September 26, 2013

Julie A. Smith and Christopher Lawrence
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Avenue SW.
Washington, DC 20585

Via e-mail: *juliea.smith@hq.doe.gov* and *christopher.lawrence@hq.doe.gov*

RE: Improving Performance of Federal Permitting and Review of Infrastructure Projects: Comments on a Draft Integrated, Interagency Pre-Application (IIP) Process

Dear Ms. Smith and Mr. Lawrence:

On behalf of Jefferson County, Montana, the Western Environmental Law Center, Future West, and the Sonoran Institute, please accept these comments on the draft Integrated, Interagency Pre-Application (IIP) Process.

Our entities are uniquely qualified to submit these comments because of our hands-on experience with the MSTI Review Project, Centennial West, Soutline, and Sunzia[1].

Furthermore, we support greater inter-agency coordination and integrating public comment as early in project development as possible. Clearly, there is a need for agencies to share information and agree on key issues and obstacles to overcome in the planning process. This focus on responding effectively to transmission development proposals is a prime opportunity to develop strategies to engage local governments and impacted communities and landowners more effectively.

We believe that successful engagement should: 1) bring together project developers, utility representatives, land managers, and leaders from affected communities; 2) begin with a discussion and mapping of community values that might be impacted by the proposed

[1] See http://www.sonoraninstitute.org/western-issues/renewable-energy-/renewable-energy-transmission.html and www.MSTIReviewProject.org

transmission line; and 3) provide information on the need, costs, and benefits associated with the proposed line.

Early engagement is important, and we believe best done in a pre-scoping or planning phase such as this proposed integrated, interagency pre-application process. In addition, building flexibility into the template for public engagement is critical in order to ensure the ability to accommodate rapid developments in transmission planning practices into planning efforts as well as opportunities to move stalled or broken processes forward constructively.

Below, we make a series of recommendations that seek to support your stated goals to:

- Enhance early communication and coordination;
- Enhance public engagement and outreach;
- Develop early iterative feedback on routing options and alternatives;
- Promote predictability; and
- Ultimately reduce the time required to reach a decision to approve or deny a project while also ensuring compliance with environmental laws.

Overarching Recommendation: The IIP Process should be voluntary and incentive based.

While making the IIP process mandatory would, we believe, have benefits to all project developers, we are concerned that a mandatory process could be perceived as another series of "hoops" that developers are required to jump through in what is already a lengthy process. This could further deteriorate the existing relationships between state and federal agencies, project proponents, local governments, and non-profit organizations. A voluntary and incentive based approach, however, will encourage the most qualified and reputable developers to opt-in to the IIP process and hopefully see advantages far beyond other developers who elect to take the traditional route.

Central to this approach, however, is that project developers can clearly see the value in the IIP process and that it increases project certainty and reduces the overall controversy around projects thereby expediting the permitting and construction process. This would speak to the IIP Process' goal of reducing the time required to reach a decision to approve or deny a project while also ensuring compliance with environmental laws.

We recommend that you identify specific benefits to project developers for opting in to the IIP Process. For example, meaningful and iterative project engagement from affected stakeholders may lead to a better understanding of the project and an overall environment of constructive cooperation. We realize these specific benefits may be challenging to articulate, but it is imperative to clearly identify what they are in order to encourage as many project proponents to opt in to this important process as possible.

On that note, we recommend that you reduce the overall timeline of the IIP Process from one year to nine months or less to encourage participation and maintain public interest and engagement.

Recommendation 1: The Development of a Public Outreach Plan should be required, not encouraged.

While above we stated that the overall IIP Process should be voluntary, the steps developers take if they elect to engage in the IIP Process should be clear and, in some cases, required to ensure project success. Thorough and meaningful public outreach is absolutely vital in order to ensure the success of a project. Not requiring a well defined and meaningful public outreach plan could very well mean that developers who engage in the IIP process will still encounter strong public opposition to projects. This will undermine the stated goals of the IIP Process.

The draft IIP Process states that a Public Outreach Plan will be "strongly encouraged" in the first description of the plan, but then states that it will be "required" during the Public Outreach Plan description in *Section IV. Public Outreach and Tribal Coordination Plans*. We recommend you ensure that the Public Outreach Plan be required and that this is clearly stated throughout the process description.

Recommendation 2: Public Outreach Plans should be identified in the Initiation Request and developed during the Initial Meeting Phase.

A draft Public Outreach Plan approach should be required as a criterion for the Initiation Request that initiates the IIP Process**.** We commend the inclusion of environmental data in the initiation request, such as any listed threatened or endangered, candidate, or special status species; aquatic habitats, including estuarine and marine environments, and water bodies, including wetlands; and regional mitigation strategies.

Notably missing from this list is the impact to community values as a whole. By identifying the overall approach to public outreach and meaningful, quantitative engagement, the project developer will be required to consider these community impacts early on in project development. This is absolutely essential to the project's success.

The Public Outreach Plan should then be listed as a point of review, starting with the Initiation Request, throughout the IIP Process until the Final Meeting.

Recommendation 3: Include NGOs and Counties in the Pre-Application Process.

We commend the IIP Process' intent to include non-federal entities at each of the IIP Process meetings and to provide a copy of the Initiation Request to these entities. Non-governmental organizations (NGOs) and affected counties are a critical component to the pre-application process to ensure transparency and encourage meaningful and iterative dialogue very early in project development. They are also extremely knowledgeable partners.

If these entities are *not* included during the entire process, project developers will face increased concern and opposition at the outset of the environmental planning process. This would be extremely damaging to the project and would completely undermine the first three goals of the IIP Process:

- Enhance early communication and coordination;

- Enhance public engagement and outreach; and
- Develop early iterative feedback on routing options and alternatives.

Recommendation 4: The Public Outreach Plan should include quantitative mapping and modeling; a clear Purpose and Need; IIP relationship to NEPA; and creative media products.

In the description of the Public Outreach Plan in section IV, we highly recommend that some type of quantitative values mapping be required. This meaningful input provides valuable data about the community's needs and will allow community members to feel that their concerns have been heard, recorded, and integrated into the project moving forward. For an example of this type of community mapping, please visit www.MSTIReviewProject.org

The Public Outreach Plan should also include a clear and concise articulation of the Purpose and Need of the project. Many projects quickly become contentious when the Purpose and Need is not clearly understood, or if the Purpose and Need changes through the lifetime of a project.

The Public Outreach Plan should include a clear and easy to understand description of the relationship of the IIP Process with the NEPA process. As part of that description, the plan should explain how the IIP Process informs the NEPA process and seeks to engage community input early on to provide meaningful input and dialogue, with the ultimate goal of improving the NEPA process.

In addition, information on the following topics will help local governments and communities better understand the context of the proposed project:

- Describe the broader benefits of the proposed line, including benefits to energy security, economy, public health, and environment.
- Explain why there are markets ready to purchase electricity generated and delivered across hundreds of miles from other states.
- To the extent that there are utilities or other entities that have indicated a willingness to purchase electricity delivered by the proposed line, have them explain why they support the line.
- Don't oversell the project's potential for renewable energy development and be clear about what types of electricity will travel on the proposed line.

The use of creative media should be encouraged to help the community better understand what can often be a very complex and lengthy planning process. Examples of creative media products include:

- Motion stories that explain overarching energy needs and explain the community engagement process: http://www.mstireviewproject.org/msti-video/
- Information panels on issues such as property value impacts from transmission lines.
- Easy to understand, community targeted, reports and handouts: http://www.mstireviewproject.org/final-reports/
- Third Party website: http://www.mstireviewproject.org/

Recommendation 5: Integrate community values list and mapping workshop into Study Corridor Meeting; encourage a third party review.

The community values that would populate a community map (as recommended be required above in Recommendation 4) should be listed and defined as part of the Study Corridor Meeting Request. Once identified and agreed upon with non-federal entity input, a third party independent consultant should conduct community mapping meeting(s) to collect quantitative information on community values within the study corridor during the timeframe of the Study Corridor Meeting.

The community mapping process should be quantifiable so that trade-offs are ranked and converted into a map to demonstrate the most suitable locations to build a line from the community's perspective. See **http://www.mstireviewproject.org/corridor-siting/community/**

The project developer should be highly encouraged to hire a credible **independent, third party review** to implement the community mapping process. Communities often have a hard time trusting the analysis and results of the project proponent, but are able to receive information when presented by a third party who can build trust and provide unbiased mediation.

Recommendation 6: Integrate results of community mapping into Routing Meeting.

The results of the community mapping workshop should then be included in the identification of more detailed potential routes for the project during the Routing Meeting and Final Meeting.

The benefit of collecting and utilizing community driven data that identify routes that minimize the impact on community values cannot be overstated and is a powerful tool to finalizing route selection.

Recommendation 7: Provide Case Studies for project proponents so they have outstanding examples to choose from as they develop their Public Outreach Plans.

For example, The MSTI Review Project was an independent review of the Mountain States Intertie (MSTI), a 500kV transmission line proposed by NorthWestern Energy from Townsend, MT to Jerome, ID. To help counties and communities better understand the purpose and need of the line, and a number of the impacts of the line, the MSTI Review Project provided an independent, transparent analysis. The goal was to create a process that led to better planning outcomes from a variety of perspectives that are often seen as mutually exclusive.

The mapping work was focused on developing an objective, quantitative, and transparent spatial analysis of the MSTI line to empower local governments to make informed decisions on the proposed routing alternatives as it pertained to their unique economic, rural, and environmental values and concerns.

The **MSTI Review Project**:

- Demonstrated that complicated issues related to transmission lines can be

illuminated in an objective, easy-to-understand way.

- Proved that there are mapping tools that can be used to collect and display community values and potential corridor routes that try to minimize impacts on these assets, as well as on fish and wildlife. Many other tools, such as expert opinion and direct community outreach, also need to be incorporated in the infrastructure siting process.
- Helped to better engage local governments in a meaningful way that allowed them to provide constructive comments on corridor routes, rather than only providing comments in the form of opposition. This type of meaningful engagement should occur throughout the life of a project.

For more information: http://www.mstireviewproject.org/

In addition to case studies, an **online clearinghouse** of information would be very valuable for project developers. The Western Governors' Association Transmission Siting Task Force[2] is developing such a clearinghouse, as have non-profit organizations[3]. These resources should provide templates, best practices, case studies, checklists, etc. Such a clearinghouse will encourage project developers to opt in to the IIP Process because these examples will demonstrate the value of engaging stakeholders early and often in project development.

CONCLUSION

In conclusion, our entities greatly support the IIP Process with the above modifications. Please let us know if you have any questions or comments about our recommendations or if you need further detail.

Attached to these comments you will find additional information on our above stated recommendations. Please review these documents, as they provide more information and context around our collective approach to renewable energy and associated transmission development in the West.

Sincerely,

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Commissioner Leonard Wortman
Jefferson County, Montana

[Continued on page 7]

[2] http://www.westgov.org/initiatives/rtep
[3] http://www.sonoraninstitute.org/powerline.html

John Shepard
Sonoran Institute

Erik Schlenker-Goodrich
Western Environmental Law Center

Attachments:

- MSTI Review Project Summary Reports *(July 2012)*
- Memo to Steve Black, Department of Interior, as part of the Interagency Rapid Response Team for Transmission (RRTT): Sonoran Institute, Headwaters Economics, and Western Environmental Law Center *(April 2012)*
- Western Environmental Law Center Guiding Principles for Renewable Energy Development in the West *(November 2011)*

cc: Western Governors' Association Transmission Siting Task Force
Linda Davis, ldavis@westgov.org

MSTI REVIEW PROJECT

SUMMARY REPORTS

Partners

The MSTI Review Project is a unique effort between Montana counties and non-governmental organizations along the Montana-Idaho border. Our goal is to provide independent analysis and outreach to effected MSTI counties supported by high quality, transparent and meaningful analysis that will ultimately lead to better planning outcomes from a variety of perspectives.

The MSTI Review Project includes Madison County, MT, Jefferson County, MT, Western Environmental Law Center, Headwaters Economics, Sonoran Institute, Craighead Institute, and Future West.

Craighead Institute understands that the need for regionally-supplied energy will continue to grow and we are committed to finding smart, science-based solutions to ensure our community values, wildlife, and healthy environments are sustained.

Headwaters Economics is an independent, nonprofit research group. Participation in the MSTI review process is in keeping with the organization's mission of facilitating effective community development and land management decisions by providing reliable, nonpartisan data and analysis on socioeconomic issues.

Sonoran Institute is shaping the future of the west, promoting healthy landscapes, livable communities, and vibrant economies. The MSTI Review Project is a part of our work helping communities manage growth and change through collaboration, civil dialogue, sound information, practical solutions, and big-picture thinking.

Western Environmental Law Center (WELC) promotes "smart from the start" renewable energy development that balances the demand for rapid clean energy production with the needs of rural communities and wildlife. Our goal is to provide unbiased policy and scientific data in a transparent process where competing interests can be discussed and reconciled.

Future West helps communities create the future that they want. We do this by providing information, technical assistance, training ,and facilitation. The MSTI Review Project offers and opportunity for FutureWest to help key decision makers effectively weigh in on an important land use issue.

Madison County, Montana. "We look forward to working with other counties to pursue the thoughtful development of responsibly sited transmission lines in a way that protects the values that Montanans share with our neighbors in Idaho," - Dave Schulz, Madison County Commissioner.

Jefferson County, Montana. "Better understanding the tax issues associated with the MSTI line is a huge benefit in assisting with decision-making for local county governments," -Leonard Wortman, Jefferson County Commissioner.

MSTI REVIEW PROJECT

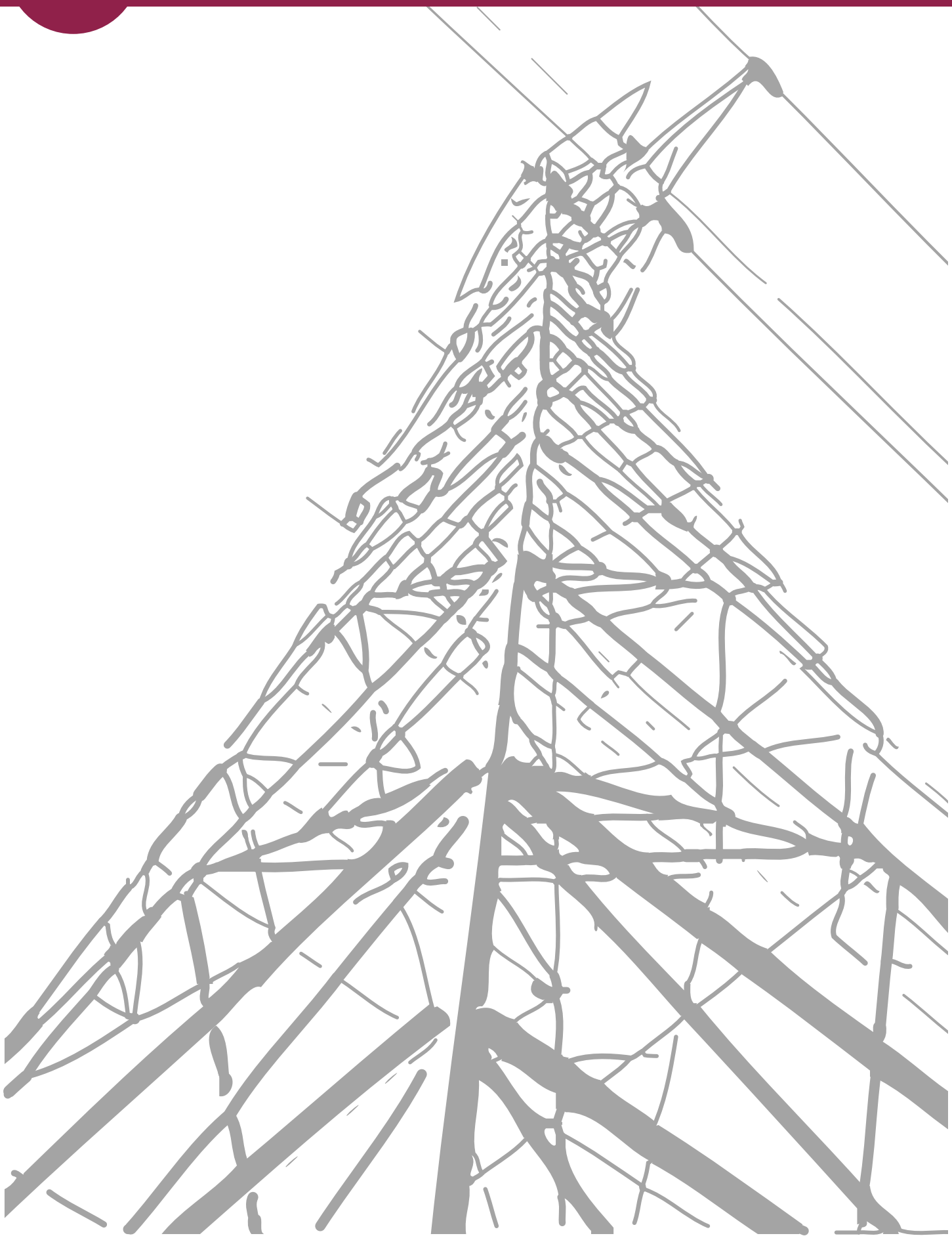
Summary Reports

July 2012

ABOUT THE MSTI REVIEW PROJECT

The MSTI Review Project is a joint effort between three Montana counties and five non-governmental organizations along the Montana-Idaho border to conduct an independent analysis of the Mountain States Transmission Intertie (MSTI).

For more information, please visit the project web site: www.mstireviewproject.org or email mstireviewproject@gmail.com



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Introduction

Monique DiGiorgio,
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Dennis Glick,
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Montana and Idaho are facing transmission siting decisions that could affect landscapes and communities for decades to come. One example is the Mountain States Transmission Intertie (MSTI), a 500 kV transmission line proposed by NorthWestern Energy from Townsend, MT to Jerome, ID. The MSTI Review Project, a unique partnership between county governments and non-governmental organizations to help counties better understand impacts of MSTI, provided an independent, transparent analysis of the proposed line. The goal was to create a process that would ultimately lead to better planning outcomes informed by a variety of perspectives.

The MSTI Review team included five non-governmental organizations: Western Environmental Law Center, Craighead Institute, Future West, Headwaters Economics, and Sonoran Institute working collaboratively with three county governments: Madison, Jefferson and Beaverhead counties in Montana. During its year and a half duration, the MSTI Review Project worked to:

- **Better understand the need and context of the line,**
- **Assess the economic impacts and benefits of the line, and**
- **Balance energy development with local values by identifying potential transmission corridors while protecting communities and the environment.**

The set of attached reports describes the results of this research and of the associated project outreach and workshops. They include:

- Tax Revenue from an Installed High Voltage Transmission Line: *A Guide to Fiscal Impact Analysis in Montana and Idaho*
- MSTI Questions and Answers: *Economic and Policy Issues Related to the Proposed Mountain States Transmission Intertie*
- Transmission Lines & Property Value Impact: *A Summary of Published Research on Property Value Impacts from High Voltage Transmission Lines*
- Wildlife Model and Wildlife Map
- Community Model and Community Map

Project Background and History

In 2010, NorthWestern Energy submitted a Montana Major Facilities Siting Act application, proposing construction of the 500 kV Mountain States Transmission Intertie (MSTI) which would stretch approximately 430 miles from Townsend, MT to Jerome, Idaho. A draft preliminary EIS released in 2010 included several alternative transmission line routes affecting 15 counties in Idaho and Montana. Concerned about these potential routes and the impact on their county, Madison County, Montana, requested assistance from the non-profits that eventually became the MSTI Review Project. County officials specified a list of issues that they wanted to better understand, including economic, community, and wildlife considerations. This became the work plan for the proof of concept that was launched in September 2010. The results of this proof of concept focused on the Montana portion of the proposed MSTI line, and results were presented to county officials in July 2011. Due to the interest in the findings of the proof of concept, Madison and Jefferson counties encouraged the project team to involve other Montana and Idaho counties. This county leadership launched what has now become the "MSTI Review Project" in early October 2011 (see project flow chart, below).

Funding for the MSTI Review Project was secured from several sources including counties, the State of Montana, in-kind service from the Project team, foundations, and NorthWestern Energy.

The MSTI Review Project had four primary goals:

1. **Better understand energy resources, and the need and context of the line,**
2. **Assess the economic impacts and benefits of the line, and tax and property value impacts,**
3. **Develop an objective, quantitative, and transparent spatial analysis of the MSTI line as it relates to community values and wildlife, and**
4. **Deliver this information via an independent, objective and transparent process, useful to decision makers and the public.**

To achieve these goals, the MSTI Review Project initiated a number of research and related activities. Major project components included:

1. **Energy Development Related Policy Research**
2. **Economic Related Research**
3. **Community Values and Wildlife Spatial Mapping**
4. **Community Outreach**

A hallmark of the MSTI Review Project is that its workplan and corresponding research were to a great degree shaped by the needs of county officials in cooperation with the project team. This required considerable one-on-one dialogue between the counties and the team as well as outreach to project partners. Early on in the process, a Project Liaison Group was created to provide the project team with feedback and direction, and to serve as a liaison with their peers. The Project Liaison Group included county officials, non-governmental organizations, concerned citizens, and others (see page 7).

Open houses were facilitated in Montana and Idaho to brief the general public on the project, and then on the MSTI Review Project research findings. Field trips to view possible transmission corridors were conducted, and additional presentations and meetings were hosted by the MSTI Review Project. These included presentations at the Idaho Association of Counties and Montana Association of Counties annual conferences, and a public panel discussion regarding transmission line impacts on property values. Meetings with the Project Liaison Group and workshops with county commissioners in Idaho and in Montana were critical to the development of the spatial maps. An ad hoc wildlife technical group made up of prominent regional biologists was instrumental in reviewing and fine tuning the wildlife maps. All preliminary and draft research products were presented to the Project Liaison Group and the three partner counties for their review. Final products were vetted through the Project Liaison Group and presented to the public in meetings held in Idaho and Montana in May of 2012.

Lessons Learned

The MSTI Review Project was a groundbreaking effort that had its strengths and also its limitations. There are a number of lessons for MSTI-related counties as well as for other regions facing the prospect of high voltage transmission lines. Some of these are described below:

1. It would have been better to have initiated the MSTI Review Project earlier in the permitting process. Involving county government, and providing them with needed and accurate information, can only make for a better process for all interests.

2. Because of time and resource constraints, the target audience for the research and mapping was county officials who serve as representatives of their citizenry. Ideally, all project stakeholders could be meaningfully engaged in this process.

3. The MSTI Review Project demonstrated that complicated issues related to transmission lines can be illuminated in an objective, easily understandable way.

4. The Project proved that there are mapping tools that can be used to collect and display community values and potential corridor routes that try to minimize impacts on these assets, as well as on fish and wildlife. Many other tools, such as expert opinion and direct community outreach, also need to be incorporated in the infrastructure siting process.

5. Local government stakeholders are better informed as a result of the MSTI Review Project, though they will likely require follow-up assistance in using this information to comment on the final EIS.

Project Findings

The research findings and mapping results follow this introduction. Included are summaries of the economic and policy research, the community and wildlife mapping, as well as more detailed reports with further information on the methodologies employed by the research team.

Acknowledgements

The MSTI Review Project team would like to thank the following individuals and entities for their involvement and support of the MSTI Review Project. This project would not have been initiated if not for the Madison County, Montana Commissioners who, concerned about the potential impacts of the proposed MSTI line, requested assistance from the non-governmental organizations that eventually came together to form the MSTI Review Project team. Later, Jefferson and Beaverhead Counties in Montana also joined this collaborative. Their financial and technical support, and direct participation and encouragement were essential for the success of the project. Many other county officials, citizens, agency representatives and non-governmental organizations also played an important role in the project. The Project Liaison Group – individuals representing a variety of organizations and perspectives – helped shape the research agenda and spatial modeling. The wildlife technical advisory group provided rigorous critiques of the model and aided in fine tuning the methodology. Many people participated in the MSTI Review Project workshops and briefings. Special thanks go to county commissioners from Idaho and Montana who provided constructive feedback on the modeling components and economic reports. Regional newspapers were diligent in their coverage of the MSTI Review Project, and agency officials and other researchers provided critical data and information that was incorporated into all aspects of the studies. Finally, the team wishes to thank the financial contributors including Madison and Jefferson counties, the State of Montana through the Headwaters RC&D, individual donors, private foundations, and NorthWestern Energy. Without all of these individuals, organizations, agencies, local officials, and concerned citizens, this project would have never come to fruition.

MSTI Review Project Liaison Group Members

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Jeff Fox
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Bill Geer
Theodore Roosevelt Conservation Partnership

John Brower
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Dave Delisi
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Brad Molnar
Montana Public Service Commission

Jack Dawson
Jefferson Valley Conservation District

John Kountz
Rancher

Tim Bozorth (observer)
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Transmission Lines and Property Values Impact

Julia Haggerty, Headwaters Economics, julia@headwaterseconomics.org

Introduction

Many stakeholders in the Mountain States Transmission Intertie (MSTI) permitting process, including local government officials, are concerned about the potential impact of a new high voltage overhead transmission line on private property values in Montana and Idaho. This review discusses research on property value impacts from high voltage overhead transmission lines with a focus on what can be learned that is of relevance to the proposed MSTI project.[1]

There is a significant body of professional and academic literature on property value impacts from transmission lines. Several important summaries of this body of work are available, including one commissioned for the Draft Environmental Impact Statement (EIS) for the MSTI project.[2] However, one new study has yet to be assimilated into existing summaries of the professional literature on property value impacts from high voltage overhead transmission lines. The new study is Dr. James Chalmers' research on sales of properties located along the 500 kV Colstrip-BPA line in Montana. Dr. Chalmers' research was carried out under contract to NorthWestern Energy in 2010 and 2011. His findings are available in a detailed research report and were published in two peer-reviewed journal articles in 2012.[3]

Chalmers' research is relevant to the MSTI proposal because it considers property types more comparable to the areas affected by MSTI than any other published studies. If built, MSTI would traverse parts of Montana and Idaho where agriculture land uses, including ranching and intensive crop production, are dominant on private property. Forested cabin sites, exurban and rural residential properties could also be affected. Chalmers' study provides new insights into the market effects of the Colstrip-BPA line on similar property types—although it is critical to observe that one cannot generalize from such research to effects on individual properties. The only way to assess impacts on an individual property is through a professional appraisal. Furthermore, Chalmers' research was not designed to provide an impact analysis for MSTI. There are a number of things to understand about the opportunities and challenges it presents as a resource in assessing potential impacts from the MSTI line.

As part of the effort to evaluate and understand property value impacts from transmission lines, the MSTI Review Project hosted a presentation in Butte on April 17, 2012. Dr. Chalmers presented his research findings and a panel of real estate professionals from different locations in the region of Montana potentially affected by MSTI provided comments and critique.[4]

Key Findings

Most property value impact studies use market response to evaluate impact. From a market response perspective, transmission lines affect property values adversely when they sell at prices lower or more slowly than comparable properties without transmission lines. This approach tends to find less evidence of negative impact than what might be expected based on surveys and interviews that ask people about their feelings about transmission lines. The majority of responses to such queries reveal negative associations with transmission lines, although not without variation and some exceptions.

The majority of previous research on property value impacts concerns residential properties in suburban and urban areas. The recent study of sales involving agricultural and residential properties along the Colstrip-BPA 500 kV line in Montana by James Chalmers is the first detailed exploration of market impacts to rural properties in the Interior West. The research uses appraisal-based techniques to evaluate a cohort of 56 case studies and also applied a statistical evaluation to sales in the Aspen Valley Ranches subdivision in Jefferson County.

The case study approach to the BPA-Colstrip 500 kV line found cases in which the adverse impacts to parcels in rural residential subdivisions from the line exceeds what might be expected based on earlier research, while the statistical analysis of the Aspen Valley Ranch showed an average impact of 15 percent devaluation within 1000 feet of the line. Chalmers found little to no sensitivity to price impacts within production agriculture and amenity-influenced agricultural properties. However, his work emphasizes the strong influence of location- and property-specific concerns on the relationship between the presence of a high voltage overhead transmission line and market response.

The Chalmers study concerns the effects on raw land values many years after the construction of the line. It was not designed to capture the market response associated with the potential initial stigma of a transmission line proposal. There is some limited evidence in other research that market impacts can be greatest during the siting and construction period—anecdotal information from real estate professionals in southwestern Montana suggest that this trend may be playing out in the current MSTI situation.

The research can benefit the siting process for MSTI in several ways. The findings provide solid reasons (among many others) to separate industrial features like a transmission line from residential land uses, especially small lot subdivisions. While the sales data do not provide any evidence of adverse price impacts to production agricultural parcels in eastern and central Montana, interview data substantiate the imperative to locate towers at minimally intrusive locations within existing agricultural operations, especially irrigated, plowed, or otherwise mechanically managed fields. The challenges in using market response to document impacts to agricultural lands where market value is affected by recreational and other amenities is evident in the Chalmers study. These difficulties reveal important information gaps that may suggest a need for further analysis. In the absence of further conclusive research, the siting process will continue to demand discussions with landowners and communities about perceived impacts and how best to mitigate them in the event that the project is permitted.

Endnotes

1 The MSTI Review Project is an effort between Montana counties and non-governmental organizations along the Montana-Idaho border to conduct an independent analysis of the Mountain States Transmission Intertie (MSTI) proposal. The Project is working to (1) better understand the need and context of the line, (2) balance energy development with local values by identifying corridors while protecting the community and environment, and (3) assess the economic impacts and benefits of the line. Focused on outreach to local government stakeholders in the MSTI permitting process, the MSTI Review Project core team includes Madison County, MT; Jefferson County, MT; Western Environmental Law Center; Headwaters Economics; Sonoran Institute; Craighead Institute; and Future West. For more information, please see: http://www.mstireviewproject.org.

2 Kroll, C. A. and P., T. (1992). The Effects of Overhead Transmission Lines on Property Values. *Report to Edison Electric Institute Siting & Environmental Planning Task Force*. Priestley, T. (2009). *Transmission Lines and Property Values: Review of the Research and Summary of Key Findings* (Vol. Appendix c.7.2 to the 2010 Draft EIS, MSTI). Jackson, T. O., & Pitts, J. (2010). The Effects of Electric Transmission Lines on Property Values: A Literature Review. *Journal of Real Estate Literature*, *18*(2), 239–259.

3 Chalmers, J. A. (2012a). *High Voltage Transmission Lines and Montana Real Estate Values*. Available from NorthWestern Energy. Retrieved May 11, 2012, from http://www.northwesternenergy.com/documents/ElectricTransmission/HighVoltageFinalReport.pdf. Chalmers, J. A. (2012b). High-Voltage Transmission Lines and Rural, Western Real Estate Values. *The Appraisal Journal*, *Winter, 2012:* 1-16. Available from NorthWestern Energy. Retrieved May 11, 2012, from http://www.northwesternenergy.com/documents/ElectricTransmission/HighVoltageValues.pdf. Chalmers, J. A. (2012c). Transmission Line Impacts on Rural Property Values. *Right of Way*. May/June 2012: 32-36.

4 The panel included Kevin Pearce, Appraiser and Owner of New Frontier Ranches, Twin Bridges, MT (http://www.newfrontierranches.com); Katie Ward, Broker in Sheridan and Missoula (http://www.propertyinmontana.com), Vana Taylor, Broker in Bramlette & Co in Dillon, MT (http://www.bramlettecompany.com), and Sarah Bauer, Broker in Helena and Boulder, MT (http://www.mymontanahome.net). Realtor perspectives are provided as an appendix to the full report.

Tax Revenue from an Installed High Voltage Transmission Line: *A Guide to Fiscal Impact Analysis in Montana and Idaho*

Julia Haggerty, Headwaters Economics, julia@headwaterseconomics.org

Background

Local government officials and other decision makers involved in the permitting process for the Mountain States Transmission Intertie (MSTI), a 500 kV electric transmission line proposed to run from central Montana to south-central Idaho, seek information about the potential revenue benefits of a new high voltage overhead transmission line. An installed high voltage transmission line can directly generate public revenue through property taxes, rent, and lease payments for right of ways on public land, and through taxes on the sale of electricity. Public revenue also is created during the construction phase indirectly through sales and use taxes on equipment and materials, and other taxes such as lodging taxes on construction-related economic activity. The amount and distribution of these sources of revenue vary according to state laws.

While estimates of the potential revenue value are provided, the goal of this report is to enable critical and informed understanding of revenue estimates from other sources by describing how these estimates are derived and the assumptions made in the process. The discussion also aims to provide a sense of how significant differences between affected areas mean that the impact of an increase in taxable value will vary from place to place. What matters more than the total dollar amount of tax revenue from a new project like a transmission line is how that dollar amount compares to the existing tax base. Across the different taxing jurisdictions in potentially affected landscape in Montana and Idaho, the scale of the fiscal impact varies dramatically. Thus, this document discusses the state fiscal policies that shape the ability of local and state governments to capture revenue from a large industrial transmission project.

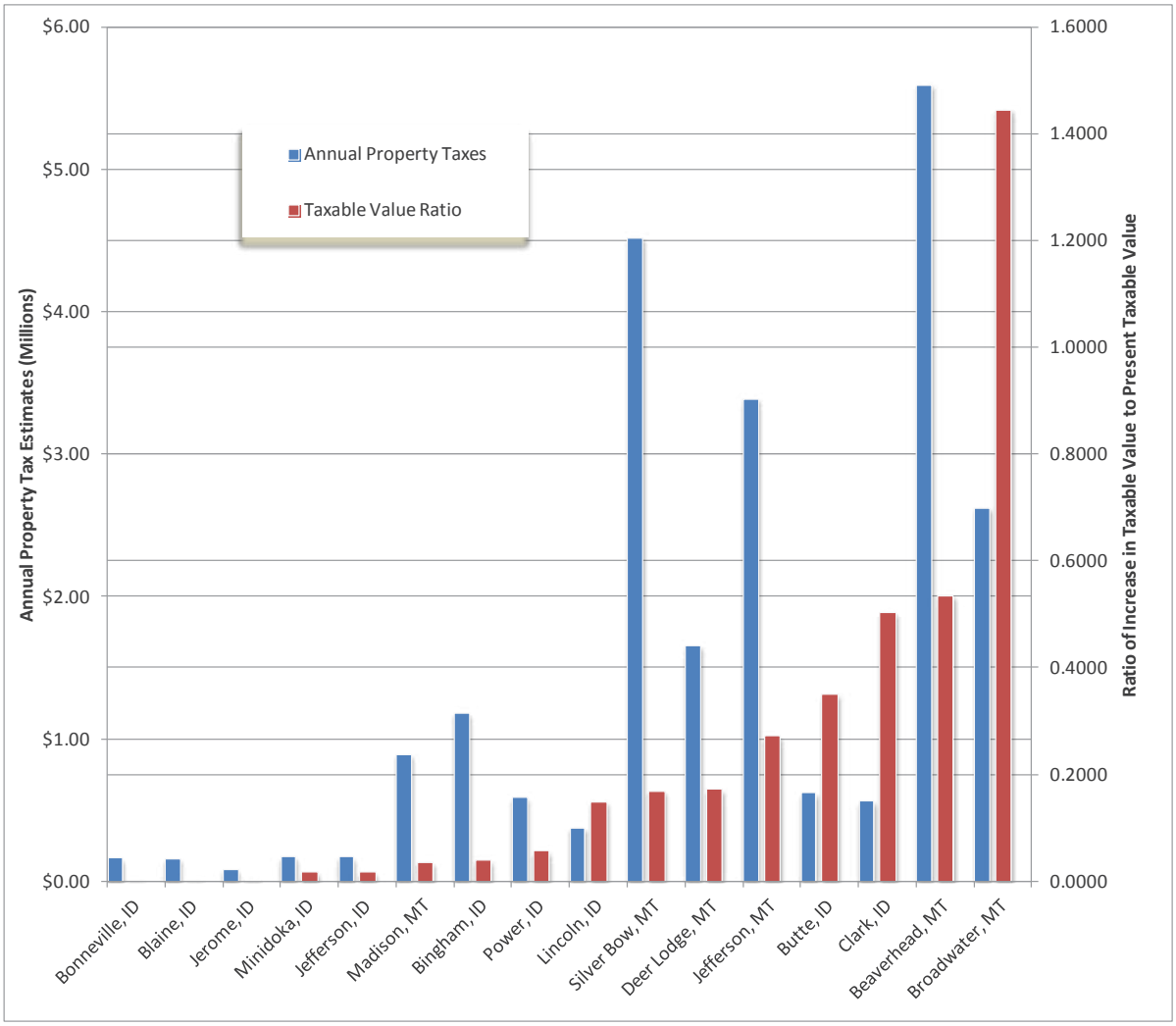
The Size of Tax Payment Differs from the Scale of Impact

MSTI has an estimated capital cost of more than $1 billion and as such represents a sizable taxable asset. In local taxing districts, a 500 kV HVTL line generates tax revenue in an amount proportional to the number of miles and the presence of substation facilities.

Figure 1 provides a visual comparison of the size of possible tax payments in terms of dollars and the scale of impact, as measured by the increase in taxable value associated with the project.

A rough estimate of the dollar value of potential annual property taxes associated with MSTI and its substations in each county is shown in the chart in blue.[1] The influence of the fiscal benefit depends on the size of the benefit relative to the taxable value of a school, county, or other tax district. This varies significantly across the MSTI landscape. The red bars compare the potential increase in taxable value represented by the MSTI project to each county's assessed value.

Figure 1. Estimates of Annual Tax Revenue to Local Tax Districts vs. Ratio of Increase in Taxable Value to Present Taxable Value



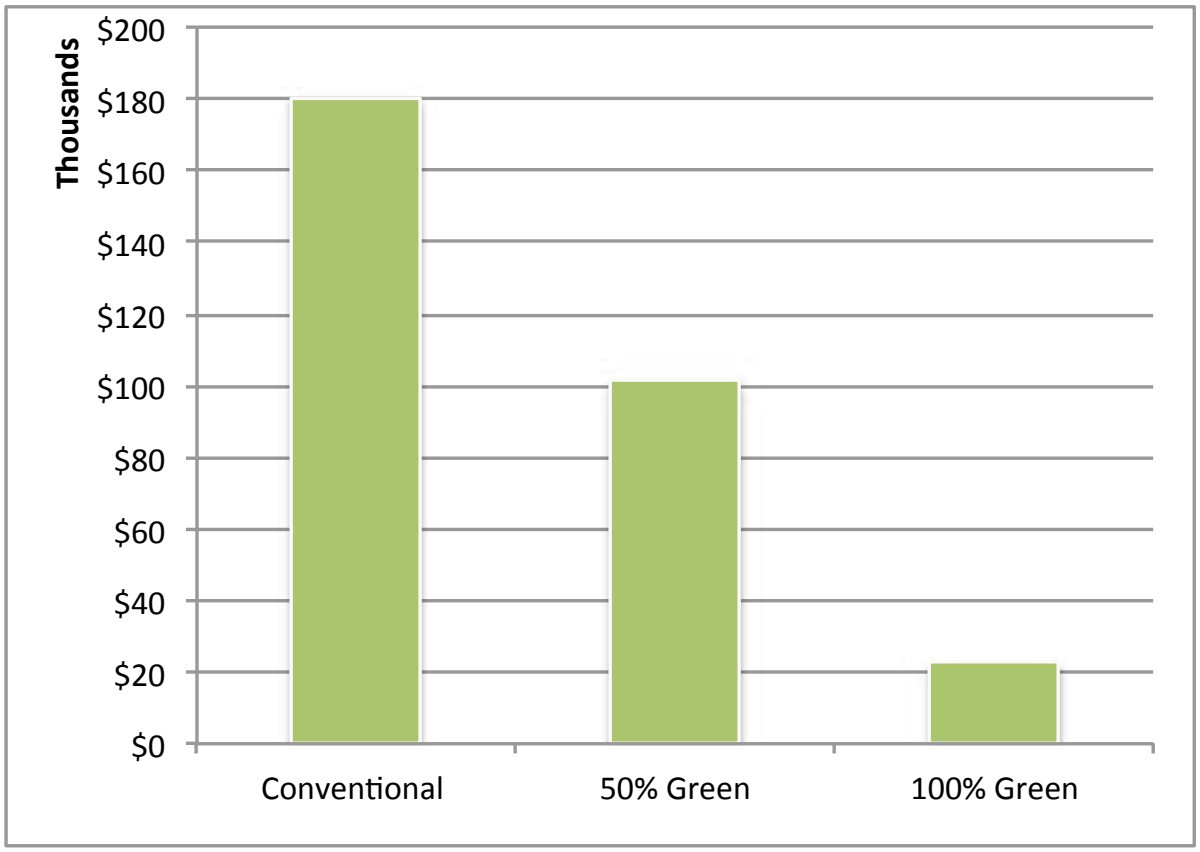
State Tax Policies Shape the Fiscal Opportunities for Local Governments

State tax laws shape the scope of the fiscal opportunity for local taxing districts. Incentives can work to lower taxes accruing to tax jurisdictions. At the same time, limits on the ability to increase property tax collections mean that a new taxable value can work to lower tax rates, but will not create new funds for county projects such as economic development.

Incentives

In Montana, the revenue opportunity can be reduced significantly if the transmission line qualifies for considerable tax exemptions directed at renewable energy facilities.

Figure 2. Range of Taxable Value of One Mile of MSTI in Montana Due to Tax Incentives[2]

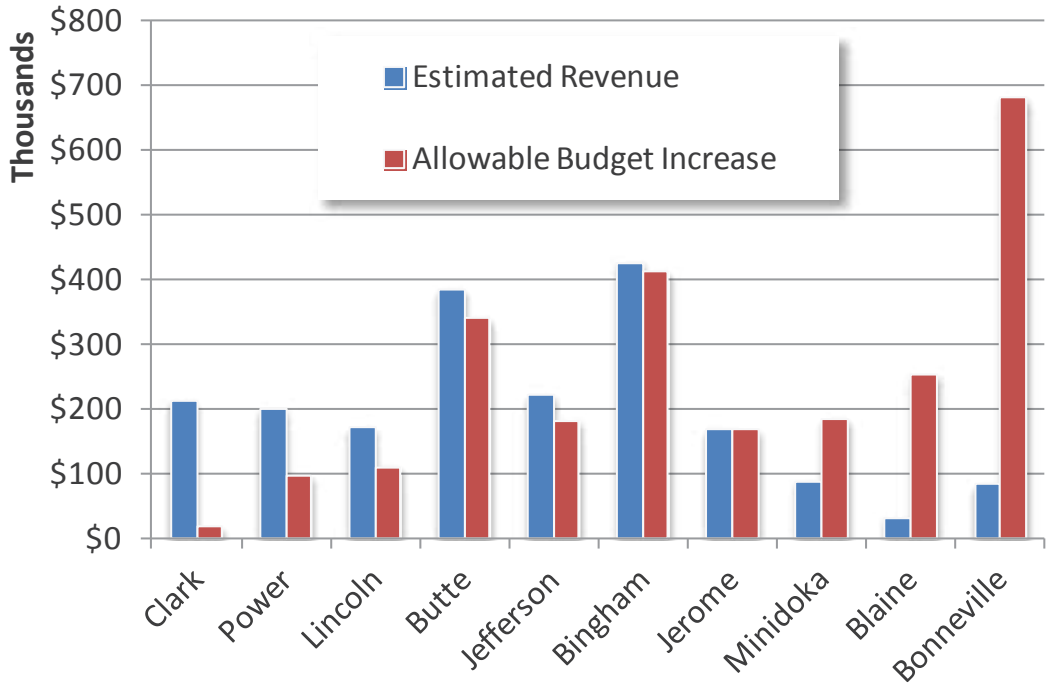


In Idaho, utility property receives special treatment that includes being exempt from fire district taxes and also exclusion from allowable budget increases associated with new construction.

Budget and Expenditure Limits

Both Montana and Idaho have laws restricting the ability of tax districts to increase property tax collections. However, Montana law allows taxing jurisdictions to capture additional revenue from the value of large increases in the area tax base, although school districts are an important exception. In contrast, Idaho tax law imposes stricter limits on the ability to increase revenue collection. Figure 3 compares the estimated annual tax revenue (blue bars) from the line to the amount county budgets are allowed to increase (red bars).

Figure 3. Potential MSTI Property Tax Revenue Compared to Allowable Budget Increases by Idaho County (county funds only)[3]



Where the blue bar exceeds the red bar, the county is not in a position to grow its budget to reflect the increase in taxable value. The implication is that Clark, Power, Lincoln, and Butte counties will not capture an increase in taxable value in a growth in county budgets—unlike some Montana counties might. However, taxpayers would benefit from lower mill levies. The scale of relief would be most significant in tax districts where the mileage proposed represents a significant addition to the district's taxable value.

Recommended Elements of a Complete Fiscal Impact Analysis

Environmental Impact Statements required under federal law and various state siting acts, such as the Montana Major Facility Siting Act, often include a discussion of fiscal impacts from transmission projects. Based on the engagement with local governments over the course of the MSTI Review Project, we offer the following recommendations to make fiscal impact analyses more understandable and relevant to stakeholders.

An explicit discussion of state policy limits affecting revenue growth and distribution for local governments should accompany any dollar estimates of tax revenue. This would avoid overestimating or misrepresenting actual benefits to local government funds.

Reports on fiscal impacts from a high voltage transmission line should recognize relevant policies. Examples from the MSTI case study include Idaho state law's exemption of utility property from fire district taxes and from new construction roll allowances, and Montana's tax incentives that significantly lower tax rates for renewable energy projects.

Attention should be paid to the significant differences in taxable value among affected taxing districts because the ultimate fiscal impact to each place is a function of the proportion of the increase in taxable value to the existing tax base. It is important to distinguish those counties and other districts where the project's fiscal benefits are significant from those where the benefits would be unremarkable.

Endnotes

1 Property tax estimates assume a value of $1.5m per mile of line and substation values of $190m in Broadwater County; $75m in Deer Lodge County, $29m in Clark County, and $25m in Jerome County. Calculations for Montana are based on 2010 average levies countywide, local and countywide schools, fire, and miscellaneous districts in each county—total taxes would be more considering other mills, state taxes, etc. Idaho estimates use 2011 mill levies for countywide funds, school districts, county roads, and ambulance districts. The estimates shown here assume that the line carries 50 percent "clean" energy (see page 7) and are calculated based on maximum possible mileage in each county (per the 2010 preliminary Draft EIS). Taxable values shown are countywide for 2010 in Montana and December 2011 in Idaho.

2 Taxable value shown based on total value of $1.5m per mile of line and does not include substations. Class 9, conventional utility property, is taxed at 12 percent of market value, while two state tax incentives can reduce a transmission line's tax burden to as little as 1.5 percent if all of its firm transmission is contracted to qualifying clean energy facilities.

3 Property tax estimates assume a value of $1.5m per mile of line and substation values of $29m in Clark County, and $25m in Jerome County. Calculations are based on 2011 mill levies for countywide funds only and maximum allowable budget increases for 2011.

Mill Creek Substation, Anaconda, MT

Questions & Answers

Julia Haggerty, Headwaters Economics, julia@headwaterseconomics.org

The purpose of this document is to help clarify points of confusion identified by county commissioners about MSTI in a question and answer format. The focus is on concise answers, supported by references to credible sources of detailed information. It was first released in May 2011 and updated in October 2011. This report was updated again this spring to reflect new information and policy developments.

To produce this report, Headwaters Economics has consulted key policy documents, published literature, and energy industry experts. Peer review was also provided by technical experts.

Summary: Questions Concerning the Proposed MSTI Line

1. What Type of Energy Will MSTI Carry?
2. Rate Impacts: Who Pays for a $1 Billion Transmission Line?
3. What is the Role of Mill Creek in the MSTI Siting Process?

A brief summary of answers to the questions guiding this report is offered on this and the following page. The reader is likely to notice that the summary answers suggest some uncertainties associated with each of the issues being considered. For a fuller discussion of the range of ways to approach and consider these questions, please see the full document.

What Type of Energy Will MSTI Carry?

NorthWestern Energy's plans to market transmission on MSTI to wind generation facilities reflect the profile of energy markets at the time MSTI was officially proposed (2008). While there is more uncertainty facing the wind industry today than at that time, there is still strong demand for new, large-scale generation from renewable resources. To meet existing state quotas, the Western Electricity Coordinating Council estimates that the U.S. West will need to double the volume of electricity generated from renewable resources in the region over the course of just ten years. Wind developers banking on the opportunity for Montana's wind resources to play a role in that build out have been and remain the majority (currently about 90%) of the requests for interconnection with NorthWestern Energy's transmission network.

In January 2012, Northwestern Energy announced a Memorandum of Understanding with the Bonneville Power Authority (BPA). The Memorandum of Understanding lays out the terms for exploring the possibility that MSTI could play a role in helping the BPA meet transmission service requirements for its "Southeast Idaho Service Area" which includes parts of western Wyoming and southern Montana. This could represent demand for up to 550 MW of service. The BPA is also exploring options to utilize the Boardman to Hemingway project for its Southeast Idaho service demand.

If BPA were to become a partner or "anchor tenant" on the MSTI line, this would be a major step forward in securing a customer base for the project. The generation resources would reflect a mix of BPA assets, primarily but not only hydroelectric facilities. The results of the economic and engineering studies on the feasibility of this option for the BPA are expected in August 2012.

While the physical realities of the electric grid mean that all types of electrons will travel on MSTI regardless of generation source, MSTI's eventual construction depends on the market for new generation resources. For a variety of reasons, expansion of coal-burning generation facilities is highly unlikely. Nationwide, many utilities are looking to natural gas as a future generation resource, but in Montana, wind remains the most likely resource for near-term development.

Rate Impacts: Who Pays for a $1 Billion Transmission Line?

So long as MSTI's product and marketing methods remain consistent with NorthWestern Energy's plan, the project should not significantly increase the transmission portion of retail electricity rates in Montana. NorthWestern Energy utility proposes to recover the costs of building the MSTI line through a "participant funding" model. This means that all of the costs of constructing the line would be rolled into the price of transmission access on the line and not into Montana rates.

Ongoing federal policy efforts, including FERC's recently issued Order 1000, are focused on establishing processes for determining fair and relevant strategies to address cost allocation for transmission expansion. At this time, it is too early to predict the full implications for remote regions (like Montana and Wyoming) with regards to the costs of infrastructure designed to export electricity to distant markets.

The policies and strategies for complying with the order may differ significantly from other parts of the country where Regional Transmission Organizations predominate. In the West, FERC Order 1000 compliance is being undertaken by subregional transmission groups. While Order 1000 does introduce the possibility of regional cost allocation for transmission developments based on a beneficiary pays principle, it does not impose regional cost allocation on all projects and provides the option for developers to use participant funding as a cost recovery approach.

What is the Role of Mill Creek in the MSTI Siting Process?

Mill Creek describes an area south of Anaconda, MT that features a cluster of utility infrastructure. NorthWestern Energy's proposed route for MSTI, submitted with its original permit application to the Montana Department of Environmental Quality, ran west from the Townsend substation through Jefferson County, past Butte, into Anaconda in order to integrate transmission infrastructure around Mill Creek with an eye on future development.

The cooperating agencies drafting the 2010 Draft EIS observed that integration with the Mill Creek system was not technically critical to the construction of MSTI as an export facility and thus opted for a shorter route with fewer cumulative impacts—the route via western Madison County along the Jefferson and Beaverhead Rivers. However, NorthWestern Energy has repeatedly observed that there are significant benefits to incorporating Mill Creek into the route for MSTI, particularly related to long-range transmission expansion planning. A second look at Mill Creek's relationship to route alternatives in the revised EIS process is likely.

Community Model

Cameron Ellis, Sonoran Institute, cellis@sonoraninstitute.org

The Community Model portion of the MSTI Review Project has successfully demonstrated that it is possible to collect and use stakeholder input in a robust, transparent and meaningful way.

The goal of the Community Model is to convert local values and concerns about the impacts of transmission lines into maps that can be used to identify corridors and comment on routing options – recognizing unique local values such as property, hunting and fishing, agriculture, scenic views, building density and recreation.

The final products of the Community Model are:

1. A "Values Surface," which assigns locally scored community values to a map of the entire study area, at 90 meter intervals

2. A "Community Values Corridor" which represents a route from Townsend, MT to Jerome, ID with the least possible impacts to the locally assigned community values along the way.

Summary

1. The results of the community model process reflect local community values and place a heavy emphasis on **defending private property, agricultural land uses, residential land uses**, and collocating **with existing major infrastructure**. The model reflects these emphases by assigning high values to the cell in which they occur, and lower values to cells without these features.

2. The "least impact" or "most suitable" corridor for the community map has a strong affinity for public land, while avoiding "NoGo" areas and attempting to collocate with existing infrastructure where possible. Since there is no contiguous patch of public land between Townsend MT and Jerome ID, there are portions of the corridor that occur on private land. In those instances, the corridor attempts to collocate with existing infrastructure and avoid agricultural and residential land-uses. As such, the resulting community map is comprised of approximately 70% public land, and 30% private land.

3. Special Management Areas, as identified by the Bureau of Land Management, and engineering constraints, as identified by NorthWestern Energy, populate the "NoGo" areas and play a strong role in keeping the line out of special management areas where transmission lines are prohibited, strongly discouraged, or prohibitively difficult to build (due to high slope or existing physical structures, such as interstates).

4. The model tries to balance a tradeoff between *distance and impacts to community values*. The model assumes that the line will be built and attempts to find the best possible route; it will never make a judgment on whether the line should or should not be built.

Obtaining the Values

Due to constraints on the project, the Community Model was not intended to be a full public outreach process. Rather, the Community Model relied on input from the Project Liaison

Group, elected local officials, and county staff in the counties that were potentially affected by the line.

The variables used in the model, and the thematic structure of the model were, determined by the Project Liaison Group. Values were assigned to those variables and themes by elected local officials and county staff at workshops held in Pocatello, ID and Butte, MT. The workshops resulted in a *percent influence* for each theme and a *1-9 score* for each variable. These values were averaged across each state.

Processing

Value Surfaces: GIS data was collected or created for each of the 38 variables in Idaho and Montana. Due to differences in data availability and formatting between the two states, there are some slight differences in nature of the data used to represent similar variables in each state. For example, in Montana land irrigated by center pivot sprinkler has been comprehensively digitized, whereas center pivot irrigation in Idaho must be inferred from crop-type data sets and cross checked with aerial imagery.

Each theme was processed separately by aggregating each respective set of variables into a single raster layer, creating six unique and independent community value surfaces based on their *1-9 scores*.

Then, each thematic surface was multiplied by its respective *percent influence*, creating a composite value surface where each 90-meter cell was assigned a weighted score from each of the thematic categories.

Avoidance ("NoGo") Areas: *Hard* and *Soft avoidance areas* represent our attempt to make the model as realistic as possible, by reflecting management designations and engineering constraints that make construction of a transmission line either *impossible* or *difficult*.

Hard avoidance areas explicitly or physically prohibit construction of transmission lines, such as designated wilderness areas or interstate highways. These areas are removed from the model entirely.

Soft avoidance areas include management designations or geographic features that do not explicitly exclude transmission, but place general restrictions on development, such as national monuments and areas with extremely high slope. Thorough review of each of these 1,200 special management areas was not possible in our scope of work, so these areas were uniformly assigned a "maximum cost."

Corridors: Corridors are paths across the composite surface that incur the least possible impacts to community values, as assigned in the workshops.uses, and collocating with existing major infrastructure. The model reflects these emphases by assigning high values to the cell in which they occur, and lower values to cells without these features.

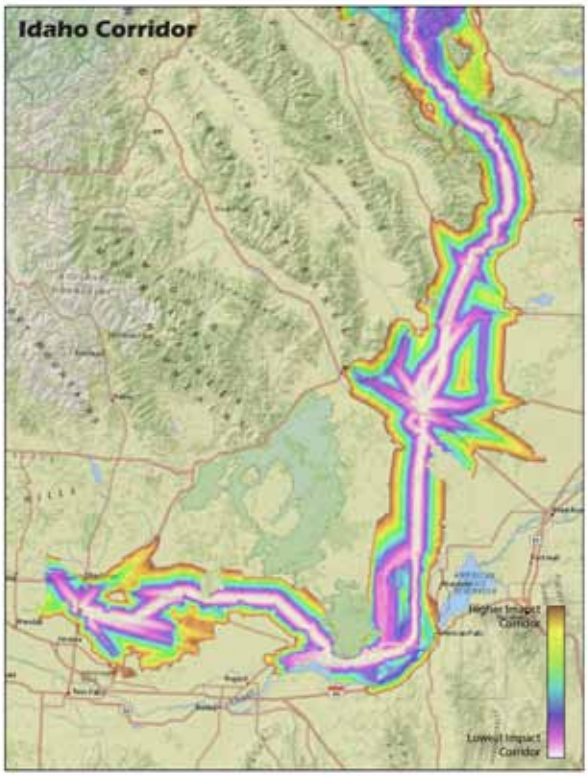
The "least impact" corridor identified across these value maps has a strong affinity for public land, while avoiding "NoGo" areas and attempting to collocated with existing infrastructure where possible. Since there is no contiguous patch of public land between Townsend MT and Jerome ID, there are portions of the corridor that occur on private land, in those instances the corridor attempts to collocate with existing infrastructure and avoid agricultural and residential land-uses.

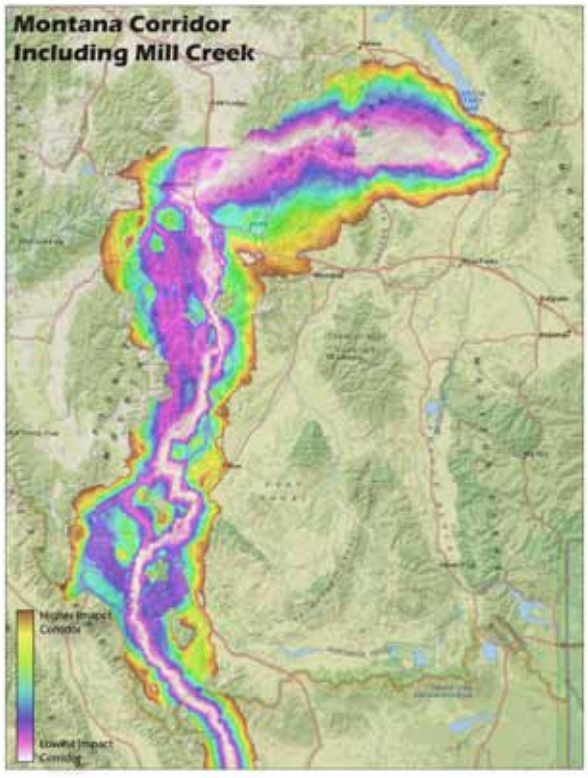
Avoidance areas, as identified by the BLM and NWE, play a strong role in keeping the line out of special management areas where transmission lines are prohibited, strongly discouraged or prohibitively difficult to build.

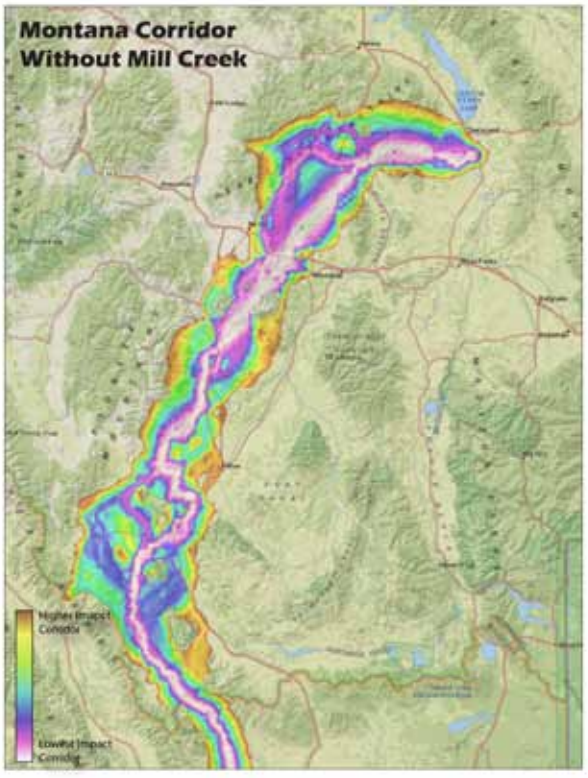
Endnotes

Concerns related to impacts on local community values from a 500 kV transmission line were quantified into accurate and spatially-explicit maps, allowing us to explore the geographic dimension of community values in an objective, relevant way.

The model tries to balance a tradeoff between distance and impacts to community values. The model assumes that the line will be built and attempts to find the best possible route; it will never make a judgment on whether the line should or should not be built.







Wildlife Model

Brent Brock, Craighead Institute, bbrock@craigheadresearch.org

The goal of the Wildlife Model is to explore alternatives for minimizing potential impacts to wildlife from NorthWestern Energy's proposed MSTI line, which would carry energy from Townsend, MT to Jerome, ID. This tool does not address whether the transmission line should be built, replicate or replace the regulatory process, or estimate the actual impacts to wildlife likely to occur. The model maps the relative effects on wildlife based on perceived and documented sensitivities according to published research or the expertise of qualified professional biologists. This map is used to generate a model that explores all possible routes connecting the endpoints of the proposed MSTI line to find the most suitable corridors that would result in the least accumulated costs in terms of reduction in wildlife populations or habitat quality.

Final Products of the Wildlife Model:

- A "*Wildlife Cost Surface,*" which assigns values to a map of relative effects on wildlife based on perceived and documented sensitivities according to published research or the expertise of qualified professional biologists over the entire study area. "Cost" refers to a relative reduction in a location's ability to support native wildlife if a new 500 kV transmission line was located there.
- A "*Least-cost Wildlife Corridor*" which represents the relative accumulated impacts on wildlife and their habitats from Townsend, MT to Jerome, ID.
- A quantitative comparison of three options connecting the Townsend substation to the I-15 corridor.

Summary

1. Minimizing impacts to wildlife requires co-location with existing major transmission lines or highways. The iconic wildlife of southwest Montana and eastern Idaho depend on the large blocks of relatively undisturbed habitat in the region. Clustering infrastructure is the best assurance for maintaining thriving wildlife populations for future generations.
2. Both public and private lands provide important habitat that should be considered when siting a transmission line. The best 5% of modeled corridors includes approximately 42% private and 58% public land.
3. Connecting through Mill Creek via the existing Bonneville Power Administration (BPA) or I-90 corridor appears to accumulate less impact than shorter, more direct routes.
4. Given our results, it appears that a process such as the MSTI Review Project would narrow the range of alternatives early on, potentially streamlining the planning process.
5. These models provide a useful tool to compare and contrast potentially competing groups of stakeholder values, or conversely, to explore areas of agreement between different stakeholders.

Obtaining the Values

Relative impacts on wildlife were mapped with the assistance of regional wildlife professionals representing federal and state agencies, and non-government organizations.

Model Weighting: Impacts were divided into four categories: Habitat Sensitivity, Habitat Fragmentation, Species of Concern (species needing management to stabilize or reverse declining populations), and Degree of Habitat Protection. GIS map layers were assembled to represent each of these components and weighted by experts to reflect the relative impacts a major transmission line are predicted to have on features within each category. For example, within the habitat sensitivity category, high quality grasslands, sagebrush and wetlands were scored higher than other habitat types because of a preponderance of evidence that species living within these habitats are most adversely impacted by tall structures like transmission towers and lines. The four impact categories were combined to reflect the way impacts on each category are likely to combine to impact wildlife in nature.

Adjusting for Existing Impacts: The same process used to weight wildlife impacts was used to account for the relative impact that existing infrastructure is already having on wildlife habitat in the study area. Layers of existing houses, roads, railroads, and major utility lines were assembled and weighted according to the impacts these structures have on wildlife. Total infrastructure weightings were used to reduce wildlife impact scores where infrastructure impacts occur.

Avoidance Areas: Special Management Areas, as identified by the Bureau of Land Management, and engineering constraints, as identified by NorthWestern Energy, populate the "NoGo" areas and play a strong role in keeping the line out of special management areas where transmission lines are prohibited, strongly discouraged, or prohibitively difficult to build (due to high slope or existing physical structures, such as interstates).

MSTI Wildlife Model

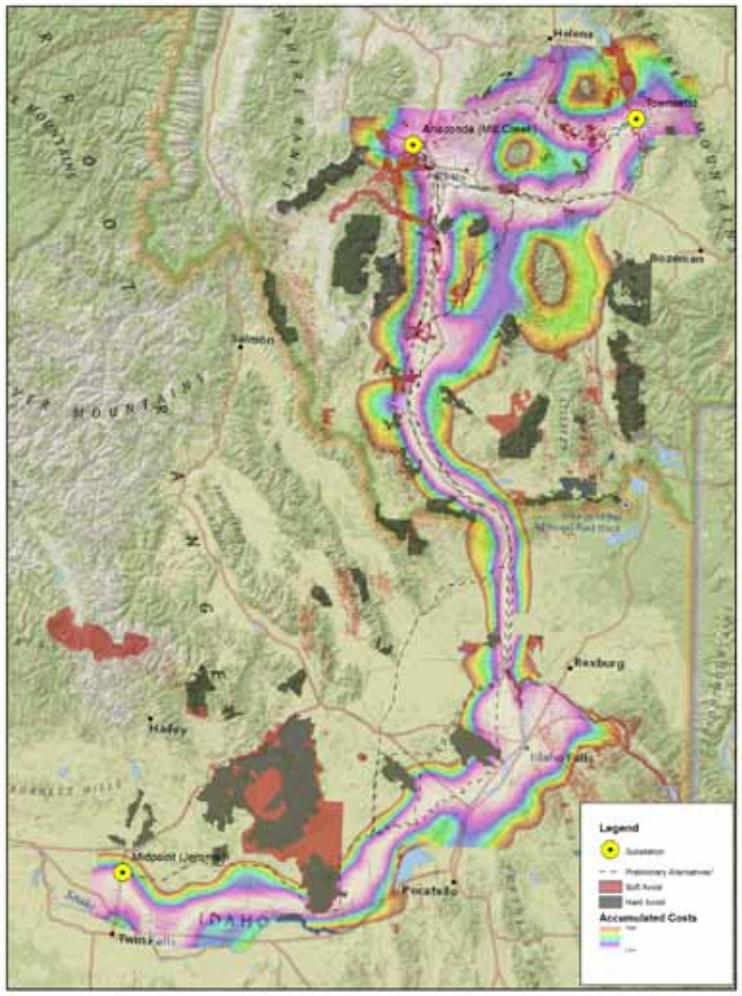


Figure 6 - Best 5% of Potential MSTI Corridors for Minimizing Wildlife Impacts. Corridors converge on I-15 corridor south of Dillon, MT. *Preliminary alternatives as of March 2010. For full resolution maps, visit: www.mistreviewproject.org

Hard and Soft avoidance areas represent our attempt to make the model as realistic as possible, by reflecting management designations and engineering constraints that make construction of a transmission line either impossible or likely difficult.

Hard avoidance areas explicitly or physically prohibit construction of transmission lines, such as designated wilderness areas or interstate highways. These areas are removed from the model entirely.

Soft avoidance areas include management designations geographic features that do not explicitly exclude transmission, but place general restrictions on development, such as national monuments and areas with extremely high slope. Thorough review of each of these 1,200 special management areas was not possible in our scope of work, so these areas were uniformly assigned a "maximum cost."

Results

The results indicate the importance of collocating new transmission lines near existing infrastructure to minimize impacts to wildlife. Large blocks of relatively undisturbed habitat occur throughout the study area which present challenges for routing. This is particularly evident in extreme southwest Montana and eastern Idaho where large blocks of high quality sagebrush habitat occur with research indicating negative impacts from towers and transmission lines on the inhabitants. However, existing roads and utility lines have likely already had an impact on adjacent habitat and therefore provide the best option for siting a line with respect to wildlife. In particular, the I-15 corridor provides the least-cost option indicated by the model.

The model indicates three potential corridors connecting the Townsend substation to the I-15 corridor. These routes are: 1) Townsend to Mill Creek via the existing BPA line, 2) Townsend to Mill Creek via the I-90 corridor, and 3) Townsend to I-15 via the Jefferson Valley. Cost distance analysis indicates that connecting Townsend to Mill Creek via I-90 may result in the least cumulative impacts to wildlife while connecting Townsend to I-15 via the Jefferson Valley would result in greater cumulative impacts despite being a shorter route.

Both public and private lands provide important wildlife habitat that should be considered when siting a transmission line. As such, the resulting wildlife map includes approximately 42% private land, and 58% public land.

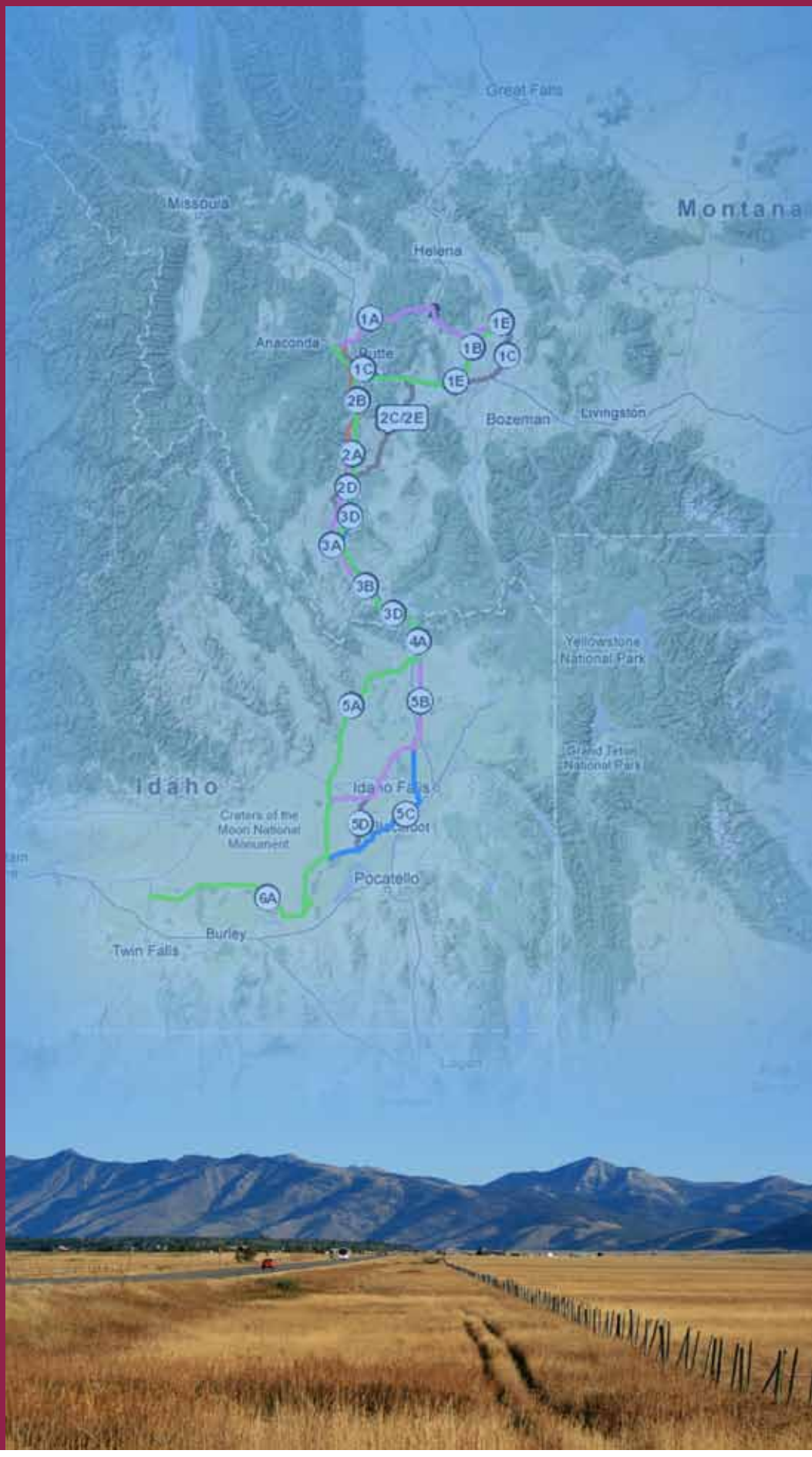
Endnotes

The model tries to balance a tradeoff between *distance* and *impacts to wildlife and their habitats*.

MSTI REVIEW PROJECT

For more information see:

www.MSTIreviewproject.org



MEMORANDUM

Dt: April 11, 2012
To: Steve Black, Department of Interior
Fr: John Shepard, Sonoran Institute; Julia Haggerty, Headwaters Economics; and Betsy Hands, Western Environmental Law Center

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Our groups support greater inter-agency coordination. Clearly, there is a need for agencies to share information and agree on key issues and obstacles to overcome in the planning process. This focus on responding effectively to transmission development proposals is also a prime opportunity to develop strategies to engage local governments and impacted communities and landowners more effectively.

We believe that successful engagement should: 1) bring together project developers, utility representatives, land managers, and leaders from affected communities; 2) begin with a discussion and mapping of community values that might be impacted by the proposed transmission line; and 3) provide information on the need, costs, and benefits associated with the proposed line.

Early engagement is important, and we believe best done in a pre-scoping or planning phase. In addition, building flexibility into the template for public engagement is critical in order to ensure the ability to accommodate rapid developments in transmission planning practices into planning efforts as well as opportunities to move stalled or broken processes forward constructively.

To help advance productive public engagement, the RRTT member agencies could pursue several approaches. One approach involves developing an audit system. Federal agencies may consider either requirements ("performance standards") for transmission developers as part of the pre-application process or provide them with a set of guidelines and resources that developers can adopt as part of the pre-application process.

There also are opportunities for federal agencies to look at other "partners" who can work with transmission developers and/or stakeholders to help meet established guidelines and to provide local officials and community leaders the information they need.

Below, this memo outlines key elements of a successful engagement process. The guidelines identified are drawn from the experiences of Headwaters Economics, Sonoran Institute, and Western Environmental Law Center, working on the MSTI Review Project and other proposed transmission lines in the Interior West.

1. **Help local officials and community leaders understand the need and context for a proposed transmission line.**

The challenge: Local officials and community leaders do not understand the complex interplay among broader policy and market forces driving transmission development. In the absence of a strong message about a project's potential merits in terms of delivering necessary, desired energy to markets, public discussion can get mired in perceived local costs of development.

For the most part, transmission developers and other project proponents invest few resources in communicating the need for the line information in manner that is credible to local officials and community leaders. Indeed the contingencies of project plans on uncertain, rapidly changing market and policy forces can appear to undermine the case for a project. Often, the "purpose and need" statements generated through environmental permit application processes do little to resolve confusion. However, there are resources—FERC dockets, regional transmission plans, reports, and policy documents—that can be mined and repurposed to communicate a clearer, more articulate message about the need for additional transmission infrastructure to meet public policy mandates about both reliability and renewable energy generation.

Guidelines

- Where possible, use credible third parties or information sources to make the case for why the proposed line is needed.
- Where appropriate, describe the broader benefits of the proposed line, including benefits to our energy security, economy, public health, and environment.
- Where appropriate, explain why there are markets ready to purchase electricity generated and delivered across hundreds of miles from other states.
- To the extent that there are utilities or other entities that have indicated a willingness to purchase electricity delivered by the proposed line, have them explain why they support the line.
- Don't oversell the project's potential for renewable energy development and be clear about what types of electricity will travel on the proposed line.
- Have this information ready before beginning discussions with local officials and community leaders about alternative routes.

2. Give local officials and community leaders a way to register their values and concerns and to monitor the inclusion of these values at multiple stages in the planning process.

The challenge: NEPA provides limited opportunities for community values to be meaningfully considered as part of environmental impact assessments for proposed transmission lines extending across hundreds of miles. Typically, by the time the NEPA process is underway, transmission developers already have narrowed their consideration of possible routes to corridors that may not reflect local values and concerns. Another barrier is the level of attention required of stakeholders in order to track the inclusion of their values and priorities in the review process. GIS tools combined with well-designed public participation processes can allow for meaningful local engagement that has a uniquely transparent, trackable quality. These approaches offer opportunities to educate local officials and community leaders on the challenges of siting transmission lines and give those stakeholders a chance to assess a range of possible transmission routes before these are selected for review under NEPA.

Guidelines

- Leverage tools and techniques that enable transparency, direct communication about how stated stakeholder priorities affect outcomes of milestones in the preplanning and planning process.

- Integrate engineering and wildlife data layers into the mapping process and use these data layers to educate local officials and community leaders about the physical, technical, and environmental constraints to transmission development.
- Once community values have been identified and mapped, ask local officials and community leaders to rank and score these values, so that maps can be developed reflecting high- to low-conflict transmission routes.
- Complete the mapping process prior to undertaking economic impact analyses (discussed below), as this will help identify communities and landscapes likely affected by transmission lines located in high- and low-conflict routes.

3. Assess the local economic costs and benefits of the line.

The challenge: Local officials and community leaders may receive conflicting or inadequate information on the economic impacts of transmission lines on the local economy. Project developers typically communicate simple, optimistic job and revenue estimates, but lack credibility with many stakeholder audiences. On the other hand the thorough socioeconomic impact analyses developed in permit application processes are problematic because they arrive late in the process, are long and technical, and rarely provide direct, straightforward answers.

Guidelines

- Be prepared to answer four basic questions: 1) Who pays for the construction of the line? 2) How will the line affect property values? 3) Will it generate local tax revenue? 4) Will it affect local residents' electricity rates?
- Start with providing a basic primer on applicable revenue collection and distributions policies (federal, state, and local).
- Explain how revenue projections are calculated and any assumptions behind these projections.
- Develop a consistent, accurate document addressing rate issues specific to the line as they are shaped by FERC open access ruling, merchant development, and other grid-wide issues and update regularly in step with policy developments.
- Cite peer-reviewed studies and other literature when offering comparable examples.
- Set up an advisory committee to review any findings and ensure that the committee selection and review process is transparent to local officials and community leaders.

***

Headwaters Economics, the Sonoran Institute, and Western Environmental Law Center are prepared to advise and assist transmission developers and others in generating project-specific information, as well as develop tools and resources that can assist others in effective community engagement in the pre-planning process. There are other resources available as well, and we hope to publicize these as we are able.

Western Environmental Law Center

Guiding Principles for Renewable Energy Development in the American West

Vision Statement

We envision a world committed to robust climate and energy policies that will avoid catastrophic climate change and conserve ecological systems critical to the persistence of the American West's iconic wildlands and communities. This vision requires, first, returning atmospheric greenhouse gas ("GHG") concentrations to historic levels by sharply reducing GHG emissions and enhancing natural carbon sequestration capacity. And, second, centering human management of natural resources on the protection and restoration of ecological resilience. Both tasks require an urgent shift away from dirty fossil fuels toward the responsible and efficient use of renewable energy from the sun, wind, and water as well as the capacity to transmit that renewable energy to homes, schools, and businesses. This goal is technologically and economically feasible; we can produce all new energy with clean sources by 2030 and replace all pre-existing fossil fuel energy with renewable energy by 2050.[1] But to do this, it is an imperative that the American West lead the way by helping to achieve the following goals:

- Reducing atmospheric concentrations of carbon dioxide ("CO2") to no more than 350 parts per million[2] by: (1) phasing out reliance on fossil fuels; and (2) managing natural systems to promote carbon sequestration. Efforts to stabilize CO2 must be complemented by near-term action to reduce other warming pollutants such as methane and black carbon.

- Ensure a just, fair, and durable transition from fossil fuels to renewable energy from the sun, wind, and water by:

    - Increasing energy efficiency through grid modernization, industrial retooling, building weatherization and insulation, electrification of vehicle fleets, and related infrastructure investment and improvement;
    - Incentivizing distributed renewable energy generation through smart, appropriate financing mechanisms and assurances that surplus generation from small scale generators will be purchased by local utilities;
    - Facilitating the development, as needed, of utility-scale renewable energy and commensurate upgrades to the transmission system to ensure that new renewable energy can be brought to market and used by homes, schools, and businesses.

We are sympathetic to concerns regarding large-scale, renewable energy generation. However, even with energy efficiency and distributed energy generation, it is our view that some measure of large-scale, renewable energy generation and grid expansion is necessary in the American West, at least in the near term.[3] In particular, we support grid expansion where doing so: (a) is necessary to bring increased renewable energy generation to market; (b) will not facilitate additional or inappropriate fossil fuel

[1] See M.Z. Jacobson, M.A. Delucchi, Energy Policy 39 (2011) 1154-1169.
[2] See Hansen, et al, Target atmospheric CO2: Where should humanity aim? (2008) at http://arxiv.org/abs/0804.1126.
[3] See Linvill, et al, Western Grid 2050: Contrasting Futures, Contrasting Fortunes (August 2011) pg. 57.

energy generation; and (c) minimizes ecological and community impacts. Export of this generation from one state to another is therefore likely, necessary and, in our view, appropriate given the interdependency of energy systems in the region. Such transmission projects must, of course, demonstrably empower expanded renewable energy generation and not further our dependence on dirty fossil fuels, in particular coal. These projects must also respect the lands and communities that they will most directly impact.

Guiding Principles

The Western Environmental Law Center believes that necessary, renewable energy generation and grid expansion projects should adhere to the following principles:

(1) Respect the needs and concerns of private landowners and local communities by providing for a transparent decision-making process. This process should include meaningful and honest engagement and incorporation of the interests and concerns of community stakeholders.

(2) Include a clear purpose and need that explains the project's benefits and value to the impacted communities, including a description of the renewable energy the project will transmit or generate and how the project fits in within broader, regional energy development plans that promote energy efficiency, distributed energy, and renewable energy.

(3) Utilize the best available scientific and commercial data to inform and identify a range of reasonable alternatives that address both location and design. Common sense measures to avoid community and environmental resources such as burying lines, advanced tower designs, and stacking, should always be explored in the analysis.

(4) Protect the West's landscapes, ecosystems, and wildlife while avoiding special areas set aside and managed for conservation purposes. These areas include core and secure habitat and key migration and travel corridors for native terrestrial wildlife as well as important or vulnerable watersheds, wetlands, and riparian areas for aquatic wildlife.

(5) Minimize the overall extent of the disturbance and need for new infrastructure such as roads by using: (a) transportation, utility, and rights-of-way corridors that are already set aside, located on degraded, disturbed or developed lands, and well-suited for new transmission lines; and (b) similarly appropriate industrial sites such as brownfields.

(6) Plan for the long-term energy needs of the American West by building flexibility and reliability into the system including, but not limited to, right sizing, demand response smart grid, and intra hourly scheduling.

We are committed to implementing these principles by facilitating renewable energy projects and challenging ill-advised dirty energy projects that undermine our transition to a just, fair, and durable economy and critical fight against climate change.

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