

400 North Fourth Street  
Bismarck, ND 58501  
701-222-7900

September 30, 2019

Executive Secretary  
ND Public Service Commission  
State Capitol Building  
Bismarck, ND 58505

Re: Case No. PU-15-592  
Post Construction Monitoring

Montana-Dakota Utilities Co. (Montana-Dakota), a Subsidiary of MDU Resources Group, Inc., herewith submits the year two survival data for tree and shrub replacements for the Thunder Spirit Wind Energy Facility (TSWEF) located in Adams County, North Dakota.

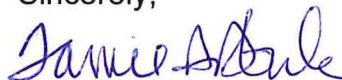
A total of 69 trees and shrubs were partially or completely removed during construction of TSWEF. Montana-Dakota committed to replacing these trees and shrubs at a 2:1 ratio (138) and ensuring a survival rate of 75% (104), 3 years after the initial planting. Montana-Dakota chose to add a contingency of 20% to the plantings, bringing the total amount of trees and shrubs planted in the Spring of 2017, to 165.

Drought conditions, significant weather events, and animal foraging in Adams County, ND in 2018 continued to present challenges. Montana-Dakota is evaluating maintenance options with the Adams County Soil Conservation District for the remaining trees, as the landowners involved in the project are not interested in accepting additional replacements. As of July 12, 2019, 108 trees are still alive.

Please contact me at 701-222-7856 or at [tamie.aberle@mdu.com](mailto:tamie.aberle@mdu.com) with additional questions or follow up as necessary.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter, attached hereto, and returning the same in the enclosed self-addressed, stamped envelope.

Sincerely,



Tamie A. Aberle  
Director of Regulatory Affairs

MDU/TSW 2019 Tree and Shrub Survival Report - Year Two

# Trees Juniper Ponderosa Scotch Common CB Crab Dogwood Bur Oak Plum Lilac Notes  
Pine Pine Chokecherry Spruce Apple

YEAR 2017 - Original Planting

Elhers, Jerry	39		20		5	2	1	2	2	1	6	Planted in 2017
Christman, Todd	55		55									Planted in 2017
Erickson, Tyler	71	17	27	27								Planted in 2017
2017 Total Planted	165											

YEAR 2018

Elhers, Jerry	39		20		5	2	1	2	2	1	6	Trees planted in grass/drought yr.
Alive trees			8		5	0	0	0	0	1	0	
Added Spring 2018			8		1						6	Replacement trees received from nursery.
Total as of 7/1/2018	29		16		6	0	0	0	0	1	6	

Christman, Todd	55		55									Trees were watered & well taken care of.
Alive Trees			49									
Added Spring 2018			6									Producer purchased 6 Ponderosa pine.
Total as of 7/1/2018	55		55									

Erickson, Tyler	71	17	27	27								
Alive trees		1	5	20								
Added Spring 2018		9	22									Replacement trees received from nursery.
Total as of 7/1/2018	57	10	27	20								

Removed during Construction	69
PSC 2:1 Replacement Requirement	138
Actual Replacements Planted	165
PSC Three Year Survival Requirement	104
Year One Survival Total	141

Name # Trees Juniper Ponderosa Scotch Common CB Crab Dogwood Bur Oak Plum Lilac Notes  
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YEAR 2019

Elhers, Jerry	29		16		6	0	0	0	0	1	6	Trees planted in grass/drought yr
Alive trees	27		12		5	2	1	0	0	1	6	Some trees reported as dead in 2017 are rebounding and showing growth
Added Spring 2019												
Total as of 7/12/2019	27		12		5	2	1	0	0	1	6	

Christman, Todd	55		55									Trees were watered & well taken care of
Alive Trees	50		50									5 of 6 trees replanted in 2018 did not survive.
Added Spring 2019												
Total as of 7/12/2019	50		50									

Erickson, Tyler	57	10	27	20								Replacement trees received from the nursery
Alive trees	31	4	7	20								Overgrown with weeds and not watered regularly or well taken care of. Currently evaluating maintenance options.
Added 2019												
Total as of 7/12/2019	31	4	7	20								

PSC Three Year Survival Requirement	104
Year Two Survival Total	108