



Thursday, March 24, 2011

Re: Sollega Solar InstaRack wind tunnel testing for wind loads

CPP, Inc. has conducted wind tunnel testing on the Sollega InstaRack system with generic solar PV modules. The wind tunnel study was conducted in accordance with the test procedures described in Section 6.6 of ASCE 7-05, Method 3 – Wind Tunnel Procedure and in accordance with the specifications of ASCE Manual of Engineering Practice No. 67, “Wind-tunnel Studies of Buildings and Structures”. Principals at CPP, Inc. have decades of wind engineering experience, testing hundreds of buildings and structures, and include membership on the ASCE-7 Wind Load Subcommittee and Standards Committee on Wind Tunnel Testing. Engineers at CPP, Inc. have tested and analyzed dozens of solar energy systems for wind loads.

The wind load coefficients we measured were provided for the InstaRack system as a function of module location within an array and location of the module on the roof. These net normal gust pressure coefficients (G_{CN}) are consistent with the formulation of ASCE 7-05, which is based upon a 3-second design wind speed at 10 meters. Therefore, they are used in conjunction with the methods prescribed by the analytical method of ASCE 7-05 Chapter 6.

CPP, Inc. has provided wind load coefficients and recommendations to calculate the design wind loads potentially experienced by the InstaRack system. Strategies for resisting these wind loads are left to the discretion of Sollega and their contractors.

Sincerely,

DAVID BANKS, PH.D.
Senior Associate

SCOT K. WAYE, PH.D.
Senior Engineer