

January 16, 2018

Energy and Telecommunications Interim Committee
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UNDERSTANDING ENERGY IN MONTANA

OVERVIEW

During the 2017-18 Interim, the Energy and Telecommunications Interim Committee (ETIC) staff along with subject matter experts from the Montana Department of Environmental Quality (DEQ) are updating the state's "Understanding Energy in Montana" guidebook. The committee will receive a brief overview of the book's content and design during the January 16, 2018 ETIC meeting. The guidebook serves to provide an overview of the various electricity generation and energy resources in the state and to educate citizens on the energy sector's role in the state's economy. ETIC members and the DEQ last updated the guide in the 2013-2014 Interim. In the new edition, the authors worked to reorganize the book's basic outline, improve data visualization and develop a digital version for online viewing.

Outline

The updated version of "Understanding Energy in Montana" features five sections that detail the major sectors of energy generation, coal, petroleum and natural gas production in the state. The following is the reorganized outline featured in the newest edition of the guide.

1. **Executive Summary**
2. **Title Page**
3. **Table of Contents**
4. **List of Tables and Figures**
5. **Comments on the Data**
6. **Introduction**
7. **Electricity Supply and Demand**

- a. **Electricity overview:**

Includes a discussion of recent and historical electricity supply and demand trends, an overview of electric generation stations in the state and consumption and sales data for Montana utilities.

- b. **Energy Industry Restructuring**

- i. Details the history of deregulation and restructuring from 1997 to present.

- c. **Hydropower:**

This chapter details the production at hydroelectric generation facilities in the state, provides a brief history of hydropower, details future hydroelectric generation opportunities and details the role of pumped storage in Montana.

- d. **Coal:**

Provides an overview of existing coal-fired generation facilities in the state.

- e. **Gas, Oil and Petroleum Coke:**

Details existing natural gas, fuel-oil and petroleum coke generating facilities

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- f. Wind Energy:**
Features discussion of current wind projects and the state’s capacity for future wind generation facilities.
 - g. Utility-Scale Solar Generation:**
This chapter details the state’s capacity for solar generation and provides data related to the state’s operational solar facilities.
 - h. Biomass, Methane, and Landfill Gas Generation:**
Includes data regarding the state’s biomass generation resources and an overview of existing facilities in the state
 - i. Distributed Generation:**
Provides data related to net-metering customers in Montana, installed generating capacity and costs and discusses Montana’s community solar installations.
 - j. Energy Efficiency and Demand Response Programs:**
Details existing efficiency and demand response programs and provides data related to those programs.
- 8. Electric Transmission and the Distribution Grid:**
This section outlines the basics of the grid, the history and current status of transmission in the state and explains how the grid works in Montana.
- 9. Coal**
- a. Provides data and discussion to explain the role of coal production in Montana. This section includes data concerning coal exports, severance tax collections, and the current market factors facing the coal industry.
- 10. Natural Gas**
- a. This section discusses Natural Gas as a source of energy for Montana by providing detail on the state’s supplies, transmission infrastructure and pricing trends in the state. It also discusses the use of Natural Gas as a fuel for electric generation.
- 11. Petroleum**
- a. Details crude oil production trends, the role of pipelines and refineries in the state and provides a historical view of petroleum production in the state.
- 12. Glossary**

Timeline

The updated version of “Understanding Energy in Montana” will print prior to the March 16, 2018 ETIC meeting. In addition to the examples provided during today’s meeting, a complete digital version of the print guide will be made available for the committee’s review. The team of ETIC and DEQ staff will also complete a digitally optimized version of the book for online viewing prior to the March meeting. The digital version will include larger maps, searchable copy and links to additional energy resources.