2024 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, EL22-026, EL23-025, and EL24-029, 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 2024. Projects that achieve commercial operation in 2025 will be included in next year's report containing 2025 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 2024. This is less than our initially forecasted project cost of $342.9 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. The increase in congestion costs for the Pleasant Valley facility stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$331,791,894	$4,360,687		$3,652,362	$590,978	$4,243,340
2024	$331,791,894	$4,966,544		$2,934,605	$674,840	$3,609,444

Border Winds

The Border Winds facility 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 2024. This is slightly less than our initially forecasted project cost of $261.8 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor. The Company notes that due to rare adverse drought conditions impacting Manitoba Hydro, Border Winds, which is located in northern Minnesota, gained higher revenues for generation relative to what load centers paid. This is what is driving the negative total loss figure in 2023.

Border Winds 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
2023	$261,586,803	$2,607,338		$(1,049,336)	$554,159	$(495,177)
2024	$261,586,802	$3,156,931		$1,930,987	$431,201	$2,362,187

Courtenay

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 2024. This is less than our initially forecasted project cost of $300 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor. The Company notes that due to rare adverse drought conditions impacting Manitoba Hydro, Courtenay Wind, which is located in the northern region of NSP territory, gained higher revenues for generation relative to what load centers paid. This is what is driving the negative total figure in 2023.

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
2023	$286,949,324	$4,187,847		$(735,516)	$585,063	$(150,453)
2024	$286,071,556	$4,579,151		$(122,282)	$670,112	$547,830

*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 2024. This is less than our initially forecasted project cost of $242.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. The increase in congestion costs for Foxtail stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$230,285,739	$903,247		$8,051,731	$1,071,728	$9,123,459
2024	$230,285,739	$1,954,945		$9,547,027	$1,104,624	$10,651,651

*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 2024. This is less than our initially forecasted project cost of $166.7 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$158,310,519	$1,692,305		$5,397,834	$1,116,499	$6,514,333
2024	$158,310,519	$2,194,711		$5,855,624	$1,104,196	$6,959,820

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 2024. This is less than our initially forecasted project cost of $318.8 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. The increase in congestion costs for Blazing Star I facility stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor. In 2024, Blazing Star I was impacted by some transmission-related outages in the region that resulted in higher congestion-related costs. These outages also impacted Blazing Star II and Nobles Wind farms.

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
2023	$315,596,497	$3,729,582		$6,770,998	$1,220,323	$7,991,321
2024	$315,596,497	$5,224,444		$10,044,358	$1,394,601	$11,438,960

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 $302.5 million through 2024. 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. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. The increase in congestion costs for Crowned Ridge II facility stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$302,518,867	$3,242,486		$12,512,037	$1,735,505	$14,247,542
2024	$302,518,867	$3,984,037		$13,363,684	$1,978,480	$15,342,164

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 2024. This is more than our initially forecasted project cost of $320.2 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure,

the native congestion, and loss cost. The increase in congestion costs for Blazing Star II facility stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor. In 2024, Blazing Star II was impacted by some transmission-related outages in the region that resulted in higher congestion-related costs. These outages also impacted Blazing Star I and Nobles Wind farms.

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
2023	$342,835,842	$4,786,715		$6,896,627	$1,249,031	$8,145,659
2024	$342,861,265	$5,116,402		$9,964,445	$1,390,862	$11,355,307

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 2024. This is more than our initially forecasted project cost of $285.0 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$318,136,304	$4,974,955		$4,383,343	$1,334,645	$5,717,988
2024	$318,136,304	$6,316,679		$5,115,798	$1,383,664	$6,499,462

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 2024. This is slightly more than our initially forecasted project cost of $71.8 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$72,029,057	$1,179,159		$1,300,903	$435,416	$1,736,319
2024	$72,029,057	$1,205,239		$2,128,339	$496,610	$2,624,949

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 2024. This is slightly more than our initially forecasted project cost of $66.3 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$66,622,809	$748,779		$959,081	$207,702	$1,166,784
2024	$66,622,809	$649,923		$1,262,614	$233,950	$1,496,564

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 2024. This is less than our initially forecasted project cost of $168.3 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed

monthly information about the plant's performance in 2024, 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
2023	$158,385,544	$2,194,431		$1,159,253	$378,061	$1,537,314
2024	$158,385,544	$2,318,263		$905,365	$446,116	$1,351,481

Dakota Range I and II

The Dakota Range I and 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 $377.7 million through 2024. This is more than our initially forecasted project cost of $374.4 million, adjusted for impacts from the Tax Cuts and Jobs Act. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. The increase in congestion costs for Dakota Range facility stems from allocating the lower priced wind resource to our customer base in lieu of the wholesale market. This larger allocation of a low-cost wind resource is accompanied with the associated congestion costs for that generation. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Dakota Range I and II Costs

	Capital to Date	O&M		Congestion	Loss	Total
2022	$377,886,456	$7,227,695		$13,678,911	$1,842,881	$15,521,792
2023	$377,723,568	$3,551,581		$24,948,638	$2,892,619	$27,841,257
2024	$377,725,482	$5,309,786		$18,579,181	$2,166,225	$20,745,406

Rock Aetna

The Rock Aetna facility has an operating capacity of 22.3 MW and was placed in-service in December 2022. Total capital cost to build the Rock Aetna facility, including transmission, but excluding AFUDC, was $34.2 million through 2024. The combined initially forecasted project cost for Northern Wind and Rock Aetna was $215.6 million compared to the combined $219.96 million to date. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment

14A provides detailed monthly information about the plant's performance in 2024, 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
2023	$34,203,777	$489,102		$822,610	$147,211	$969,820
2024	$34,228,366	$378,998		$1,150,188	$167,741	$1,317,929

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 $212.6 million through 2024. This is less than our initially forecasted project cost of $249.2 million. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor. The increase in total loss in 2023 stems from different operating conditions in 2022 when Nobles Wind (not yet repowered) was no longer accruing PTCs, so the wind facility was operated to mitigate operating costs like congestion. However, in 2023 the Repowered Nobles Wind qualified for PTCs, so the Company prioritized maximizing PTC value leading to incurring more congestion costs for that year. In 2024, Nobes Wind was impacted by some transmission-related outages in the region that resulted in higher congestion related costs.

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
2023	$212,589,117	$4,009,880		$9,095,905	$1,364,029	$10,459,934
2024	$213,146,348	$4,980,043		$15,064,795	$1,818,119	$16,882,914

Northern Wind

The repowered Northern Wind facility has an operating capacity of 100 MW and was placed in-service in January 2023. Total capital cost to build the Northern Wind facility, including transmission, but excluding AFUDC, was $185.9 million through 2024. The combined initially forecasted project cost for Northern Wind and Rock

Aetna was $215.6 million compared to the combined $219.96 million to date. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Northern Wind Costs

	Capital to Date	O&M		Congestion	Loss	Total
2023	$185,753,220	$1,704,617		$3,578,758	$627,179	$4,205,937
2024	$185,957,788	$1,958,408		$5,173,937	$764,227	$5,938,164

Grand Meadow

The Grand Meadow wind facility has an operating capacity of 100.5 MW and was placed in-service in March 2023. Total capital cost to build the Grand Meadow wind facility, including transmission, but excluding AFUDC, was $112.6 million through 2024. The initially forecasted project cost for Grand Meadow was **[PROTECTED DATA BEGINS PROTECTED DATA ENDS]**. See the table below for the facility's O&M expenditure, the native congestion, and loss cost. Attachment 14A provides detailed monthly information about the plant's performance in 2024, including the amount of energy produced, curtailment, average wind speed, and average net capacity factor.

Grand Meadow Costs

	Capital to Date	O&M		Congestion	Loss	Total
2023	$112,259,179	$2,554,446		$1,495,391	$229,354	$1,724,745
2024	$112,690,680	$2,859,823		$1,465,408	$332,384	$1,797,792