

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

November 9, 2020

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

Re: Case No. PU-15-592
Post Construction Monitoring – Tree/Shrub Survival

Montana-Dakota Utilities Co. (Montana-Dakota) herewith electronically submits the year three 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.

Adams County Soil Conservation District personnel completed the third and final year of tree survival analysis on Nov. 4, 2020. Drought conditions over the three-year time frame proved challenging; however, the final report indicates that the Company has achieved its obligation, with exactly 104 trees surviving through the third year.

Please contact me at 701-222-7855 or at travis.jacobson@mdu.com with additional questions or follow up as necessary.

Sincerely,

/s/ Travis Jacobson

Travis Jacobson
Director of Regulatory Affairs

MDU/TSW 2020 Tree and Shrub Survival Report - Year Three

Name	# 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
			Pine	Pine	Chokecherry	Spruce	Apple					

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

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

YEAR 2020												
Elhers, Jerry	27		12		5	2	1	0	0	1	6	Trees planted in grass/drought yr
Alive trees	25		12		5	1	1			1	5	Some trees reported as dead in 2017 are rebounding and showing growth
Total as of 11/4/2020	25		12		5	1	1			1	5	Trees were well taken care of and watered.

Christman, Todd	50		50									Trees were watered & well taken care of
Alive Trees	49		49									5 of 6 trees replanted in 2018 did not survive.
Total as of 11/4/2020	49		49									Trees are well established and mowed.

Erickson, Tyler	31	4	7	20								Replacement trees received from the nursery
Alive trees	30	5	7	18								Same status as 2019, but one extra Juniper was found for a total of 5 living. Scotch pine row was a mixture of ponderosa and scotch.
Total as of 11/4/2020	30	5	7	18								

PSC Three Year Survival Requirement	104
Year Three Survival Total	104