formula to provide a more stable and accurate revenue source for counties.

Transmission

The Task Force recognizes, and recommends that the Legislature fully appreciate, the fundamental importance of transmission development in Wyoming. Wind energy cannot be developed in Wyoming without an adequate system for moving the electricity generated out of this state and to the places where there is demand for the electricity. A coordinated and well planned transmission system will provide multiple benefits to Wyoming's economy and is a key element in allowing Wyoming to expand and maximize its energy portfolio. The Task Force recommends that the Legislature promote the responsible development of transmission capacity in Wyoming and consider ways to promote cooperation between developers and with federal agencies who are responsible for transmission line siting. In doing so, the Task Force recommends that the Legislature remain mindful of the substantial infrastructure that will need to be installed to meet potential capacity demands. The Task Force recognizes the potential impacts and potential problems associated with such large-scale development and encourages the Legislature to assure that such development is highly coordinated and appropriately regulated.

Wind as a Property Right

The Task Force makes no specific recommendation regarding the legal status of wind as a property right or other type of legal right. Further, the Task Force makes no recommendation regarding the severability of any right to wind from any legal estate to which it belongs. The Task Force does recognize the fundamental importance of these issues and recommends that the Legislature study these subjects to determine if wind rights need to be statutorily defined and, if so, how. The Task Force recommends that any study of these issues include a full consideration of the research presented to the Task Force. The Task Force notes that the Joint Judiciary Interim Committee might be particularly well suited to consider these issues because of their expertise surrounding split estates, pore space rights and eminent domain.

Approved this 1st day of November, 2009

Senator Jim Anderson
Chairman, Wind Energy Task Force

Appendix

NOTE:

*All information referenced in this appendix is available for review on the Legislative Service Office's web site:
<http://legisweb.state.wy.us/>*

August 26 – 27, 2009 Wind Energy Task Force Meeting

Riley, Brian, Whirlwind, LLC. (August 26, 2009). Developing Wind Energy on Private Lands. Powerpoint presentation.

Henderson, Terry, Renewable Energy Alliance of Landowners (REAL). (August 26, 2009). Leasing Wind – A Rancher’s Perspective. Powerpoint presentation.

Boomgaarden, Lynne, State Lands and Investments Board (SLIB). (August 26, 2009). Wind Energy Development on State Trust Lands. Powerpoint presentation.

Wrigley, Janelle, U.S. Bureau of Land Management (BLM). (August 26, 2009). Wind Energy In Wyoming. Powerpoint presentation.

Stacy, Mark, Iberdola Corporation. (August 26, 2009). Wind Farm Development. Powerpoint presentation.

Grant, Matt, Rocky Mountain Power (August 26, 2009). “Rocky Mountain Power Tour Information”. Handout summary of tour of a windfarm near Glenrock Wyoming.

Ellenbecker, Steve, Wyoming Infrastructure Authority. (August 26, 2009). Connecting Wind and Transmission to Expand Wyoming’s Economy. Powerpoint presentation.

Knoell, Craig, Western Area Power Administration. (August 26, 2009). Section 402 American Recovery and Reinvestment Act. Powerpoint presentation.

Edmunds, Daly, Audubon of Wyoming. (August 26, 2009). “Audubon Wyoming Formal Comments”. Formal written comments provided to Wind Energy Taskforce.

Flanderka, Mary, Wyoming Game and Fish Department. (August 26, 2009). Conflicts Between Wind and Other Resources. Powerpoint Presentation.

Emmerich, John, Wyoming Game and Fish Department. (August 26, 2009). What We Know – Wind Energy Transmission and Wildlife. Powerpoint presentation.

Budd, Bob, Wyoming Wildlife and Natural Resources Trust. (August 26, 2009). Sage Grouse and Wyoming – A Bird That May Define Our Future. Powerpoint Presentation.
Hopkins, Mary, Wyoming State historic Preservation Office. (August 26, 2009). Arts. Parks. History. Wyoming State Parks and Cultural Resources. Powerpoint Presentation.

Lay, Ken, Northern Laramie Range Alliance. (August 26, 2009). The Property Rights Dilemma: Different Landscapes, Different Choices. Powerpoint Presentation.

Whitton, Bob, Renewable Energy Alliance of Landowners (REAL). (August 26, 2009). Problems, Solutions, Benefits of Wind. Powerpoint Presentation.

Magagna, Jim, Rock Springs Grazing Association. (August 26, 2009). “Rock Springs Grazing Association Formal Comments”. Formal written comments provided to Wind Energy Taskforce.

George, Walt, Bureau of Land Management (BLM). (August 26, 2009). Transmission Line Planning and Approval on Federal Lands. Powerpoint Presentation.

Oxley, Steve, Wyoming Public Service Commission (PSC). (August 26, 2009). Wind Power in Wyoming. Powerpoint presentation.

Parfitt, Todd, Wyoming Industrial Siting Council (ISC). (August 26, 2009). Industrial Citing Overview. Powerpoint Presentation.

Werner, Ed & DeLancy, Cindy. Wyoming County Commissioners Association. (August 26, 2009). Industrial Siting and Wind Energy Task Force. Powerpoint presentation.

Grant, Matt, Rocky Mountain Power. (August 26, 2009). “Rocky Mountain Power Comments”. Formal written comments on minimum requirements provided to Wind Energy Taskforce.

Stickley, Dr. Dennis, Marvel, Brian, & Kenny, Benjamin, University of Wyoming Law School. (August 26, 2009). “Executive Summary for Wind Energy Task Force Report”. Formal written comments on wind as a property right.

Welcher, Lynn, Wyoming Mining Association. (August 26, 2009). “Mining and Wind: Conflicts and Opportunities”. Formal written comments and slides provided to the Wind Energy Task Force.

Meadows, Dwayne, Wyoming Wildlife Federation and National Wildlife Federation. (August 26, 2009). “Sportsmen for Responsible Energy Development”. Formal written comments provided to the Wind Energy Task Force.

Day 2: August 27, 2009

LSO Memorandum on Eminent Domain for Transmission Projects

Cox, Craig, Interwest Energy Alliance. (August 27, 2009). The U.S. Wind Energy Industry Today. Powerpoint presentation.

Clark, Fred A. "Rocky". International Brotherhood of Electric Workers. (August 27, 2009). Partners in Progress – The IBEW and Wind Power in Wyoming". Powerpoint presentation.

Stacy, Mark & Bergen, Chris, Iberdola Renewables representing the Wyoming Power Producers Coalition. (August 27, 2009). "WPPC Wind Energy Tax Issues". Provided formal position paper to Wind Energy Task Force.

MacPherson, John, Attorney. (August 27, 2009). "Memorandum of Law and Proposed Statute to Clarify Wind Ownership and to Provide for Severability from Surface Ownership". Formal Legal memorandum provided to Wind Energy Task Force.

Choquette, Kara. Power Company of Wyoming, LLC. (August 27, 2009). Wind Energy Works for Wyoming. Powerpoint presentation.

Burke, Indy, Ruckelshaus Institute. (August 27, 2009). Ruckelshaus Institute. Powerpoint presentation.

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Sternberg, Ray & Woodward, Randy, R & R Rig Service. (August 27, 2009). "R & R Rig Service LLC". Formal memorandum provided to Wind Energy Task Force.

October 12, 2009