Transmission Lines and Property Values Impact Summary

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This document summarizes the findings of a property values summary report by Headwaters Economics as part of the MSTI Review Project - an independent, transparent analysis of the proposed MSTI transmission line that leads to better planning outcomes from a variety of perspectives. The full, detailed report is posted at www.mstireviewproject.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]

[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

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 and 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

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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.

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.