

2021 Wind Project Performance Annual Report

Pursuant to Settlements, Commission Orders, or commitments otherwise made Docket Nos. EL14-058, EL15-038, EL18-040, EL19-035, EL20-026 and EL21-026, we provide information related to capital costs, operating costs and energy production for the wind projects currently being recovered through the Infrastructure Rider or through base rates that operated in the calendar year 2021. Projects that achieved commercial operation in 2022 will be included in next year’s report containing 2022 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 2021. This is less than our initially forecasted project cost of \$342.9 million. For 2021, the facility’s O&M expenditure was \$4,724,786 and the native congestion and loss cost for the facility was \$7,249,737. Attachment A provides detailed monthly information about the plant’s performance in 2021, 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	\$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
2021	\$331,791,894	\$4,724,486		\$6,683,660	\$566,078	\$7,249,737

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 2021. This is slightly less than our initially forecasted project cost of \$261.8 million. For 2021, the facility’s O&M expenditure was \$2,634,529 and the native congestion and loss cost for the facility was \$2,637,094. Attachment A provides detailed monthly information about the plant’s performance in 2021, 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 ¹	\$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
2021	\$261,586,803	\$2,634,529		\$1,731,879	\$905,215	\$2,637,094

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 2021. This is less than our initially forecasted project cost of \$300 million. For 2021, the facility's O&M expenditure was \$4,134,883 and the native congestion and loss cost for the facility was \$7,220,604. Attachment A provides detailed monthly information about the plant's performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Courtenay Costs

	Capital to Date	O&M		Congestion	Loss	Total
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 ²	\$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
2021	\$286,949,324	\$4,134,883		\$5,731,415	\$1,489,189	\$7,220,604

*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 \$230.2 million through 2021. This is less than our initially forecasted project cost of \$242.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2021, the facility's O&M expenditure was \$455,203 and the native congestion and loss cost for the facility was \$19,260,998. Attachment A provides detailed monthly information about the plant's performance in 2021, including the

¹ See footnote 2.

² See footnote 2.

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

Foxtail Costs

	Capital to Date	O&M		Congestion	Loss	Total
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
2021	\$230,240,048	\$455,203		\$17,380,575	\$1,880,423	\$19,260,998

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

Lake Benton II

The Lake Benton II 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 \$157.1 million through 2021. This is less than our initially forecasted project cost of \$166.7 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2021, the facility's O&M expenditure was \$2,285,413 and the native congestion and loss cost for the facility was \$9,428,786. Attachment A provides detailed monthly information about the plant's performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Lake Benton II 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
2021	\$157,093,781	\$2,285,413		\$7,996,904	\$1,431,882	\$9,428,786

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 \$315.6 million through 2021. This is less than our initially forecasted project cost of \$318.8 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2021, the facility's O&M expenditure was \$3,658,497 and the native congestion and loss cost for the facility was \$13,768,891. Attachment A provides detailed monthly information about the plant's performance in 2021, 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
2021	\$315,595,293	\$3,658,497		\$11,928,794	\$1,840,097	\$13,768,891

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 \$299.8 million through 2021. 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 2021, the facility's O&M expenditure was \$3,117,517 and the native congestion and loss cost for the facility was \$20,451,610. 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
2021	\$299,807,296	\$3,117,517		\$17,997,113	\$2,454,497	\$20,451,610

Blazing Star II

The Blazing Star II facility has an operating capacity of 200 MW and was placed in-service in February 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$342.5 million through 2021. This is more than our initially forecasted project cost of \$320.2 million, adjusted for impacts from the Tax Cuts and Jobs Act. As discussed in more detail in Docket No. EL20-026, the Blazing Star II wind project experienced cost increases as a result of pandemic-related supply chain delays. For 2021, the facility's O&M expenditure was \$4,782,356 and the native congestion and loss cost for the facility was \$13,640,459. Attachment A provides detailed monthly information about the plant's performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Blazing Star II Costs

	Capital to Date	O&M		Congestion	Loss	Total
2021	\$342,502,116	\$4,782,356		\$11,826,371	\$1,814,088	\$13,640,459

Freeborn

The Freeborn facility has an operating capacity of 200 MW and was placed in-service in April 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$317.9 million through 2021. This is more than our initially forecasted project cost of \$285.0 million, adjusted for impacts from the Tax Cuts and Jobs Act. As discussed in more detail in Docket No. EL20-026, the Freeborn wind project experienced cost increases as a result of pandemic-related supply chain delays as well as site permitting disputes. For 2021, the facility’s O&M expenditure was \$3,577,030 and the native congestion and loss cost for the facility was \$8,993,505. Attachment A provides detailed monthly information about the plant’s performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Freeborn Costs

	Capital to Date	O&M		Congestion	Loss	Total
2021	\$317,922,660	\$3,577,030		\$7,882,452	\$1,111,053	\$8,993,505

Jeffers

The Jeffers facility has an operating capacity of 44 MW and was placed in-service in January 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$72.0 million through 2021. This is slightly more than our initially forecasted project cost of \$71.8 million. For 2021, the facility’s O&M expenditure was \$1,230,980 and the native congestion and loss cost for the facility was \$3,750,395. Attachment A provides detailed monthly information about the plant’s performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Jeffers Costs

	Capital to Date	O&M		Congestion	Loss	Total
2021	\$72,009,432	\$1,230,980		\$3,197,987	\$552,408	\$3,750,395

Community Wind North

The Community Wind North facility has an operating capacity of 26.4 MW and was placed in-service in January 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$66.5 million through 2021. This is slightly more than our initially forecasted project cost of \$66.3 million. For 2021, the facility’s O&M expenditure was \$723,486 and the native congestion and loss cost for the facility was \$2,122,562. Attachment A provides detailed monthly information about the plant’s performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Community Wind North Costs

	Capital to Date	O&M		Congestion	Loss	Total
2021	\$66,544,115	\$723,486		\$1,823,680	\$298,882	\$2,122,562

Mower

The Mower facility has an operating capacity of 98.9 MW and was placed in-service in March 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was \$158.3 million through 2021. This is less than our initially forecasted project cost of \$168.3 million. For 2021, the facility’s O&M expenditure was \$1,416,992 and the native congestion and loss cost for the facility was \$2,938,565. Attachment A provides detailed monthly information about the plant’s performance in 2021, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Mower Costs

	Capital to Date	O&M		Congestion	Loss	Total
2021	\$158,262,267	\$1,416,992		\$2,667,297	\$271,268	\$2,938,565