

# POWER GRID SOLUTIONS

# WE DO THAT ... & MORE

# Building connections between generation facilities & end-users

Michels Power, Inc. supports America's electrical and communication backbone by delivering comprehensive overhead and underground construction services for 69kV to 765kV electric utility systems and fiber networks. We have a team of skilled project management and construction management leaders, experienced field construction resources and an enviable equipment fleet strong enough to build transmission and distribution power lines, electrical substations and communication systems from coast to coast. Michels offers EPC contracts on significant power projects involving all the services we provide.

www.Michels.us







# TRANSMISSION

Michels Power has built tens of thousands of miles of 69kV to 765kV lines to move electrical power from generation facilities to substations.

### Our transmission line construction capabilities include:

- Overhead and underground facilities
- New, rebuild & relocation construction
- Maintenance
- Structure/tower assembly & erection
- Reconductoring
- Barehand live line & hot sticking work
- Structural Concrete

# DISTRIBUTION

Michels Power has significant experience installing, converting, upgrading and removing electrical distribution networks.

#### Our distribution construction capabilities include:

- Overhead & underground
- New construction & rebuilds
- Voltage conversions
- Pole replacement programs

# RENEWABLE ENERGY

Michels Power installs overhead and underground medium-voltage collection systems, overhead and underground transmission lines, substations, switchyards, interconnects and battery storage for wind and solar.

# BATTERY ENERGY STORAGE SYSTEMS (BESS)

Michels Power's BESS solutions allow energy generated from renewables, such as solar and wind, to be stored and then released when the power is needed most.

#### Our BESS capabilities include:

- Civil, grading, drainage & fence
- Foundations (spread footing & piling)
- Raceways & cabling
- Fire alarm systems
- Battery & inverter installation
- Supervisory control & data acquisition (SCADA)
- Interconnection of BESS to utility systems
- Testing & commissioning



# SUBSTATIONS AND INSIDE WIRING

Michels Power has delivered hundreds of stations across the country, from turnkey greenfield installations to complex, outage driven brownfield rebuilds. Our expertise includes oil and gas facilities and heavy industrial projects.

#### Our substation capabilities include:

- Stations up to 500kV
- Site work
- High security fences
- Transformer transportation
  and logistics
- Testing & commissioning

HVDC transmission

- SCADA
- Heavy industrial

## FOUNDATIONS

Michels Power foundations crews support our partners by building foundations for transmission and substation projects from coast to coast. We work directly with energy companies and as a subcontractor to general contractors.

#### Our foundations capabilities include:

- Direct embed
- Drilled shafts/caissons
- Grillages
- Micropiles
- Helical piers
- Driven piles
- Auger-cast piles

### LIVE LINE UPGRADES AND REPAIRS

Michels Power invests in the training, certification and specialized equipment needed to safely and efficiently maintain and repair critical high-voltage lines up to 500kV without outages.

#### Our energized line capabilities include:

- Barehand work
- Hot sticking
- Mechanical arms





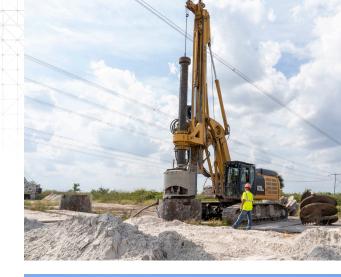


#### **EMERGENCY AND STORM RESPONSE**

Michels Power, crews and equipment are quickly deployed whenever and wherever needed to restore damaged networks safely and systematically.

Pre-negotiated contracts allow our crews to get to work quickly.

Storm Hotline: 855.322.3922



# We Do That

Transmission lines Distribution lines Substations Communication networks Renewable energy

#### ... & More

Access roads

Emergency & energy response

Foundations

GIS

Helicopters & drones

Horizontal directional drilling, Direct Pipe & microtunneling

Joint installations

Live line upgrades & repairs

Matting

- Rail plowing
- Site clearing
- Slip stabilization
- Work pads



# WE DO THAT ... & MORE

#### Distribution networks

Did you know Michels constructs and maintains natural gas distribution systems and duct bank networks throughout the United States? We are equipped for work in urban and rural areas.



# www.Michels.us



**Center to Grand Forks** *North Dakota* 2012-2014

- 250 miles of new 345kV AC line between two existing substations
- 1,334 steel structures
- Direct embed & drilled foundations
- Extreme temperatures



Raccoon Trail 345kV Switchyard Waukee, Iowa 2018-2019

- Engineered, procured and constructed 345kV switchyard 768 piers
- 67,000 feet of conduit
- 60,000 feet of ground grid
- 3,000 feet of cable trench
- 395,000 feet of control and power cable
- All above-grade equipment



**500kV Rebuild Phase D** Southern Florida 2019-2020

- 642 drilled shafts from Loxahatchee to Indiantown, FL
- 5½ to 6½ feet in diameter
- 35 feet deep
- All drilled under slurry
- All drilled under energized 500kV lines



Moses-Adirondack Smart Path Reliability Project Upstate New York 2020-2023

- 86 miles of two existing H-frame circuits from Massena and Croghan, NY
- 389 foundations
- 407 direct embedments
- 776 new structures
- 12 hard outages

An overview of the collective strength of the **MICHELS**<sup>®</sup> Family of Companies

7,000+ people strong









Visit our website to learn more about our power solutions.