PUBLIC - NOT PUBLIC DATA HAS BEEN EXCISED

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY DEUEL HARVEST WIND ENERGY SOUTH LLC FOR ENERGY FACILITY PERMITS OF A WIND ENERGY FACILITY AND A 345-kV TRANSMISSION FACILITY IN DEUEL COUNTY, SOUTH DAKOTA FOR THE SOUTH DEUEL WIND PROJECT	* * * * * * * * * *	**DEUEL HARVEST WIND ENERGY SOUTH LLC'S SUPPLEMENTAL RESPONSES TO STAFF'S SIXTH SET OF DATA REQUESTS NOS. 6-1, 6-2 and 6-3** **EL 24-023**

Deuel Harvest Wind Energy South LLC ("South Deuel Wind") provides the following supplemental responses to Staff's Sixth Set of Data Requests in the above-captioned matter.

6-1) Refer to Exhibit 1-59(b), Page 9 of 9. The tipping fee for concrete stabilized soil is **[begin confidential information]** [redacted]. **[end confidential information]** Please explain why the tipping fee assumption is **[begin confidential information]** [redacted] **[end confidential information]** for concrete stabilized soil when the tipping fee assumption for most other materials is $47.35/ton. If this cost assumption is an error, please provide a revised decommissioning cost estimate.

Monica Monterrosa/Burns & McDonnell: South Deuel Wind's analysis of this request is underway and will be supplemented accordingly.

South Deuel Wind's Supplemental Response by Monica Monterrosa/Burns & McDonnell: The tipping fee for concrete stabilized soil was in error. It should have been $0.00 consistent with the estimation for other road material. Crushed rock from roads, balance-of-plant areas, and turbine foundation areas is assumed to have value as a commodity for reuse. The concrete stabilized soil will be broken up upon removal and similarly is assumed to have value as a commodity for reuse. The cost to remove the concrete stabilized soil, break-it up, load it into dump trucks, and haul it off-site is assumed to be at the expense of the Project. However, it is assumed the third party will accept the crushed concrete stabilized soil at no charge. Therefore, the cost of disposal is excluded from the estimate. In addition, the hauling costs are slightly increased, because rather than an assumption that the concrete stabilized soil would be hauled to a landfill, it is assumed to be hauled to a local municipality like the crushed rock, which adds two miles. Revised Table A-1s for the GE 3.8-154 and Vestas V163-4.5 Decommissioning Plans reflecting these updates—elimination of the tipping fee and revised hauling costs—are provided in **Exhibit 6-1**.

6-2) Refer to the Supplemental Response to Staff DR 1-59(a), Section 4.3, Decommissioning Assumptions. The decommissioning costs are presented in current dollars (2024 -

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$3,396,000 or $49,900 per turbine). Assuming a 30-year operational life and an in-service date of 2026, please provide a revised total decommissioning cost estimate in total and per turbine in 2056 dollars to reflect the decommissioning cost at the end of the life. Please provide supporting work papers to show how inflation was estimated and calculated.

Monica Monterrosa; Burns & McDonnell: South Deuel Wind's analysis of this request is underway and will be supplemented accordingly, using costs updated in response to this 6th Set of Data Requests.

South Deuel Wind's Supplemental Response by Monica Monterrosa/Burns & McDonnell: Please see **Exhibit 6-2**.

6-3) Refer to Ms. Monterrosa's rebuttal testimony, lines 107 – 111. Does changing the removal depth of turbine foundations from 42 inches to 48 inches increase decommissioning costs? Please explain.

Monica Monterrosa/ Burns & McDonnell: Yes, increasing the removal depth of turbine foundations from 42 inches to 48 inches will increase decommissioning costs. South Deuel Wind's analysis of this request is underway and may be supplemented accordingly, including with calculations demonstrating the scope of the increased costs were the removal depth increased to 48 inches.

South Deuel Wind's Supplemental Response by Monica Monterrosa/Burns & McDonnell: The Table A-1s for the GE 3.8-154 and Vestas V163-4.5 Decommissioning Plans provided in **Exhibit 6-1** reflect the increased decommissioning costs associated with increasing the removal depth of turbine foundations from 42 inches to 48 inches. For the Vestas V163-4.5, it resulted in a cost increase of $81,650. For the GE 3.8-154, the increase is $96,600.

Dated this 10th day of January 2025.

By *s/ Lisa Agrimonti*
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Table A-1: Estimated Cost for Wind Turbine Decommissioning GE 3.8-154 (2024$)

South Duel Wind Project
Decommissioning Cost Evaluation

Wind Turbine Removal Cost		
Removal	$	4,992,000
Hauling & Disposal	$	504,000
Total	**$**	**5,496,000**
Scrap Value	**$**	**(7,524,000)**
Wind Turbine Foundation Removal Cost		
Removal	$	426,000
Hauling & Disposal	$	464,000
Total	**$**	**890,000**
Collection System Removal Cost		
Removal	$	214,000
Total	**$**	**214,000**
Substation Removal Cost		
Removal	$	278,000
Hauling & Disposal	$	27,000
Total	**$**	**305,000**
Scrap Value	**$**	**(249,000)**
Transmission Line Removal Cost		
Equipment Removal	$	339,000
Hauling & Disposal	$	21,000
Total	**$**	**360,000**
Scrap Value	**$**	**(65,000)**
Civil Works Removal Cost		
Removal	$	529,000
Hauling & Disposal	$	1,351,000
Grading & Seeding Costs	$	147,000
Total	**$**	**2,027,000**
O&M Facility Removal		
Removal	$	83,000
Hauling & Disposal	$	55,000
Total	**$**	**138,000**
Scrap Value	**$**	**(28,000)**
ADLS Tower Removal		
Removal	$	40,000
Hauling & Disposal	$	2,000
Total	**$**	**42,000**
Scrap Value	**$**	**(5,000)**
Met Tower Removal		
Removal	$	28,000
Total	**$**	**28,000**
Scrap Value	**$**	**(3,000)**
Other Costs		
Oils & Chemicals Removal & Disposal	$	71,000
Total	**$**	**71,000**
Total Estimated Cost	**$**	**9,571,000**
Owner Indirects (5%)	**$**	**478,550**
Contingency (10%)	**$**	**957,100**
Total Gross Cost	**$**	**11,006,650**
Total Scrap Value	**$**	**(7,874,000)**
Total Net Cost	**$**	**3,132,650**

Table A-1: Estimated Cost for Wind Turbine Decommissioning V163-4.5 (2024$)

South Duel Wind Project
Decommissioning Cost Evaluation

Wind Turbine Removal Cost		
Removal	$	4,248,000
Hauling & Disposal	$	635,000
Total	**$**	**4,883,000**
Scrap Value	**$**	**(8,122,000)**
Wind Turbine Foundation Removal Cost		
Removal	$	357,000
Hauling & Disposal	$	389,000
Total	**$**	**746,000**
Collection System Removal Cost		
Removal	$	190,000
Total	**$**	**190,000**
Substation Removal Cost		
Removal	$	278,000
Hauling & Disposal	$	27,000
Total	**$**	**305,000**
Scrap Value	**$**	**(249,000)**
Transmission Line Removal Cost		
Equipment Removal	$	339,000
Hauling & Disposal	$	21,000
Total	**$**	**360,000**
Scrap Value	**$**	**(65,000)**
Civil Works Removal Cost		
Removal	$	456,000
Hauling & Disposal	$	1,168,000
Grading & Seeding Costs	$	127,000
Total	**$**	**1,751,000**
O&M Facility Removal		
Removal	$	83,000
Hauling & Disposal	$	55,000
Total	**$**	**138,000**
Scrap Value	**$**	**(28,000)**
ADLS Tower Removal		
Removal	$	40,000
Hauling & Disposal	$	2,000
Total	**$**	**42,000**
Scrap Value	**$**	**(5,000)**
Met Tower Removal		
Removal	$	28,000
Total	**$**	**28,000**
Scrap Value	**$**	**(3,000)**
Other Costs		
Oils & Chemicals Removal & Disposal	$	69,000
Total	**$**	**69,000**
Total Estimated Cost	**$**	**8,512,000**
Owner Indirects (5%)	**$**	**425,600**
Contingency (10%)	**$**	**851,200**
Total Gross Cost	**$**	**9,788,800**
Total Scrap Value	**$**	**(8,472,000)**
Total Net Cost	**$**	**1,316,800**

Exhibit 6-2

GE 3.8-154		
YEAR	TOTAL COST	PER TURBINE
2024	$3,132,650	$46,068
2025	$3,226,630	$47,450
2026	$3,323,428	$48,874
2027	$3,423,131	$50,340
2028	$3,525,825	$51,850
2029	$3,631,600	$53,406
2030	$3,740,548	$55,008
2031	$3,852,764	$56,658
2032	$3,968,347	$58,358
2033	$4,087,398	$60,109
2034	$4,210,020	$61,912
2035	$4,336,320	$63,769
2036	$4,466,410	$65,682
2037	$4,600,402	$67,653
2038	$4,738,414	$69,683
2039	$4,880,567	$71,773
2040	$5,026,984	$73,926
2041	$5,177,793	$76,144
2042	$5,333,127	$78,428
2043	$5,493,121	$80,781
2044	$5,657,914	$83,205
2045	$5,827,652	$85,701
2046	$6,002,481	$88,272
2047	$6,182,556	$90,920
2048	$6,368,032	$93,648
2049	$6,559,073	$96,457
2050	$6,755,846	$99,351
2051	$6,958,521	$102,331
2052	$7,167,277	$105,401
2053	$7,382,295	$108,563
2054	$7,603,764	$111,820
2055	$7,831,877	$115,175
2056	$8,066,833	$118,630

V163-4.5		
YEAR	TOTAL COST	PER TURBINE
2024	$1,316,800	$23,102
2025	$1,356,304	$23,795
2026	$1,396,993	$24,509
2027	$1,438,903	$25,244
2028	$1,482,070	$26,001
2029	$1,526,532	$26,781
2030	$1,572,328	$27,585
2031	$1,619,498	$28,412
2032	$1,668,083	$29,265
2033	$1,718,125	$30,143
2034	$1,769,669	$31,047
2035	$1,822,759	$31,978
2036	$1,877,442	$32,938
2037	$1,933,765	$33,926
2038	$1,991,778	$34,943
2039	$2,051,531	$35,992
2040	$2,113,077	$37,072
2041	$2,176,470	$38,184
2042	$2,241,764	$39,329
2043	$2,309,017	$40,509
2044	$2,378,287	$41,724
2045	$2,449,636	$42,976
2046	$2,523,125	$44,265
2047	$2,598,819	$45,593
2048	$2,676,783	$46,961
2049	$2,757,087	$48,370
2050	$2,839,799	$49,821
2051	$2,924,993	$51,316
2052	$3,012,743	$52,855
2053	$3,103,125	$54,441
2054	$3,196,219	$56,074
2055	$3,292,106	$57,756
2056	$3,390,869	$59,489