

http://www.kgw.com/news-local/stories/kgw_082507_news_windturbine_accident.6ea7f093.html

Family, friends mourn wind farm worker killed in collapse

12:36 PM PDT on Wednesday, August 29, 2007

By KGW Staff

The Sherman County wind farm where one man was killed and another injured Saturday when a wind turbine collapsed was cited for two violations just a few months ago, officials said Monday.



Courtesy SEIU Healthcare 1199 NW

Chadd Mitchell

Chadd Bryce Mitchell, 35, was killed in the accident.

Mitchell was a father of three who had been working at the farm since July 10th.

Slideshow: [Collapsed turbine](#)

Blog: [Profound sadness](#)

“He was the myth, the man, the legend. The leader of the family. He was the most respectful human in the world, never did anything but help other people. His family loves him more than anything in the world,” said brother Bradd Mitchell.

The Occupational Safety and Health Administration issued two minor citations to Klondike Wind Farms in May. One was regarding the farm's lack of a formal safety committee. The other citation had to do with stairs that were too high.

Mitchell and another man had been working on a non-operational turbine at the Klondike Wind Farms east of Wasco, Oregon.

Officials said Mitchell, who was at the top of the turbine, was killed when it buckled. The second man had to be rescued from the barrel of the collapsed structure. He was taken to an area hospital where his condition was unknown.

OSHA was investigating the cause of the collapse.

A team of engineers from Finland was expected to investigate the site.

<http://www.reporternews.com/news/2008/apr/21/wind-turbine-worker-hurt-in-fall-remains/>

Wind turbine worker hurt in fall remains hospitalized

- By [Sarah Kleiner Varble](#)
- Posted April 21, 2008 at 9:49 p.m.

The man who fell 50 to 60 feet inside the shaft of a wind turbine last week is still recovering at University Medical Center in Lubbock.

Christian Mendoza seems to be improving, but he still needs a lot of care, said George Bunting, general manager of Global Windpower Services, Mendoza's employer.

Global Windpower Services contracts with GE to perform wind turbine maintenance. GE contracts with FPL Energy, the company that owns the Horse Hollow wind farm where the accident occurred.

GE is conducting an investigation into the accident, so it is still not clear how Mendoza fell inside the tower, Bunting said.

"We're all just devastated that it happened," Bunting said, adding that Mendoza was a popular employee.

"The thing we're thankful for is that he was given such rapid medical attention" and it appears he is going to recover.

Global Windpower Services has never had an accident like this, Bunting said.

The industry is safety-conscious and ensures all employees know how to properly use protective equipment, such as harnesses, steel-toed boots, hats and glasses, Bunting said. Mendoza had been through all the training and was very experienced.

<http://www.dailyrecord.co.uk/news/scottish-news/2009/09/16/maintenance-worker-killed-in-wind-farm-accident-86908-21678314/>

Maintenance worker killed in wind farm accident

[Sep 16 2009](#)

A MAN has died in an accident while carrying out maintenance at a wind farm today.

It is understood the man was working high up on one of the turbines but did not fall.

Police were called at around 9.15am to the Causeymire Wind Farm, south of Spittal, near the A9 in Caithness.

A spokesman for Northern Constabulary said: "Police inquiries into the circumstances surrounding the death are ongoing and a report will be submitted to the procurator fiscal in due course.

"The Health and Safety Executive has been made aware of the incident.

"No details of the deceased will be issued until all next of kin have been informed."

Highlands and Islands Fire and Rescue Service said it was called at 9.11am today with a report that a man was unconscious and stuck on a turbine.

Three fire engines were sent to the wind farm but left the scene when it was confirmed the worker had died at 10.25am.

RWE npower renewables owns the wind farm.

In a statement, a spokeswoman said: "RWE npower renewables has regretfully been informed of a fatality at one of its operating wind farms today.

"The incident involved a contractor at Causeymire Wind Farm in Thurso, Scotland.

"Our thoughts at this time are very much with the individual's family.

"The cause of the incident is being investigated by RWE npower renewables and we will be fully co-operating with the Health and Safety Executive."

<http://www.cdc.gov/Niosh/FACE/stateface/mn/94mn013.html>

Minnesota FACE Investigation 94MN01301

Construction Worker Dies After Falling From a Wind Turbine Tower

SUMMARY

A 29-year-old male rigger (victim) died after falling between 20-40 feet during wind turbine tower construction. He was wearing, but not using, a safety belt and lanyard at the time of the incident. The tubular, slightly tapered, turbine tower consisted of two vertical sections which were being bolted together. The bottom tower section had been set and the victim and two coworkers were attaching the top section. They were working from a pre-installed factory-manufactured work platform inside the bottom section, at approximately 50 feet. Access to the platform was by way of a pre-installed metal ladder, attached to the wall with heavy steel supports. Tower section interiors were cleared of snow and ice prior to setting; except for ice on the bolt flange which was removed, the tower's top section appeared clear. After attaching four bolts, the workers noticed additional ice and snow inside the top tower section. They decided there was insufficient accumulation to warrant its removal for further cleaning, and one coworker climbed up the ladder and began to dislodge it. A large chunk of ice fell to the platform and struck the other coworker's head. As the victim and injured coworker began descending the ladder to exit the tower, more ice fell from the sides of the top section, through the platform's ladder opening, and onto the men on the ladder. The victim was knocked from the ladder by the falling ice. As he fell, his head struck a steel ladder support and he sustained instant, fatal, head injuries. MN FACE investigators concluded that, in order to prevent similar occurrences, employers should:

- **ensure workers use fall protection, even in emergency situations, when ascending/descending fixed ladders;**
- **cap wind turbine tower sections exposed to inclement weather to avoid ice build-up inside; and**
- **provide employees with adequate training to ensure that they can recognize potential hazardous exposures.**

INTRODUCTION

MN FACE was notified of a March 2, 1994, work-related death of a rigger on March 3, 1994. MN OSHA, the county coroner, and the county sheriff were contacted and releasable information was taken. Copies of the sheriff's report and photos were obtained. A site investigation was conducted on March 4, 1994.

The victim worked as a rigger for a construction company erecting wind turbine equipment. The company had been on the 73-tower site for five months, working throughout the fall and winter months. Rigging began four months prior to the incident. The victim had been provided on-the-job training by his employer. The incident occurred about 10:00 a.m.

INVESTIGATION

A 29-year-old male rigger (victim) died from injuries incurred after falling from a ladder inside a wind turbine tower under construction. He and two coworkers (Coworker 1 and Coworker 2) were bolting two tower sections together when the incident occurred. All were equipped with hard hats and safety belts with lanyards. The 120-foot tall tubular, tapered tower consisted of a bottom and top section, 56 and 64 feet tall, respectively. The bottom section, already bolted to a base concrete pad, was 11 feet in diameter. It tapered to 9 feet at the top, where the two sections were connected using 36 bolts. A door at the base of the bottom section allowed access to the inside of the tubular structure. Inside, a pre-installed metal ladder, secured with heavy steel supports at 12-inch intervals, ran along one side of the section. Workers climbed the ladder with the wall at their backs and the steel supports at their sides. During construction, fall protection for riggers consisted of a safety belt and two lanyards equipped with clips to tie/clip off to the ladder rungs as they ascended or descended it. A cable climbing kit for self-retracting lifelines had not yet been installed behind the ladder as permanent fall protection. The ladder led to a pre-installed work platform at about 50 feet, where workers stood while bolting the tower sections together. See Figure 1. The platform's ladder opening, about 3-foot square, could be covered with a hinged metal cover after the platform was gained.

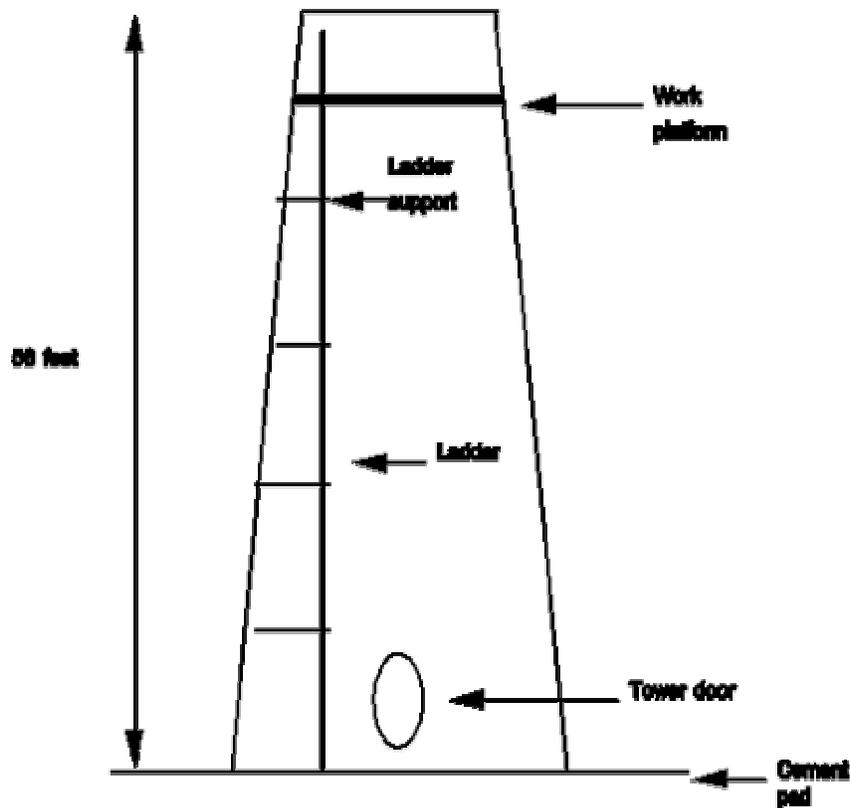


Figure 1.; Interior of bottom section of tower. Not to scale.

Tower construction began in the fall and proceeded throughout the winter. Before erection, sections were stored lying horizontally, open-ended, and unprotected on the ground. Tower

erection protocol called for the dislodging of any snow or ice accumulation on or inside tower sections before sections were set by rapping on its outside walls with 3 lb. rubber mallets until the snow/ice was cleared out. Snow removal took place while the sections were held in a vertical position by a crane.

Except for ice on the bolt flange, which was removed, the tower's top section appeared clear. The top section was lifted into position, and the workers on the platform began bolting it into place. Four bolts were connected when the workers noticed more ice in the top section. They decided there was insufficient accumulation to warrant its removal; Coworker 1 climbed up its pre-installed ladder to dislodge it instead. A large chunk of ice fell to the platform and struck Coworker 2 on the head, knocking his hard hat off. Coworker 2 complained of feeling dizzy and the victim, also on the platform, notified crew on the ground that he and injured Coworker 2 were coming down; Coworker 2 descended the ladder first. Apparently, neither worker clipped off to ladder rungs during their descent. More large pieces of ice, estimated to be up to 1 foot square and 6 inches thick, suddenly let loose from the sides of the top section and fell through the platform's ladder opening onto the men on the ladder. The victim, above Coworker 2 on the ladder at between 20-40 feet, was struck by the ice and knocked from the ladder. As he fell, his head struck a steel ladder support and he sustained instant, fatal, head injuries.

Other workers on site placed a 911 call immediately after the incident. The victim's falling body had knocked Coworker 2 off the ladder and landed on top of him; he required hospitalization for several days. Coworker 1 managed to avoid the falling ice and escaped major injury. No resuscitation was attempted on the victim after the incident.

CAUSE OF DEATH

The cause of death reported by the county coroner was severe head injuries.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Ensure workers use fall protection, even in emergency situations, when ascending/descending fixed ladders.

Discussion: Because of the height of the fixed ladders in the towers, workers were required to use fall protection (safety belts equipped with lanyards) during ascent and descent. During project start-up, in fact, it had been necessary to equip lanyards with larger clips to accommodate the towers' ladder rung size. In addition to making any necessary mechanical adjustments during start-up, and as part of fall protection training, employers should address appropriate procedures to use in emergency situations. The urgency of this situation demanded that the workers leave the tower as quickly as possible, but both the injured coworker and the victim should have used the supplied fall protection as they descended the ladder. In addition to the falling ice hazard, the injured coworker, feeling weak and dizzy, could have lost consciousness and fallen.

Recommendation #2: Cap wind turbine tower sections exposed to inclement weather to avoid ice build-up inside.

Discussion: Tower sections were stored lying horizontally, open-ended, and unprotected on the ground prior to erection. Open ends could be securely capped with a tarpaulin or similar covering to prevent snow from entering during winter months. This procedure, in addition to eliminating the hazard which caused this incident, may actually save time during tower erection.

Recommendation #3: Provide employees with adequate training to ensure that they can recognize potential hazardous exposures. This recommendation is in accordance with CFR 1926.21(b)(2).

Discussion: Employers should provide employees with adequate training to ensure that they can recognize potential hazardous exposures. The interior of tower sections were painted white, and snow and ice accumulation may have been difficult to see and/or assess, especially when they were hanging in a vertical position. Training should, therefore, emphasize that dislodging ice above workers who may be in the tower is always hazardous and should be avoided. When new company procedures or guidelines are developed or existing ones are modified, employers should ensure that workers are provided with appropriate supplemental training.

REFERENCES

1. Office of the Federal Register, Code of Federal Regulations, Labor, 29 CFR Part 1926.21(b)(2), U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., July 1, 1992.

<http://www.comtrainusa.com/CT/News/Sioux%20Falls%20Accident/article.htm>

Sioux Falls utility worker dies in fall from Minnesota wind tower

Man, 26, installing turbine before fire broke out; 2 others injured

From Staff & Wire Reports

Article Published: 11/12/05

CHANDLER, Minn. - A Sioux Falls man was killed after falling more than 200 feet from a wind tower after it caught fire Friday morning near Chandler, authorities said.

Benjamin James Thovson, 26, died at the scene after falling about 210 feet, Murray County (Minn.) sheriff's deputy Randy Donahue said.

The victim was installing a Suzlon Wind Energy Corp. wind turbine, according to a statement released Friday evening by Suzlon and another company, Gary, S.D.-based Energy Maintenance Service.

The workers were replacing a bolt when the fire started, the Associated Press reported.

Two other employees of the Gary firm were injured and treated at a local hospital, according to the statement. They were able to climb down and escape.

The sheriff's office had received a call just before 10 a.m. reporting the fire, and that one person had fallen.

When help arrived, Donahue said, "the wind generator was engulfed in flames."

Names of the injured workers and details on the extent of their injuries were not released Friday.

The tower is owned by Dean DeGreeff of Chandler, who is part of an eight-person private ownership group called East Ridge Wind Farm.

Energy Maintenance Service and Suzlon officials said they were cooperating with federal, state and local authorities in the investigation.

"Our sincerest condolences go out to the family and friends of our co-worker, and to all employees of Energy Maintenance Service, LLC., and Suzlon Wind Energy Corporation," according to the statement.

"This is a difficult time for all of us," it stated. "As is the case when workplace tragedies happen, Energy Maintenance Service and Suzlon will provide grief counseling services to employees as needed."

According to Suzlon's Web site, the company's Minnesota Project includes about a dozen wind farms in the southwestern part of the state. The firm supplies wind turbines for farms.

The power produced is sold to Northern States Power Co., a subsidiary of Xcel Energy, and to Great River Energy, according to Suzlon.