2022 Wind Project Performance Annual Report

Pursuant to Settlements, Commission Orders, or commitments otherwise made in Docket Nos. EL14-058, EL15-038, EL18-040, EL19-035, EL20-026, EL21-026, and EL22-026, 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 2022. Projects that achieve commercial operation in 2023 will be included in next year's report containing 2023 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 2022. This is less than our initially forecasted project cost of $342.9 million. For 2022, the facility's O&M expenditure was $4,421,390 and the native congestion and loss cost for the facility was $376,666. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$331,791,894	$4,421,390		$50,124	$326,542	$376,666

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 2022. This is slightly less than our initially forecasted project cost of $261.8 million. For 2022, the facility's O&M expenditure was $2,537,703 and the native congestion and loss cost for the facility was $792,338. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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	$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
2022	$261,586,803	$2,537,703		$349,280	$443,059	$792,338

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 $286.9 million through 2022. This is less than our initially forecasted project cost of $300 million. For 2022, the facility's O&M expenditure was $5,490,724 and the native congestion and loss cost for the facility was $290,548. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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	$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
2022	$286,949,324	$5,490,724		$(231,684)	$522,232	$290,548

*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 $230.3 million through 2022. This is less than our initially forecasted project cost of $242.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2022, the facility's O&M expenditure was $3,145,812 and the native congestion and loss cost for the facility was $6,807,843. Attachment 14A provides detailed monthly information about the plant's performance in 2022, including the

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
2022	$230,285,739	$3,145,812		$6,058,778	$749,064	$6,807,843

*There was a $6.9 million 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 $158.3 million through 2022. This is less than our initially forecasted project cost of $166.7 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2022, the facility's O&M expenditure was $(224,092) and the native congestion and loss cost for the facility was $2,512,025. The overall O&M was negative due to waking and liquidated damages payments that were credited against normal O&M. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$158,310,519	$(224,092)		$1,797,591	$714,435	$2,512,025

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 2022. This is less than our initially forecasted project cost of $318.8 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2022, the facility's O&M expenditure was $5,072,596 and the native congestion and loss cost for the facility was $3,435,723. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$315,596,497	$5,072,596		$2,629,608	$806,115	$3,435,723

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 $301.5 million through 2022. 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 2022, the facility's O&M expenditure was $3,955,171 and the native congestion and loss cost for the facility was $6,931,068. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$301,462,920	$3,955,171		$5,943,861	$987,207	$6,931,068

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 $342.8 million through 2022. 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 2022, the facility's O&M expenditure was $6,344,246 and the native congestion and loss cost for the facility was $3,558,959. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$342,833,986	$6,344,246		$2,733,779	$825,180	$3,558,959

Freeborn

The Freeborn facility has an operating capacity of 200 MW and was placed in-service in May 2021. Total capital cost to build the facility, including transmission, but excluding AFUDC, was $318.1 million through 2022. 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 2022, the facility's O&M expenditure was $5,589,784 and the native congestion and loss cost for the facility was $2,474,178. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$318,132,693	$5,589,784		$1,672,371	$801,807	$2,474,178

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 2022. This is slightly more than our initially forecasted project cost of $71.8 million. For 2022, the facility's O&M expenditure was $1,332,274 and the native congestion and loss cost for the facility was $764,878. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$72,029,057	$1,332,274		$478,675	$286,203	$764,878

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 $66.6 million through 2022. This is slightly more than our initially forecasted project cost of $66.3 million. For 2022, the facility's O&M expenditure was $774,067 and the native congestion and loss cost for the facility was $533,122. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$66,622,809	$774,067		$404,674	$128,448	$533,122

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 $158.4 million through 2022. This is less than our initially forecasted project cost of $168.3 million. For 2022, the facility's O&M expenditure was $2,382,484 and the native congestion and loss cost for the facility was $82,580. Attachment 14A provides detailed monthly information about the plant's performance in 2022, 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
2022	$158,385,544	$2,382,484		$(105,874)	$188,454	$82,580

Dakota Range I & II

The Dakota Range I & II facility has an operating capacity of 302.4 MW and was placed in-service in January 2022. Total capital cost to build the facility, including transmission, but excluding AFUDC, was $377.9 million through 2022. This is more than our initially forecasted project cost of $374.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. For 2022, the facility's O&M expenditure was $7,227,695 and the native congestion and loss cost for the facility was $15,521,792. Attachment 14A provides detailed monthly information about the plant's performance in 2022, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Dakota Range I & II Costs

	Capital to Date	O&M		Congestion	Loss	Total
2022	$377,866,456	$7,227,695		$13,678,911	$1,842,881	$15,521,792

Rock Aetna

The Rock Aetna facility has an operating capacity of 22.3 MW and was placed in-service in December 2022. Combined with Northern Wind, which was placed in-service in January 2023, the total combined capacity is 122 MW. Total capital cost to build the Rock Aetna facility, including transmission, but excluding AFUDC, was $33.4 million through 2022. The combined initially forecasted project cost for Northern Wind and Rock Aetna was $215.6 million. For 2022, Rock Aetna's O&M expenditure was $17,243 and the native congestion and loss cost for the facility was $35,717. We will provide data on Northern Wind beginning in 2023 in our next wind performance annual report. Attachment 14A provides detailed monthly information about the plant's performance in 2022, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Rock Aetna Costs

	Capital to Date	O&M		Congestion	Loss	Total
2022	$33,419,111	$17,243		$13,840	$21,877	$35,717

Nobles

The repowered Nobles facility has an operating capacity of 201 MW and was placed in-service in November 2022. Total capital cost to build the facility, including transmission, but excluding AFUDC, was $211.9 million through 2022. This is less than our initially forecasted project cost of $249.2 million. For 2022, the facility's O&M expenditure was $4,127,913 and the native congestion and loss cost for the facility was $1,749,530. Attachment 14A provides detailed monthly information about the plant's performance in 2022, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Nobles Costs

	Capital to Date	O&M		Congestion	Loss	Total
2022	$211,935,716	$4,127,913		$1,123,278	$626,253	$1,749,530