



- Environmentally Friendly
- Quick Installation
- Eliminates Corrosion
- Cost Effective

# Renewables

## Green grounding innovations

### Typical Applications

- Wind farms & solar arrays
- Hydro, nuclear, gas, and/or coal fired generating plants
- Electrical switching centres and substations
- Electrical high voltage transmission systems and towers

### Risks and Opportunities

- Service interruptions caused by lightning strikes due to poor or inadequate grounding strategy and systems.
- Damage to equipment and infrastructure by power system ground faults.
- Premature failure (due to corrosion) of grounding systems built with traditional techniques and materials.
- Personnel safety hazards due to improper or deficient grounding systems.
- Sensor and other monitoring and control system failures due to unwanted ambient electrical noise and EMF radiation that can disrupt equipment and cause service interruptions.

### Solutions

- Improve the effectiveness, robustness and life expectancy of power generation ground grids with new materials and computer modeled engineering designs.
- Correct deficiencies in existing building grounding systems to eliminate dangerous ground loops, mitigate ambient electrical noise and reduce unwanted EMF radiation.
- Upgrade transmission towers with long-life, ultra-low maintenance grounding systems designed to effectively dissipate lightning strikes or power system ground faults without arcing or other collateral effects.