



Arapahoe County Wind Driven Power Supply Submittal Guide

The attached handout is designed to be a general permit submittal covering most installation instances, however it is not possible to anticipate all individual site variations and therefore additional plan review or inspection comments may apply beyond what is included herein

The main office number is 720-874-6600, where you can speak directly with inspection staff from 7:00 to 7:30 AM and 4:30 to 5:00 PM, or any of the office / plan review staff from 8:00 to 4:30.

Inspections requested by 4:30 PM are, except for rare occasions, normally always completed the next business day, and may be performed anywhere from 7:30 AM to 5:00 PM

For inspections to occur, the address must be posted, the permit card, approved plans and any previous correction notices must be available, access (including ladders if applicable) must be provided to the inspection area, someone at least 18 years of age must be present if access inside the structure is required, and permission must be provided prior to us entered a fenced yard.

Permit Submittal Requirements

- A complete BUILDING PERMIT APPLICATION, signed and dated by the applicant, including all contact information and the total labor and materials valuation for the full scope of work
- Two sets of plans that specify if the system is a stand alone system or an interactive system. The plans should also clarify the location of the equipment, indicate required clearances and mounting requirements.
- Provide a site plan indicating the location of the tower on the property along with dimensions from the tower to all adjacent structures and property lines. The site plan must also indicate the septic and leachfield locations, if applicable for Tri-County Health Department approval.

Wiring Requirements

Provide a one-line diagram that includes the following information:

- Conductor sizes
- Conductor insulation types
- Conductor material i.e., copper/ aluminum
- Overcurrent device ratings
- Existing and new panel amperage ratings
- Series and parallel configuration of the module connections. Provide a schematic drawing that includes, the location of all disconnects, the location of all modules, the location of all batteries and inverters

- The size, location and connection of all grounding electrode conductors
- Conduit sizes
- Conduit material (i.e., nonmetallic, EMT, direct burial cable, NM cable)

Equipment Requirements:

Provide the following general module information:

- The short circuit current ratings, the open circuit voltage ratings, and the series fuse ratings.
- Inverter output circuit current rating and the UL listings.
- All associated documentation including inverters, batteries, disconnects, modules, charge controllers, over-current devices, etc.

Structural Considerations for the Tower and Foundation:

Provide the following information:

- Clarify (code) parameters used in the design of the tower and foundation
- Provide verification that the wind turbine structure is designed to meet the minimum Arapahoe County wind speed standards of 90 MPH 3-second gust.
- Provide a stamped engineered footing / foundation design for the wind turbine structure
- Provide a stamped engineered plans for the tower design
- Provide a stamped soils report or stamped soils verification letter from the engineer, verifying that the actual site soil type and bearing capacity is consistent with the submitted engineered footing / foundation design.