

The Economic Implications of MATS Rulemaking in Montana Final Report

On April 25, 2024, the U.S. Environmental Protection Agency released a final rule significantly revising the Mercury Air and Toxics Standards (MATS) for coal-fired electric power plants. That rule would require substantial investment at the Colstrip Steam Electric Station (SES), Montana's largest electric generating facility located in Rosebud County in southeast Montana, to continue operation. Such an investment may not be technically or financially feasible for the facility. This would render the continued operation of the Colstrip SES beyond the date of July 8, 2027, when the applicable provisions of the new MATS go into effect, in doubt.

Should the MATS rulemaking result in the premature closure of the Colstrip SES, it would be a significant economic event. This was demonstrated by a 2018 study published by the University of Montana Bureau of Business and Economic Research (Bureau of Business and Economic Research, 2018), which found that an early closure of the coal-fired generator would have sizable impacts on jobs, incomes, tax revenue and population.

A key factor that contributed to the size and scope of the impacts identified in that study is the close relationship of the generating station to the adjacent Rosebud coal mine, owned and operated by Westmoreland. The Colstrip SES is a mine mouth plant, receiving its coal via a dedicated conveyor from the mine. With no rail access to ship its coal to the broader market, any circumstance that terminates electricity generation at the Colstrip SES would bring about the closure of the mine.

The purpose of this report is to bring those estimates of economic impacts up to date, using the most current operating information and conforming to the specific timetable of the MATS rulemaking. The research question addressed is: what would be the consequences for the Montana economy, in terms of jobs, income, spending, output and population, if the new MATS rulemaking brought about the closure of the Colstrip SES in mid-2027?

The basic approach of this research is to compare two futures for the state economy. The baseline projection is a status quo scenario where the generating station and the adjacent mine continue to operate as today. The alternative scenario is premature retirement of the two facilities, with production ceasing in mid-2027. In the alternative scenario, the economic flows ultimately supported by the production of electricity from the Colstrip SES, are removed from the economy, with important implications for those who receive those flow and spend again in the economy.

The difference between these two projections of the future of the Montana economy is the economic impact of the Colstrip SES closure. We produce these projections with an economic model that has been constructed and calibrated for this purpose, leased from Regional Economic Models, Inc. (REMI). The REMI model, described in more detail in Appendix B of this report, has been extensively documented and utilized in both peer-reviewed and other research studies. The model combines a detailed, 70-sector economic output model, a multi-equation econometric model and a demographic model to serve as a powerful tool to assess policies and events affecting the economy (Cassing & Giaratini, 1992).

About This Study

This study was produced by Patrick M. Barkey, Ph.D., who has been retained by Baker Botts and Baker & Hostetler LLP. The research was conducted in June of 2024. The study has benefited from operational and financial information on actual operations of both the Colstrip SES and the Rosebud Mine provided by the facilities themselves. All findings of this study, as well as any errors or omissions, are solely the responsibility of Dr. Barkey, who produced all the research findings in this report.