



TURNERY ENERGY CENTER

LATHROP, MO

BY THE NUMBERS



PROJECT FACTS

Location: **Lathrop, Missouri**
 Type: **Wholesale Power Generations**
 Owner: **Associated Electric Cooperative Inc. (AECI)**
 EPC: **Black & Veatch Construction, Inc.**
 TIV: **\$520 Million**



MAXIM FACTS

Total Contractors: **1**
 Weight Lifted: **1,376,000 lbs.**
 Project Duration: **4 weeks**



CRANE STATS

Rough Terrain: **5**
 Crawler: **3**
 Gantry: **1**
On Site Total: 9



THE PROJECT: In response to the need for increased energy transmission to rural Missouri communities, NW Electric Power Cooperative is building a brand-new energy center. Associated Electric Cooperative is leading the construction of the center. When complete, Turnery Energy Center will be the most advanced commercially operated combustion turbine in the state of Missouri. The center will be available to quick start and run on demand during periods of peak energy use.

THE CHALLENGE: Maxim Crane supported one aspect of this project by erecting a 440 MW Single Combustion Turbine Power Block. Primary challenges and considerations for this project included precision, safety, and cost effectiveness. To handle the heaviest rotating equipment, Maxim used a hydraulic gantry system with power-links that allowed operators to position the turbine and generator precisely over the foundation anchor bolts. The use of a gantry provided a more cost-effective alternative to a large crawler crane. Both the gas turbine and generator were safely lifted and rough set on time.

OUR APPROACH & SOLUTION: The centerline erection scope for the power block was accomplished utilizing a 700-ton hydraulic gantry system. Each major component was unloaded from hydraulic platform trailers, traversed, and placed to benchmarks on each foundation pedestal. The duration of the gantry operations ran approximately 4 weeks based on the major component delivery schedule.

EQUIPMENT USED: Maxim used top-tier lifting equipment for this project, specifically selected for the site's constraints and load requirements:

- (1) 700-ton hydraulic gantry | J&R Engineering/Lift & Lock T1402-4-39 1400 system with power-links
- (1) 50-ton rough terrain | Link-Belt RTC8050
- (1) 65-ton rough terrain | Grove RT765E
- (1) 80-ton rough terrain | Grove RT880E
- (1) 110-ton tele-crawler | Grove GHC110
- (1) 130-ton tele-crawler | Grove GHC140
- (1) 275-ton crawler | Kobelco CK2750G-3
- (1) 300-ton crawler | Manitowoc 2250 S3
- (1) 330-ton crawler | Liebherr LR1300

RESULTS & IMPACT: When the Turnery Energy Center is completed in 2027, Missourians across the state will have reliable access to backup power during periods of peak energy use, strengthening the state's resilience against outside factors and fulfilling the energy needs of a modern population.

THE MAXIM ADVANTAGE: Black & Veatch Construction came to Maxim Crane not just to provide cranes for their lifts, but to provide high-quality equipment and critical execution that would bring this project safely to completion. Drawing on our elite team of engineers, sales representatives, operators, and more, Maxim Crane is experienced in providing support for turn-key solutions. We don't just sell the job. We see it through.

BRING MAXIM'S EXPERTISE TO YOUR NEXT PROJECT: Maxim is here for our nation's energy solutions and infrastructure. As your needs continue to evolve, reach out to Maxim to learn how we can best support your lift.

