

## **2020 Wind Project Performance Annual Report**

In the Settlement Stipulation approved by the Commission in our last rate case (Docket No. EL14-058), the Company agreed to report information related to capital costs, operating costs and energy production for the Pleasant Valley and Borders wind facilities once they are completed and in operation. We agreed to provide this data beginning with the first October 1 Annual Infrastructure Rider Update following completion of the projects' construction and to continue annually until each project is moved into base rates. As part of the Settlement Stipulation approved in the 2015 Annual Infrastructure Rider Update (Docket No. EL15-038), we also agreed to include information about the Courtenay wind facility in the report once the project was complete and in service. In the Company's October 1, 2018 Infrastructure Rider Petition in Docket No. EL18-040, the Company committed to reporting the same information for the new wind facilities included in the Petition – Blazing Star I, Crowned Ridge II, Foxtail, and Lake Benton. This report contains wind facility data for calendar year 2020 for the wind facilities placed in-service before the end of that year.

The Commission's December 13, 2019 Order in Docket No. EL19-035 requires the Company to submit annual informational reports on the performance metrics of the Blazing Star II and Freeborn wind projects; however these projects did not achieve commercial operation until 2021, so there is no 2020 data to report. We will include them in next year's report containing 2021 data.

### **Pleasant Valley**

The Pleasant Valley Wind Farm has an operating capacity of 200 MW and was placed in-service in November 2015. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$331.8 million through 2020. This is less than our initially forecasted project cost of \$342.9 million. For 2020, the facility's O&M expenditure was \$4,198,335, and the native congestion and loss cost for the facility was \$3,450,394. Attachment A provides detailed monthly information about the plant's performance in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

### Pleasant Valley Costs

	Capital to Date	O&M		Congestion	Loss	Total
2016	\$332,065,758	\$5,721,195		\$688,514	\$277,899	\$966,413
2017	\$331,699,144	\$7,372,656		\$248,007	\$248,007	\$496,013
2018 <sup>1</sup>	\$331,791,894	\$4,982,159		\$803,679	\$340,362	\$1,144,041
2019	\$331,791,894	\$5,666,839		\$1,573,415	\$404,457	\$1,977,843
2020	\$331,791,894	\$4,198,335		\$3,159,465	\$290,929	\$3,450,394

### Border

The Border Wind Farm has an operating capacity of 150 MW and was placed in-service in December 2015. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$261.6 million through 2020. This is slightly less than our initially forecasted project cost of \$261.8 million. For 2020, the facility's O&M expenditure was \$2,740,686, and the native congestion and loss cost for the facility was \$3,264,716. Attachment A provides detailed monthly information about the plant's performance in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

### Border Costs

	Capital to Date	O&M		Congestion	Loss	Total
2016	\$261,264,067	\$4,538,134		\$1,721,177	\$1,206,315	\$2,927,492
2017	\$261,685,798	\$4,879,690		\$796,022	\$1,213,285	\$2,009,307
2018 <sup>2</sup>	\$261,586,803	\$2,792,178		\$95,735	\$738,778	\$834,513
2019	\$261,586,803	\$3,151,033		\$897,616	\$776,752	\$1,674,369
2020	\$261,586,803	\$2,740,686		\$2,317,899	\$946,817	\$3,264,716

### Courtenay Wind Farm

The Courtenay facility has an operating capacity of 200 MW and was placed in-service in December 2016. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$289.9 million through 2020. This is less than our initially forecasted project cost of \$300 million. For 2020, the facility's O&M expenditure was \$3,329,025, and the native congestion and loss cost for the facility was \$2,840,557. Attachment A provides detailed monthly information about the plant's performance

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<sup>1</sup> Please note that due to a database error, the 2018 Congestion, Loss, and Total costs provided in Docket No. EL19-035 for Pleasant Valley, Borders, and Courtenay Wind Farms only reflected the Day Ahead market and did not include the Real Time data as they had in previous years. We updated the 2018 costs in Docket No. EL20-026 to also include the Real Time data.

<sup>2</sup> See footnote 2.

in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

#### **Courtenay Costs**

	<b>Capital to Date</b>	<b>O&amp;M</b>		<b>Congestion</b>	<b>Loss</b>	<b>Total</b>
2016	\$286,031,744	\$1,318,236		\$206,724	\$255,027	\$461,751*
2017	\$287,031,302	\$5,724,832		\$1,644,197	\$1,481,164	\$3,125,361
2018 <sup>3</sup>	\$286,946,605	\$4,929,521		\$978,777	\$1,152,024	\$2,130,800
2019	\$286,949,324	\$3,962,437		\$947,646	\$890,189	\$1,837,835
2020	\$286,949,324	\$3,329,025		\$2,049,662	\$790,895	\$2,840,557

\*Online for testing Aug-Dec 2016

#### **Foxtail**

The Foxtail facility has an operating capacity of 150 MW and was placed in-service in December 2019. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$232.5 million through 2020. This is less than our initially forecasted project cost of \$242.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2020, the facility's O&M expenditure was \$3,347,343, and the native congestion and loss cost for the facility was \$7,746,091. Attachment A provides detailed monthly information about the plant's performance in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

#### **Foxtail Costs**

	<b>Capital to Date</b>	<b>O&amp;M</b>		<b>Congestion</b>	<b>Loss</b>	<b>Total</b>
2019	\$239,372,031	\$50,070		\$9,991	\$8,659	\$18,650
2020	\$232,460,381*	\$3,347,343		\$6,898,705	\$847,386	\$7,746,091

\*There was a \$6.9M credit from Montana-Dakota Utilities Company in 2020 related to a Generation Interconnection Agreement.

#### **Lake Benton**

The Lake Benton facility has an operating capacity of 100 MW and was placed in-service in November 2019. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$155.3 million through 2020. This is less than our initially forecasted project cost of \$166.7 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2020, the facility's O&M expenditure was \$1,553,313, and the native congestion and loss cost for the facility was \$2,874,476. Attachment A provides detailed monthly information about the plant's performance in 2020,

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<sup>3</sup> See footnote 2.

including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

#### Lake Benton Costs

	Capital to Date	O&M		Congestion	Loss	Total
2019	\$152,817,558	\$173,537		\$132,139	\$126,053	\$258,192
2020	\$155,283,035	\$1,553,313		\$2,225,685	\$648,791	\$2,874,476

#### Blazing Star I

The Blazing Star I facility has an operating capacity of 200 MW and was placed in-service in April 2020. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$315.1 million through 2020. This is less than our initially forecasted project cost of \$318.8 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2020, the facility's O&M expenditure was \$3,354,474, and the native congestion and loss cost for the facility was \$3,147,750. Attachment A provides detailed monthly information about the plant's performance in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

#### Blazing Star I Costs

	Capital to Date	O&M		Congestion	Loss	Total
2020	\$315,115,789	\$3,354,474		\$2,548,981	\$598,769	\$3,147,750

#### Crowned Ridge II

The Crowned Ridge II facility has an operating capacity of 200 MW and was placed in-service in December 2020. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$293.6 million through 2020. This is less than our initially forecasted project cost of \$315.4 million, adjusted for impacts from the Tax Cuts and Jobs Act and for the project's reduction in size from 300 to 200 MW. For 2020, the facility's O&M expenditure was \$199,526, and the native congestion and loss cost for the facility was \$487,049. Attachment A provides detailed monthly information about the plant's performance in 2020, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

#### Crowned Ridge II Costs

	Capital to Date	O&M		Congestion	Loss	Total
2020	\$293,621,518	\$199,526		\$322,516	\$164,533	\$487,049