



2302 Great N. Drive
Fargo, North Dakota 58102
(701) 241-8632
dave.sederquist@xcelenergy.com

November 6, 2019

VIA U. S. AND ELECTRONIC MAIL

Mr. Steven M. Kahl, Executive Secretary
North Dakota Public Service Commission
State Capitol Building, Dept. 0408
600 East Boulevard
Bismarck, ND 58505-0480

RE: COURTENAY DECOMMISSIONING PLAN –SUPPLEMENTAL FILING
CASE NO. PU-17-020

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy, herewith submits a revised decommissioning plan for its Courtenay wind generation facility. This revision addresses two areas:

1. The methodology and assumptions used by Wanzek Construction, Inc. to estimate the decommission costs for the Courtenay facility were modified to be consistent with the approach used in the recently approved Foxtail Wind Energy Center decommissioning plan; and
2. The negative net salvage rate for Courtenay production assets was recalculated to reflect the revised estimates of decommissioning costs and salvage proceeds, and to correct for the erroneous inclusion of transmission/substation decommissioning cost in the original filing.

Since the Courtenay facility was already in operation prior to July 1, 2017, a plan of financial assurance will be provided after the Courtenay Facility's tenth year of operations (December 2026) as per NDAC 69-09-09-07. Corresponding with Commission preference, the Company intends to propose at that time an associated Guarantee reflecting the estimated gross cost of decommissioning (i.e., without consideration of the estimated salvage proceeds).

Background

The 200 MW Courtenay project began commercial operation in December 2016. On July 31, 2018 Xcel Energy submitted a new decommissioning plan for its Courtenay wind generation facility to comply with the Commission's newly approved wind generation decommissioning rules for existing facilities.

In late 2018 and early 2019, Commission Advocacy Staff reviewed and conducted discovery on our proposed Courtenay decommissioning plan. To comply with NDAC 69-09-09-06.1, on August 27, 2019, the Company filed a decommissioning plan for its newest wind facility under construction, the Foxtail Energy Center. Because the anticipated commercial operating date for the Foxtail project was scheduled to occur in the 4th quarter of 2019, the Commission expedited its review of that project's decommissioning plan. After the approval of the Foxtail plan on September 19, 2019, attention was redirected back to the pending decommissioning plans for the existing facilities at Courtenay and Border Winds.

In October, the Company and Staff agreed on a general schedule for closing out the Courtenay and Border Winds decommissioning plans by year end 2019. The parties also agreed that the Company would soon file revisions to these plans that would reflect the same methodology and relevant adjustments that were made to the Foxtail decommissioning plan. This supplement and a sister filing being made concurrently for the Border Winds project are being submitted as follow-up to that agreement.

Filing

This filing includes a revised Decommissioning Plan and net salvage percent overview for the Courtenay facility with a revised decommissioning proposal by Wanzek Construction, Inc. included as Attachment A.

Please contact me if you have any questions regarding this filing.

Sincerely,



David H. Sederquist
Sr. Regulatory/Financial Consultant
Xcel Energy

**BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA**

IN THE MATTER OF THE APPLICATION OF
NORTHERN STATES POWER COMPANY
FOR APPROVAL OF A DECOMMISSIONING
PLAN FOR THE COURTENAY WIND
ENERGY FACILITY

CASE No. PU-17-020

Application of Northern States Power Company

Northern States Power Company, a Minnesota corporation (“Xcel Energy” or “the Company”), submits to the North Dakota Public Service Commission (the “Commission”) this updated decommissioning plan compliance filing in the above-referenced matters. This filing is being made pursuant to North Dakota Century Code 49-02-27, North Dakota Administrative Code Section 69-09-09-06, and Condition 31 of the Certificate of Site Compatibility (Certificate Number 36, as amended) for Energy Conversion Facility for Courtenay Energy, LLC (Courtenay Facility) which requires a decommissioning plan describing the manner in which the Company anticipates decommissioning the Courtenay Facility at the end of its service life and the estimated costs to do so.¹

Filing Information

Pursuant to Section 69-02-02-04 of the North Dakota Administrative Code, the following information is provided:

A. Contact information for utility making the filing

Matt Harris, Principal Attorney
414 Nicollet Mall – 401, 8th Floor
Minneapolis, MN 55401
(612) 330-7641
matt.b.harris@xcelenergy.com

David H. Sederquist, Sr. Regulatory Consultant
PO Box 2747, 2302 Great Northern Drive
Fargo, ND 58108-2747
(701) 241-8632
dave.sederquist@xcelenergy.com

Xcel Energy requests that all communications regarding this proceeding, including data requests, also be directed to:

¹ This plan complies with revised decommissioning rules (NDAC Ch. 69-09-09) effective July 1, 2017.

Lynnette Sweet, Regulatory Administrator
414 Nicollet Mall – 401, 7th Floor
Minneapolis, MN 55401
regulatory.records@xcelenergy.com

B. Statutory Authority

N.D.C.C. Section 49-02-27 authorizes the Commission to adopt rules governing the decommissioning of commercial wind energy conversion facilities.

C. Articles of Incorporation

Pursuant to Section 69-02-02-04 of the North Dakota Administrative Code, a certified copy of Xcel Energy's Articles of Incorporation is on file with the Commission, as is an original Certificate of Good Standing.

Background

The Courtenay Facility is composed of one hundred 2.0 MW Vestas wind turbines located on privately-owned land (primarily agricultural) located in Stutsman County, northeast of Jamestown, North Dakota. The Courtenay Facility was initially developed by Geronimo Energy, and the assets were purchased by Xcel Energy in 2015 and placed into service in December 2016. Xcel Energy currently owns and commercially operates the Courtenay Facility, which represents an important part of Xcel Energy's continued commitment to a cost-effective and geographically diverse supply portfolio of Company-owned wind resources.

The Courtenay Facility became commercially operational in early December 2016 with a service-life assumption of 25 years and an expected decommissioning date of November 2041. As is the case with all Company generating investments, the estimated remaining life of the facility will be periodically reassessed in connection with the Company's Remaining Life Studies, which occur every five years.

On August 24, 2015, an Advanced Determination of Prudence ("ADP") and a Certificate of Public Convenience and Necessity for this project were granted by the Commission in Case Nos. PU-15-181 and PU-15-175, respectively.

Decommissioning Scope

Xcel Energy will begin decommissioning the Courtenay Facility within twelve months after the time the facility reaches the end of its useful life, as required in Section 69-09-09-04 of the ND Administrative Code. The decommissioning process will be completed within twenty-four months of the end of the facility's useful life.

Decommissioning will include:

1. Dismantling and removal of all towers, turbine generators, transformers, and overhead cables;
2. Removal of underground cables to a depth of at least twenty-four inches;
3. Removal of foundations, buildings, and ancillary equipment to a depth of at least thirty-six inches;
4. Site restoration and reclamation to the approximate original topography that existed prior to the construction of the facility with topsoil respreads over the disturbed areas at a depth similar to that in existence prior to the disturbance.
5. Grading and topsoil of areas disturbed by the facility, and reseeded according to nature resource conservation service recommendations, unless the commission approves an owner request signed by the applicable landowner, identifying the surface features the landowner prefers to remain in place and the reason the landowner prefers those features to remain.

In general, the Company's decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and will be in accordance with applicable federal, state, and local permits (if any are required), and pursuant to the terms and conditions of any landowner leases currently in place.

Decommissioning Process

The process of removing structures involves evaluating and categorizing all components and materials into categories of recondition and reuse, salvage, and disposal. In the interest of increased efficiency and minimal transportation impacts, components and materials may be stored on-site at landowner-approved locations until the bulk of similar components or materials are ready for transport. The components and material will be transported to the appropriate facilities for reconditioning, salvage, or disposal. Above-ground structures include the turbines, transformers, overhead collection or transmission lines, substation(s), and the facility's portions of the interconnection facilities. Below-ground structures include turbine, substation, and building foundations, collection system conduit and cable, fiber optic facilities, and subterranean drainage structures, if any.

Turbine removal: Access roads to turbines will be widened to a sufficient width to accommodate movement of appropriately sized cranes, trucks, and other machinery required for the disassembly and removal of the turbines. Control cabinets, electronic components, and internal cables will be removed. The rotor, nacelle, and tower sections will be lowered to the ground where they may be transported whole for

reconditioning and reuse, or disassembled/cut into more easily transportable sections for salvageable, recyclable, or disposable components.

Turbine and substation foundation removal: Topsoil will be removed from an area surrounding the foundation and stored for later replacement, as applicable. Turbine foundations will be excavated to forty-eight inches below grade per the landowner agreements in place. All anchor bolts, rebar, conduits, cable, and concrete will be removed to this depth. The remaining excavation will be filled with clean sub-grade material of quality comparable to the immediate surrounding area. The sub-grade material will be compacted to a density similar to surrounding sub-grade material. All unexcavated areas compacted by equipment used in decommissioning will be de-compacted to adequately restore the topsoil and subgrade material to the proper density consistent and compatible with the surrounding area.

In accordance with North Dakota Century Code 49-02-27, the location of any portion of underground foundation not removed during decommissioning will be recorded with the county recorder in the county in which the facility is located.

Underground collection cables: The cables and conduits contain no materials known to be harmful to the environment. As part of the decommissioning, these items will be cut back to the required depth. All cable and conduit and other materials buried below the required depth will be left in place and abandoned.

Overhead collection lines: Overhead collection lines and poles will be removed as needed.

Access roads and construction pads: Access roads and construction pads will be reclaimed to agricultural land suitable for its purpose before the construction of the Courtenay Facility.

Site Restoration Activities

Prior to the removal of structures from all work areas, topsoil will be removed, separated from other excavated material, stockpiled, and clearly designated. The topsoil will be replaced to original depth. The topsoil will be de-compacted to match the density and consistency of the immediately surrounding area. Any topsoil deficiency and trench settling will be mitigated with imported topsoil consistent with the quality of the affected site.

Following decommissioning activities, the sub-grade material and topsoil from affected areas will be de-compacted and restored to a density and depth consistent with the surrounding areas to a maximum depth of eighteen inches. The affected areas will be inspected, cleaned, and all construction-related debris removed.

Disturbed areas will be reseeded to promote re-vegetation of the area to a condition reasonably similar to original condition. In all areas, restoration shall include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure establishment of suitable grasses and forbs, and to control noxious weeds and pests.

Decommissioning Costs

Xcel Energy will be responsible for all costs associated with decommissioning the Courtenay Facility.

To ensure that there is adequate recovery of future decommissioning and restoration costs, a negative net salvage rate is included in the calculation of the depreciation expense rate for the project. The net salvage rate reflects the net of the estimated decommissioning costs and any offsetting proceeds from the salvaging and/or recycling of certain generation equipment, such as the towers, cables, and other material. The net salvage rate is negative in this case because the forecasted costs of decommissioning the facility are higher than the expected salvage proceeds.

Based on the Company’s most recent production plant balance and engineering study of the estimated decommissioning expense for the Courtenay Facility, the Company recommends a net salvage rate of negative 6.9 percent for purposes of North Dakota ratemaking. See Table 1 below. This percentage of the value of Courtenay Facility production assets will be collected over the life of the facility as part of the annual depreciation expense, and will be recorded in the accumulated depreciation reserve account for the eventual removal and restoration of the production infrastructure (less any actual salvage proceeds). The substation and transmission assets within this project will be depreciated separately using the approved average service lives, net salvage rates, and depreciation rates established for those assets in the Company’s most recent electric rate proceeding (Case No. PU-12-813).

Table 1 – Calculation of Net Salvage Rate

Item	Amount
Prod. Decomm. Costs Net of Salvage	\$19,411,875
Production-Related Plant Balance	\$279,602,747
Resulting Net Salvage Rate	- 6.9 percent

Net salvage rates will continue to be reviewed every five years with an engineering study for each generating facility, including the Courtenay Facility. If any rules and regulations change regarding removal (e.g. mandates for deeper removal of underground equipment and material), these changes will be incorporated into the next *Annual Review of Remaining Lives Study* to be filed in 2020 and every five years thereafter.

Based on this approach and supported by the detail on Attachment A, the estimate of gross decommissioning expense (i.e., with no offset for salvage) for the production-related infrastructure of this project is approximately \$24.9.4 million, or about \$249,200 per 2 MW turbine, in 2019 dollars. If the estimated salvage proceeds are included as an offset, the net decommissioning cost is \$19.4 million, or about \$194,100 per 2 MW turbine. Again, these figures apply only to the generation assets for this project.

Conclusion

In summary, this updated Decommissioning Plan overview and the attached Decommissioning Proposal prepared by Wanzek Construction, Inc. (see Attachment A) includes the following information per 69-09-09-01 (6) of the North Dakota administrative code:

- The current anticipated life of the Courtenay Facility is 25 years;
- An estimate of the total cost of decommissioning and site restoration at the end of the project's useful life (including all production, substation, and transmission assets but excluding salvage value of the turbines and equipment) is \$27,058,583;
- A description of the methods and assumptions used to determine the decommissioning cost estimate is included in this overview and the Wanzek decommissioning proposal;
- A description of the anticipated manner in which the Courtenay Facility will be decommissioned;
- There are no expected effects on present and future natural resource development in the area; and
- A plan of financial assurance will be provided after the Courtenay Facility's tenth year of operations (December 2026), per the rules for facilities in which a certificate of site compatibility was issued prior to July 1, 2017.

Xcel Energy is a regulated utility governed by the laws of the State of North Dakota and will observe all regulatory requirements with respect to decommissioning the Courtenay Facility, including removal of all buildings and equipment and restoration of the land.

Xcel Energy respectfully requests that this filing be accepted as being in compliance with the decommissioning requirements of this Commission.

Dated: November 6, 2019

Northern States Power Company

COURTENAY WIND FARM DECOMMISSIONING PROJECT

Proposal Provided for
XCEL ENERGY

Proposal Provided by

WANZEK

a MasTec company 

Wanzek Construction | 4850 32nd Ave S, Fargo, ND 58104 | wanzek.com



Executive Summary
Budgetary Pricing
Clarifications
Project Schedule
Culture of Safety
Wanzek Experience

PROPOSAL CONTENTS

Wanzek Construction, Inc. is pleased to provide Xcel Energy with our proposal for the Courtenay Wind Farm Decommissioning project. With over forty-five years of experience driving excellence through all stages of construction, Wanzek has the experience and breadth of knowledge to provide continuing presence and direct management involvement to each project. Wanzek is continuously investing in equipment, technology and teams to provide innovative, efficient and cost-effective construction services that meet client needs. Wanzek is a relationship-driven company with growth largely due to repeat clients. We are further strengthened by the backing of our parent company. As a wholly-owned subsidiary of MasTec North America, Inc./MasTec, Inc., in Coral Gables, FL (NYSE: MTZ), Wanzek has the geographic reach, scalability and overall financial stability to deliver high quality and innovative solutions.

Safety is the cornerstone of our company culture and our dedicated safety personnel and employees work to make sure safe behavior is instinctive and automatic. Our focus on safety starts long before we mobilize to the field. It is a crucial part of reviewing and finalizing proposals, continues through project planning and is the responsibility of every Wanzek employee every day. Wanzek follows an Operator Qualification Plan designed to ensure all team members are OQ-certified to perform tasks safely.

Wanzek addresses quality at all stages of the job, from planning through operations and execution to lessons learned at job closure. We work collaboratively with our clients, using lean continuous improvement methodologies to optimize all aspects of construction and operations.

Our teams are built on strength, stability and experience. Wanzek self-performs the majority of our work. To ensure safety, quality and repeat clients, we employ skilled, proficient and dedicated teams. Company-wide, our craftspeople have an average of fifteen years of experience in their trade and work in a senior-level to junior-level ratio of approximately 1:4.

On behalf of Wanzek Construction, thank you for the opportunity to present our capabilities as a qualified contractor for the Courtenay Wind Farm Decommissioning project. I welcome your comments and questions as you review the proposal and look forward to working with you.

Regards,



Jake Nikle
Director of Operations - Renewable Services
Wanzek Construction, Inc.
(701) 893-3629
jnikle@wanzek.com

PRICING

Our pricing methodology includes requesting multiple bids from reputable subcontractors and material suppliers to achieve the best value. Our knowledge and expertise allow us to maximize efficiency while providing clients with all-inclusive pricing. Our detailed quotation for the Courtenay Wind Farm Decommissioning project follows.



Project:	Courtenay Decommissioning
Proposal Type:	Non-Binding Decommissioning Budget
Proposal Date:	10/30/2019
WTG # & Type:	100 x Vestas 2 MW - 80M HH - 100M rotor
Total MW:	200
Phase:	1
Location:	Courtenay, ND

OVERALL PRICING WORKSHEET - Dismantle, Downsize, & Scrap

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TURBINE SITES				
1a	Dismantle Turbines	100	EA	\$ 90,384	\$ 9,038,419
1b	Haul Away & Dispose of Components	100	EA	\$ 73,638	\$ 7,363,825
1c	Foundation Removal (above 4 ft)	100	EA	\$ 11,808	\$ 1,180,765
1d	Crane Rental	1	LS	\$ 994,115	\$ 994,115
1e	Mobilize/Demobilize Crane	1	LS	\$ 294,198	\$ 294,198
1f	Restore and Grade Topsoil	1	LS	\$ 861,586	\$ 861,586
	SUBTOTAL				\$ 19,732,908
2	SITE CIVIL WORK REMOVAL				
2a	Remove Access Road Aggregate	1	LS	\$ 1,439,387	\$ 1,439,387
2b	Decompact Access Roadway	1	LS	\$ 861,586	\$ 861,586
2c	Restore and Grade Topsoil	1	LS	\$ 1,659,816	\$ 1,659,816
2d	Transport Aggregate/Soil	1	LS	\$ 347,344	\$ 347,344
	SUBTOTAL				\$ 4,308,134
3	COLLECTION SYSTEM				
3a	Remove MV Cable (above 3 ft)	1	LS	\$ 242,453	\$ 242,453
3b	Remove Junction Boxes, Turbine Switchgear	1	LS	\$ 414,328	\$ 414,328
3c	Fill Voids in Bores	1	LS	\$ 178,710	\$ 178,710
	SUBTOTAL				\$ 835,491
4	SUBSTATION REMOVAL (above 4 ft)				
4a	Remove Items Below Grade	1	LS	\$ 142,784	\$ 142,784
4b	Remove Yard and Grade	1	LS	\$ 25,497	\$ 25,497
4c	Remove Steel Structures, Equipment	1	LS	\$ 152,627	\$ 152,627
4d	Remove and Haul Main Power Transformers	1	LS	\$ 571,273	\$ 571,273
4e	Remove Fencing and Trees	1	LS	\$ 30,597	\$ 30,597
	SUBTOTAL				\$ 922,778
5	TRANSMISSION LINE	1	LS	\$ 1,216,850	\$ 1,216,850
6	DISMANTLE ADLS SYSTEM	1	LS	\$ 31,871	\$ 31,871
7	CONTINGENCY	1	LS	\$ 1,227,400	\$ 1,227,400
TOTAL PRICE (EXCLUDING PERFORMANCE BOND)					\$ 27,058,583

in 2019 USD

ALTERNATES

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A	APPROXIMATE SCRAP VALUE OF COMPONENTS (See next page)	1	LS	\$ (5,507,080)	\$ (5,507,080)
B	Additional expense to transport whole components to a specialized recycling/scrap facility (assume 600 mile distance)	100	EA	\$ 42,979	\$ 4,297,899
C	Decreased expense for tipping WTGs (and avoiding dismantling)	100	EA	\$ (38,643)	\$ (3,864,296)



Project:	Courtenay Decommissioning
Proposal Type:	Non-Binding Decommissioning Budget
Proposal Date:	10/30/2019
WTG # & Type:	100 x Vestas 2 MW - 80M HH - 100M rotor
Total MW:	200
Phase:	1
Location:	Kulm, ND

Approximate Salvage Value Worksheet

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Mixed Steel					
1	Concrete WTG Foundation - Spread Footing Pedestal Rebar	300	TN	\$ (120.00)	\$ (36,000)
2	WTG Steel Towers - 80 Meter	12,870	TN	\$ (120.00)	\$ (1,544,400)
3	WTG Equipment - Hub Assemblies	2,050	TN	\$ (120.00)	\$ (246,000)
4	WTG Equipment - Nacelles	7,500	TN	\$ (120.00)	\$ (900,000)
5	Electrical Equipment - MP Transformer 34.5KV	125	TN	\$ (120.00)	\$ (15,000)
6	Electrical Equipment - Grounding Transformer 34.5KV	14	TN	\$ (120.00)	\$ (1,680)
Copper					
7	WTG Equipment - Tower Cable	160	TN	\$ (4,000.00)	\$ (640,000)
8	WTG Equipment - Generators	400	TN	\$ (4,000.00)	\$ (1,600,000)
9	Electrical Equipment - MP Transformer 34.5KV	121	TN	\$ (4,000.00)	\$ (484,000)
10	Electrical Equipment - Grounding Transformer 34.5KV	10	TN	\$ (4,000.00)	\$ (40,000)
SALVAGE VALUE SUBTOTAL					\$ (5,507,080)
Unit Cost					\$ (55,071)

CLARIFICATIONS

To help provide additional details regarding our proposal and approach to executing this project, please see our detailed clarifications for the Courtenay Wind Farm Decommissioning project.

CLARIFICATIONS | BUDGETARY DECOMMISSIONING PRICING

General Clarifications

1. Wanzek has prepared pricing for strictly budgetary purposes, based on current market prices.
2. Wanzek has excluded any prevailing wage or union requirements.
3. Wanzek has excluded taxes. Applicable taxes will be paid by owner.

Site Clarifications

4. Wanzek assumes that access to and from the jobsite along with an adequate work area will be available without restriction.
5. Owner to provide adequate lay down area for storage of contractor materials, supplies and equipment storage and maintenance area.
6. Wanzek will bring in a single wide trailer for site management to work.
7. Owner responsible for Landowner communications and dealings.
8. Wanzek excludes any state, or county road improvements and/or traffic control measures, barricades, or utility control, that may be required to operate at the jobsite.

Turbine Disassembly

9. Wanzek's base pricing assumes the turbines will be deconstructed with a crane, following construction industry safety processes.
10. Wanzek will mobilize the main crane (LR1600,) support cranes, equipment and crews a week before dismantling will begin. Wanzek will have two crews taking down the turbines. Crew #1 will prep the towers ahead of the main erection crane. Crew #2 will dismantle the turbines. Wanzek predicts that (4) towers per week will be taken down and placed on the ground.
11. Wanzek's base pricing includes downsizing the WTG components on site and hauling away for scrap.
12. A: Approximate salvage value as detailed on the second page of the pricing sheet, based on current market prices.
13. Alternate B: Same scope as above with the exception that the dismantled WTG components will not be downsized and will be hauled a longer distance to a specialized recycling/scraping facility (assumed 600 mile distance).
14. Alternate C: WTG's will be tipped in lieu of dismantling and downsized on site and hauled away for scrap.
15. Net price for each option:
 - Base Price: Dismantle, Downsize & Scrap = $\$27,058,583 - \$5,507,080 = \$21,551,503$ Net
 - Alternate B: Dismantle & Haul = $\$27,058,583 + \$4,297,899 - \$5,507,080 = \$25,849,401$ Net (assuming scrap value as the minimum Xcel could get if selling the WTG's for reuse)
 - Alternate C: Tip, Downsize, & Scrap = $\$27,058,583 - \$3,864,296 - \$5,507,080 = \$17,687,206$ Net

Civil Works & Foundation Pedestal Removal

16. Pricing includes removal of 4" (average) of road aggregate and turbine beauty rings. Pricing assumes all removed material will be placed on nearby aggregate roads.
17. Pricing includes removal and haul off (within 20-mile radius) of cement stabilized access road material. No disposal fees have been included. Pricing includes import and replacement with black dirt.
18. Wanzek will excavate around the foundation following all OSHA requirements for excavations. We will remove the concrete to a depth of 48" using an excavator with a concrete breaker attachment. Once concrete is broken up, the rebar and bolts will be removed (using a torch if needed) and placed in a steel dumpster. The excavations will be backfilled and compacted to 85%.

19. All areas will be de-compacted and graded to facilitate drainage using surrounding material. No imported fill has been considered.
20. All areas requiring reseeding will be seeded with an approved seed mix.

Collection System Removal

21. Wanzek has included removal of junction boxes. Collection cables will be removed to a depth of 36", all collection materials below that depth will remain in place.
22. All areas requiring reseeding will be seeded with an approved seed mix.

Substation Removal

23. Wanzek will remove all fixtures and steel and haul off site. Foundations will be removed to a depth of 48". All materials below that depth will remain in place.
24. Substation fence will be removed and hauled away. Equipment will be removed to the point of interconnect.
25. The aggregate yard will be removed and distributed on nearby gravel roadways.
26. All areas requiring reseeding will be seeded with approved seed mix.

Transmission Line Removal

27. Wanzek has included removal of the transmission line conductor as well as poles and related structures to a depth of 48" below the ground, materials below that depth will be left in place.

Interconnect Facilities

28. Wanzek has excluded the removal of the interconnect facilities.

O&M Building

29. Wanzek will demo and remove the building including foundation to a depth of 48". All materials below that depth will remain in place.
30. All areas requiring reseeding will be seeded with an approved seed mix.

SAFETY

Safety is the cornerstone of our company culture and our dedicated safety personnel and employees work to make sure safe behavior is instinctive and automatic. Our focus on safety starts long before we mobilize to the field. It is a crucial part of reviewing and finalizing proposals, continues through project planning and is the responsibility of every Wanzek employee every day.

Our safety culture details follow.



CULTURE OF SAFETY



Continual safety training and coaching is ongoing with each project.

Our [Zero Injury System of Safety Excellence](#) contains eight critical safety elements that focus on how we manage safety:

LEADERSHIP	Defines our expectations to lead and support the process
TRAINING	Outlines how we train and our expectations for training
R4	Provides the opportunity for employee engagement through active participation in our systems and through our employee observation and feedback program
PLANNING	Outlines the expectations of our pre-job planning activities such as the Pre-Task Plan (PTP), Job Hazard Analysis (JHA) Process and the Integrated Work Plan (IWP)
ASSESSMENTS	Defines how we review our safety process
INCIDENT MANAGEMENT	Is how we identify causes and system improvements to prevent recurrence
SUBCONTRACTOR MANAGEMENT	Ensures subcontractors' safety policies and procedures are equal to or greater than Wanzek's
METRICS	Is how we use both leading and lagging indicators



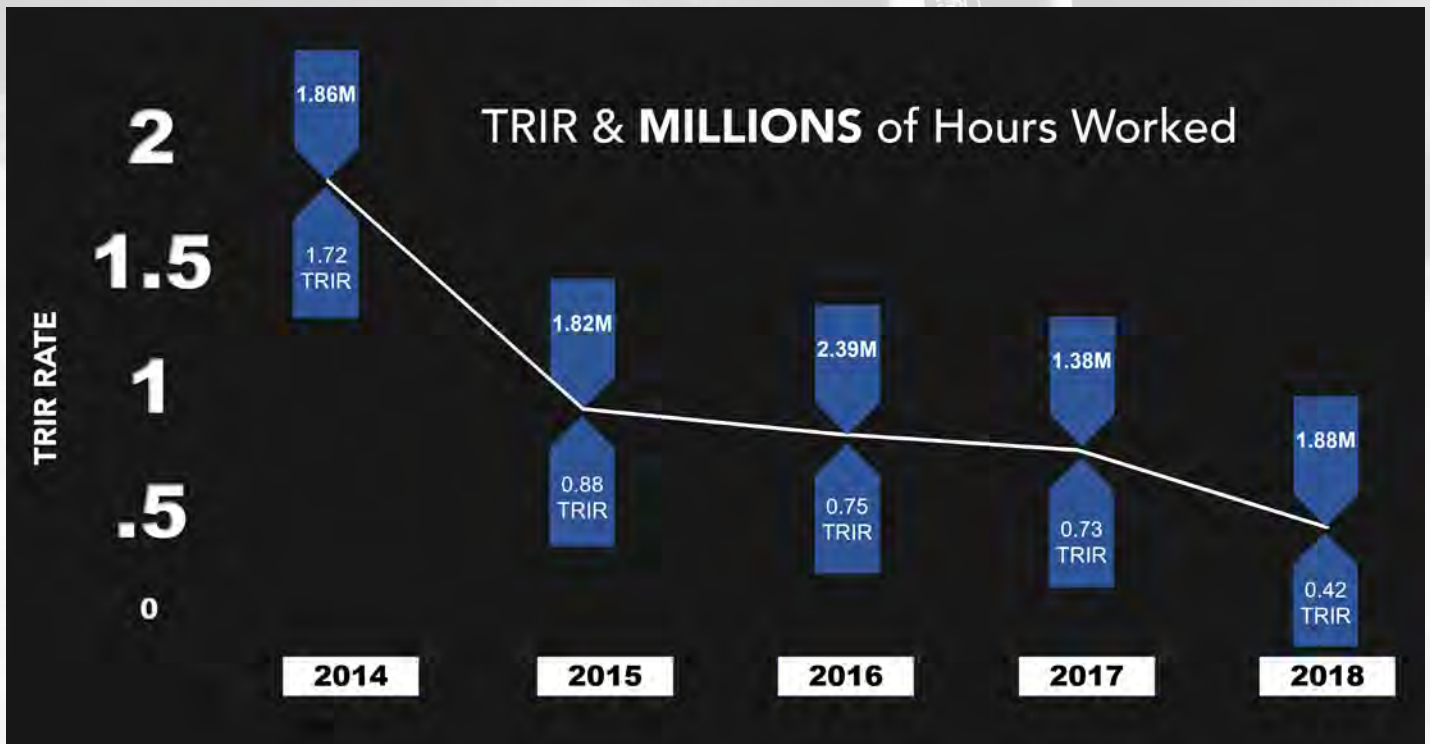
The R4 Observation Process was developed to reinforce safe behaviors and allows employees to contribute to the overall safety success of Wanzek. The process promotes the ongoing involvement of employees via employee R4 teams who conduct observations of peer employees performing work.

REVIEW + RECOGNIZE + RECOMMEND + REINFORCE



CULTURE OF SAFETY

Wanzek's safety process starts long before we mobilize to the field. Our focus on safety begins with reviewing proposals, continues through project planning and is the responsibility of every Wanzek employee every day. We continuously work to improve our safety training and management systems, to hold every team member accountable and to ensure we hold ourselves to our vision of zero injuries. Our commitment includes a Zero Injury process to instill safety values in each employee and to ensure safe behavior is instinctive.



PROTECT

PROJECT EXPERIENCE

Project Name	Client	Megawatts	# of Generators	Turbine Manufacturer	State	COD
GW3S Prototype	Goldwind Americas	3.4	1	Goldwind	Texas	2018
Twin Buttes II	Avangrid Renewables, LLC	76	38	Gamesa	Colorado	2018
Aurora Brule Wind	Con Edison Development	41.4	18	General Electric	South Dakota	2018
Persimmon Creek	Scout Clean Energy	200.6	80	General Electric	Oklahoma	2018
Thunder Spirit II	Allete Clean Energy	48	16	Nordex	North Dakota	2018
Courtenay	Xcel - Minneapolis	200	100	Vestas	North Dakota	2017
Fluvanna Renewable Energy Project	Terna Energy USA	151.7	74	Vestas	Texas	2017
Cottonwood	NextEra Energy Resources, LLC	90	40	General Electric	Nebraska	2017
El Cabo	Avangrid Renewables, LLC	298	142	Gamesa	New Mexico	2017
Sterling	Akuo Energy USA, Inc.	29.9	13	General Electric	New Mexico	2017
Odell	Algonquin Power and Utilities Corp	200	100	Vestas	Minnesota	2016
Frontier Wind Power Project	Duke Energy	201.3	61	Vestas	Oklahoma	2016
Tyler Bluff (Muenster)	EDF Renewable Energy	123.1	52	Siemens	Texas	2016
Thunder Spirit	Allete Clean Energy	102.5	41	Nordex	North Dakota	2016
Desert Wind	Avangrid Renewables, LLC	208	104	Gamesa	North Carolina	2016
Prairie Breeze II	Invenergy	73.4	41	Vestas	Nebraska	2016
Prairie Breeze III	Invenergy	35.8	20	Nordex	Nebraska	2016
Los Vientos IV	Duke Energy	200	100	General Electric	Texas	2016
Los Vientos V	Duke Energy	110	55	General Electric	Texas	2016
Bow Lake	BluEarth Renewables inc	57.6	36	General Electric	Ontario	2015
Briscoe County Wind	Capital Dynamics	149.9	81	General Electric	Texas	2015
S111 Intsallation	Suzlon Wind Energy Corporation	2.1	1	Suzlon	Texas	2015
Stephens Ranch - Phase 2	Starwood Energy Group, LLC	164.7	92	General Electric	Texas	2015
Los Vientos III	Duke Energy	200	100	Vestas	Texas	2015
Lundgren	Berkshire Hathaway Energy	246.1	107	Siemens	Iowa	2014
Bison 4	Minnesota Power / Siemens	204.8	64	Siemens	North Dakota	2014
Stephens Ranch - Phase 1	Starwood Energy Group, LLC	200.6	118	General Electric	Texas	2014
G114 Prototype	Gamesa Energy	2	1	Gamesa	Texas	2014
Spring Canyon III	Invenergy	28.9	17	General Electric	Colorado	2014
Spring Canyon II	Invenergy	32.3	19	General Electric	Colorado	2014
Vienna II	Berkshire Hathaway Energy	43.7	19	Siemens	Iowa	2013
Lakeswind	Rockland Capital	51.2	32	General Electric	Minnesota	2013
Spinning Spur Wind Ranch	Cielo Wind Power, LP	161	70	Siemens	Texas	2013
Los Vientos Wind - 1A	Duke Energy	200	87	Siemens	Texas	2013
Santa Isabel	Pattern Energy Group, Inc.	101.2	44	Siemens	Puerto Rico	2013
Busch Ranch	Black Hills Corporation	28	16	Vestas	Colorado	2013
Morninglight Windfarm	Berkshire Hathaway Energy	101.2	44	Siemens	Iowa	2013
Crofton Bluffs Wind	Edison Mission Energy	42	22	Vestas	Nebraska	2013
Eclipse Wind	Berkshire Hathaway Energy	200	87	Siemens	Iowa	2013
Huerfano River	Sany Group	8	4	Sany	Colorado	2013
Meadow Creek Wind	Ridgeline Energy, LLC	119.7	57	Suzlon	Idaho	2013
Pillar Mountain II	Kodiak Electric Association, Inc.	4.5	3	General Electric	Alaska	2012
Ironwood Wind	Duke Energy	168	73	Siemens	Kansas	2012
Cimarron Wind II	Duke Energy	131	57	Siemens	Kansas	2012
Cimarron Wind I	CPV	165	72	Siemens	Kansas	2012
Broken Bow Wind - Ph I	Edison Mission Energy	80	50	General Electric	Nebraska	2012
Los Vientos Wind - 1B	Duke Energy	201.6	84	Mitsubishi	Texas	2012
Panhandle Wind Ranch	Cielo Wind Power, LP / Golden Spread Electric Cooperative	78.2	34	Siemens	Texas	2011
Taloga Wind	Edison Mission Energy	129.6	54	Mitsubishi	Oklahoma	2011
New Harvest Wind	Avangrid Renewables, LLC	100	50	Gamesa	Iowa	2011
Crow Lake	Basin Electric Power Cooperative	162	108	General Electric	South Dakota	2011
Rockland Wind Farm	Ridgeline Energy, LLC	79.2	44	Vestas	Idaho	2011
Diamond Willow	Montana Dakota Utilities (MDU)	10.5	7	General Electric	Montana	2010
Top of the World a	Duke Energy	101.2	44	Siemens	Wyoming	2010
Buffalo Ridge Wind II	Avangrid Renewables, LLC	210	105	Gamesa	South Dakota	2010
Cedro Hill Wind	Edison Mission Energy	150	100	General Electric	Texas	2010
Top of the World b	Duke Energy	99	66	General Electric	Wyoming	2010
Cedar Hills	Montana Dakota Utilities (MDU)	19.5	13	General Electric	North Dakota	2010
Red Mesa Windfarm	NextEra Energy Resources, LLC	102.4	64	General Electric	New Mexico	2010

PROJECT EXPERIENCE

Project Name	Client	Megawatts	# of Generators	Turbine Manufacturer	State	COD
Kit Carson Windfarm	Duke Energy	51	34	General Electric	Colorado	2010
Spearville II	Kansas City Power & Light	48	32	General Electric	Kansas	2010
Laredo Ridge	Edison Mission Energy	81	54	General Electric	Nebraska	2010
Goat Mountain Phase II	Edison Mission Energy	69.6	29	Mitsubishi	Texas	2009
Notrees 1b	Duke Energy	60	40	General Electric	Texas	2009
ILEC Wind	Iowa Lakes Electric Coop	21	14	General Electric	Iowa	2009
Silver Sage Windfarm	Duke Energy	42	20	Suzlon	Wyoming	2009
Buffalo Ridge Wind	Avangrid Renewables, LLC	50.4	24	Suzlon	South Dakota	2009
Rugby Windfarm	Avangrid Renewables, LLC	149.1	71	Suzlon	North Dakota	2009
Wilton II	NextEra Energy Resources, LLC	49.5	33	General Electric	North Dakota	2009
Three Buttes/Campbell Hill	Duke Energy	100.5	67	General Electric	Wyoming	2009
Charles City	Berkshire Hathaway Energy	75	50	General Electric	Iowa	2008
Endeavor II	NextEra Energy Resources, LLC	50	20	Clipper	Iowa	2008
Baker Windfarm	Montana Dakota Utilities (MDU)	19.5	13	General Electric	Montana	2008
Notrees 1a	Duke Energy	90.7	55	Vestas	Texas	2008
Adair Windfarm	Berkshire Hathaway Energy	174.8	76	Siemens	Iowa	2008
Langdon II	NextEra Energy Resources, LLC	40.5	27	General Electric	North Dakota	2008
Barton Wind	Avangrid Renewables, LLC	160	80	Gamesa	Iowa	2008
Wessington Springs Wind	Pattern Energy Group, Inc.	51	34	General Electric	South Dakota	2008
Marengo II	RES Americas	77.4	43	Vestas	Washington	2008
Goat Mountain Phase I	Edison Mission Energy	80	80	Mitsubishi	Texas	2008
Winnebago	Avangrid Renewables, LLC	20	10	Gamesa	Iowa	2008
Century III	Berkshire Hathaway Energy	15	10	General Electric	Iowa	2008
Happy Jack Windfarm	Duke Energy	29.4	14	Suzlon	Wyoming	2008
Endeavor I	Clipper Windpower	100	40	Clipper	Iowa	2008
Jeffers Windfarm	Clipper Windpower	50	20	Clipper	Minnesota	2007
Top of Iowa II	Avangrid Renewables, LLC	80	40	Gamesa	Iowa	2007
Marengo I	RES Americas	140.4	78	Vestas	Washington	2007
Top of Iowa III	Madison Gas & Electric	29.7	18	Vestas	Iowa	2007
Oliver County II	NextEra Energy Resources, LLC	48	32	General Electric	North Dakota	2007
Wilton I	NextEra Energy Resources, LLC	49.5	33	General Electric	North Dakota	2006
Oliver County I	NextEra Energy Resources, LLC	50.6	22	Siemens	North Dakota	2006
Mower County	NextEra Energy Resources, LLC	99	43	Siemens	Minnesota	2006
Velva Windfarm	DES	12	18	Vestas	North Dakota	2005
2001-2004 Wind Projects	*Multiple Owners	85	89		North Dakota	2004
Edgeley/Kulm	NextEra Energy Resources, LLC	61.5	41	General Electric	North Dakota	2003
Totals		9,140.9	4,646.0			



WANZEK

a MasTec company 

Wanzek Construction | 4850 32nd Ave S, Fargo, ND 58104 | wanzek.com