



October 30, 2023

Southeast Energy Solutions

855 Sunset Dr #8
Athens, GA 30606

RE Bass Residence
2184 Wire Rd, Bunnlevel, NC 28323
Client Project #:2184BA
PFE Project #: 233917

On behalf of Southeast Energy Solutions, Penn Fusion Engineering LLC (PFE) performed a structural analysis of the ground mount system at the above referenced location. The purpose of our analysis was to determine if the ground mount system is structurally sufficient to support the new photovoltaic (PV) modules in addition to the code required design loads.

Conclusion and Recommendations

A structural analysis was performed per the 2017 NEC, North Carolina Residential Code 2018, and ASCE 7-10 with the following load criteria:

Basic Wind Speed (V): 135 mph (3-second gust)
Ground Snow Load : 10 psf
Exposure Category: C

Per our analysis, the system is sufficient to carry the PV load. The ground anchorage should be minimum of 36” and must be proof tested for 1811 lbs in uplift.

If you have any questions regarding this analysis, please feel free to contact us.

Best Regards,
Penn Fusion Engineering, LLC

Andrew D. Leone, P.E.
Principal

