

Memorandum

To: Commissioners Julie Fedorchak, Randy Christmann, and Brian Kroshus

From: Adam Renfandt

Date: December 21, 2021

Subject: Revised Decommissioning Plan and Cost Estimate for Tatanka Wind Power, LLC (Case No. PU-10-73)

On October 21, 2020, the Commission approved an updated decommissioning plan and cost estimate for Tatanka Wind Power, LLC (Tatanka). Tatanka consists of 61 1.5 MW turbines in North Dakota with a nameplate capacity of 91.5 MWs. The approved decommissioning plan included the mobilization of cranes and labor to disassemble the components of the turbine with a cost estimate of approximately \$15.8 million, or \$259,542 per turbine (without subtracting salvage proceeds).

On April 14, 2021, Tatanka submitted a revised decommissioning plan, which relied on the “felling” approach to decommission turbines with a cost estimate of \$8,878,377, or \$145,547 per turbine (without subtracting salvage proceeds). The felling approach eliminates the need for large cranes, and instead relies on heavy equipment, such as bulldozers, to pull the turbines to the ground after segments are cut out of the tower’s steel. Tatanka’s engineering consultant reviewed confidential information prepared for the decommissioning of a wind facility in Iowa, dated October 2018, as evidence of the success of this technique. The information listed 12 projects in four states that also used this method.

On May 18, 2021, the Commission held an Informal Hearing with Tatanka. In the Informal Hearing, Tatanka explained the felling approach had been used to decommission a wind facility in Iowa with hub heights between 80 to 90 meters and with turbines between 1.0 to 2.3 MWs. Tatanka’s hub heights are 80 meters, and the turbines are 1.5 MWs.

On July 1, 2021, the Commission held a work session, and had several questions they wanted addressed, namely for the company to provide information about whether other regulatory bodies had approved such a method and whether fiberglass blades shatter upon impact, causing fragmentation.

On September 21, 2021, Tatanka replied, and

1. Noted that the consultant who authored the Tatanka felling plan also authored approved felling plans from two reviewing authorities.
2. Proposed to amend its April 14, 2021 plan to:
 - a. Utilize truck-mounted cranes to remove the turbine blades prior to felling at a cost of \$183,600

- b. Remove foundations to a depth of four feet from three feet at a cost of \$359,700

Tatanka would cover the cost to utilize truck-mounted cranes and to remove foundations to a depth of four feet from its \$807,012 contingency, which was included in its April 14, 2021 cost estimate.

On October 10, 2021, the Commission rejected Tatanka's April 14, 2021 decommissioning plan and cost estimate as amended by its September 21, 2021 reply.

On November 12, 2021, Tatanka filed a revised decommissioning plan and cost estimate. The revision modified the April 14, 2021 decommissioning plan and cost estimate as amended by its September 21, 2021 reply as follows:

1. Tatanka will no longer cover the cost to utilize truck mounted cranes to remove turbine blades and the cost to remove foundations to a depth of four feet from the contingency reserve. Therefore, the cost estimate increased by \$599,723 to \$9,478,100, or approximately \$155,000 per turbine.
2. Tatanka has agreed to de-compact all disturbed land, and it noted that the goal of felling is to fell the tower onto access roads to reduce impacts to cropland. In addition, Tatanka noted that when the process does not involve large cranes, the disturbed area is reduced, and impacts to wetlands and cropland is reduced.

Tatanka also inquired with an owner of a wind farm that used the felling approach to decommission its facility to determine whether landowners had made any claims for lost crop productivity from felling. The owner did not mention any landowner claims.

On December 2, 2021, the Commission held a work session to discuss the November 12, 2021 decommissioning plan and cost estimate.

The Commission has three options:

1. Approve Tatanka's November 12, 2021 decommissioning plan and cost estimate.
2. Reject Option 1 in favor of the decommissioning plan and cost estimate approved on October 21, 2020, while reserving judgment on the felling approach until Tatanka nears its decommissioning date.
3. Require Tatanka to submit another decommissioning plan and cost estimate.