

**KEITH L. THORSTAD**  
**President, Thorstad Companies**

**Overview**

Keith has 40 years of experience in the construction industry, including 20 years in the wind energy industry, and has worked on over 200 projects. Keith's personal and company mission statement is to provide the best value construction services while maintaining safety, quality, and integrity. Keith is committed to providing the highest level of service and innovative thinking; providing a safe and rewarding work experience; and inspiring this same level of thinking and service in every community Thorstad Companies touches.

As the President of Thorstad Companies, Keith provides services such as: general contracting; civil design/construction (site and road); foundation design and construction; tower and turbine installation/heavy lift; and electrical design/transmission lines/installation (collection systems, substations, interconnections).

**Representative Wind Projects by Thorstad Companies and Affiliates**

***Adams Wind Farm and Danielson Wind Farm, Meeker County, Minnesota***—each a 20 MW wind farm consisting of 12 Alstom 1.65MW Ecotecnica 86 turbines. For ***Adams***, provided complete electrical collection construction and all BOP equipment and materials, turbine erection, and civil construction; for ***Danielson***, provided all civil construction, turbine erection, BOP equipment and materials, and complete electrical collection construction. Due to close proximity, Thorstad Companies or affiliate was able to reduce overhead costs by sharing resources and equipment. Both projects were built simultaneously, went very smoothly, and were completed ahead of schedule and under budget.

***Beethoven Wind Farm, Tripp, South Dakota***— 80 MW wind farm consisting of 43 GE 1.85MW turbines. Engineered, procured, and constructed wind farm, including installation of turbine foundations, turbine erection and mechanical completion, collection system, SCADA system, substation, seven miles of transmission line, and all necessary roads. Worked with the local utility company to tie the project substation into Tripp Junction substation via seven miles of T-Line. Collaborated to ensure that construction had zero wetlands impact.

***Buffalo Bear Wind Farm, Buffalo, Oklahoma***— 18.9 MW wind project consisting of 9 2.0MW Suzlon S88 turbines. Acted as Engineer-Procure-Construct Contractor ("EPC Contractor"). Designed and constructed roads, foundations, and substation, erected wind turbines, and installed collection system.

***Community Wind North Wind Farm, Benton, Minnesota***— 30 MW wind farm consisting of 12 2.5MW Clipper turbines. Improved existing roadways to accommodate heavy and long loads, provided all civil design and construction, erected turbines, provided EPC supply of BOP equipment and materials, and complete electrical construction. C-Bed (community-based energy development) project—ownership comprised of local individuals.

***Elkhorn Ridge Wind Farm, Bloomfield, Nebraska***— 27 3.0MW turbines. Served as EPC Contractor. Turbines used in this project are some of the largest commercial turbines currently in use in the United States. Designed and constructed the roads, foundations, substation, and operations and maintenance building, erected the wind turbines, and installed the collection system. Worked with local government officials to improve existing roadways to accommodate heavy and long loads. Moving the erection crane from site to site made it necessary to drop existing power lines. Collaboration with the local utilities minimized disruption to area businesses, farms and residences. Project completed ahead of schedule.

***Odin Wind Farm*** — 10 2.1MW Suzon S88 turbines. Served as EPC contractor. Designed and constructed roads, foundations, and substation, erected wind turbines, and installed collection system. A strategy for construction of roads, crane paths, and pads, as well as the weight of the crane and its site-to-site movement, was required to compensate for soft soils.

***Pioneer Wind Park I, Glenrock, Wyoming***— 80 MW wind farm consisting of 46 GE, 1.8MW wind turbines. Served as EPC Contractor. Wind turbine generators span from a canyon to a mountain range. Project's single surface access point is through six miles of canyon road, portions of it containing a 14% grade. Installed the first aircraft detection system approved by the Federal Aviation Authority. Radar-activated lighting technology mitigates impact of flashing lights on local community. FAA lights are activated when aircraft is detected. As part of this project, also built the Amasa Switchyard for PacificCorp.

***Ridgewind Wind Farm*** — 25 MW wind farm consisting of 11 2.3MW Siemens turbines. Served as the EPC contractor on this project while designing and constructing the roads, foundations, switch yard, O & M Building and installing the collection system.

***Spanish Fork*** — 18.9 MW wind farm consisting of 9 2.1MW Suzon S88 turbines. Served as EPC contractor. Located at base of a mountain with a river running through it, the windy conditions required special schedule adaptations. Provided temporary lighting to create a safe environment for working at night when winds were less severe.

***Spion Kop Wind Project, Geysler, Montana***— 40 MW wind farm consisting of 25 GE 1.6MW turbines. Served as EPC Contractor and designed and constructed roads, foundations, and substation, erected wind turbines, O & M Building, and installed collection system. Also brought construction financing to the project and purchased turbines. Terrain presented numerous challenges in the form of steep inclines and elevation changes. Ensured delivery of materials and turbine parts was executed smoothly, planned site logistics, and worked closely with experienced transportation specialists.

#### ***Single Turbine Projects:***

GL Wind, Lewiston, Minnesota— 5 MW wind project consisting of 2 2.5MW Clipper turbines. Thorstad Companies or affiliate provided all civil construction, turbine erection, BOP equipment and materials, and complete electrical construction. The project was completed on time and within budget.

Goldwind Iowa Turbines, Iowa—The project consisted of simultaneously installing 3 1.5 Goldwind turbines in separate locations in central Iowa. Goldwind is new to the US market and this project was the first with a new turbine design. Thorstad Companies or affiliate provided all civil construction, turbine erection, BOP equipment and materials, and complete electrical construction. Working closely with Goldwind and maintaining open communication were key components in delivering this project on time and within budget.

University Of Minnesota - Morris Wind Conversion System, Morris, Minnesota— The project consisted of 1 Vestas, 1.65MW wind turbine. Thorstad Companies or affiliate was the BOP contractor that constructed the roads, foundation, interconnects, erected the wind turbine and installed the collection system.

Osage Municipality, Osage, Iowa— The project included 1 1.5MW GE turbine. Thorstad Companies or affiliate served as the BOP contractor.

### **Education**

Degree in Industrial Technology  
Alexandria Technical Institute  
Moorhead State University