SITE-SPECIFIC SERVICES FOR SOLAR

CPP WIND ENGINEERING CONSULTANTS

Optimize your solar investment with a site-specific study

Wind and weather-related risks impact the reliability and cost of solar farms. Code-based wind loading procedures are generalized and often conservative. CPP Wind provides site-specific climatic design recommendations so that your investment is optimized for performance and cost:

- Replace code-prescribed methods with accurate site-specific climatic design conditions to optimize design and loading.
- Improve solar farm design (and site selection) by evaluating the effects of hills and forests, as well as the risk of extreme wind events.
- Refine wind loads based on site-specific wind speed and directionality characteristics to save on cost. A 5% reduction in speed is a 10% reduction on load.
- Provide site-specific snow loads as well as snow and wind load combination factors to ensure reliability.

DESIGN WIND SPEED

Improved storm-separation methods consider site location and regional historical and modeled weather data to replace code design speeds, which often conservatively cover large geographic regions.

WIND DIRECTIONALITY

Site-specific studies provide directional design wind speeds, which replace generic directional reductions provided by building codes and improve the overall reliability of your design.

EXPOSURE

Code procedures have conservative rules about accounting for the natural and built environment surrounding the site. CPP Wind can determine intermediate exposures by direction, allowing for accurate assessment.

TOPOGRAPHY

CFD simulations provide a more accurate representation of wind in complex terrain.

SITE-SPECIFIC LOADS

CPP provides the most accurate loads, including top-of-pile, modules, and rails, by combining directional site study parameters with wind load coefficients for each direction. This is the most precise way to determine wind loads and is common practice for marquee structures like supertall buildings.

Protect your solar investment with our additional services:

- Air Density
- Snow Loading Parameters
- Hailstorm Size with Concurrent Wind Speeds
- Ice Accretion with Concurrent Wind Speeds
- Solar Reflectivity

< CPP Wind's site-specific studies conducted worldwide.

CONTACT CPP WIND TODAY TO ENSURE THAT THE EFFECTS OF WIND AND WEATHER ARE INCORPORATED IN YOUR DESIGN.

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