



August 6, 2019

SnapNrack  
775 Fiero Lane, Ste. 200  
San Luis Obispo, CA 93401  
TEL: (877) 732-2860

Attn.: SnapNrack - Engineering Department

Re: Report # 2017-03227.11 – SnapNrack Ultra Rail Solar Photovoltaic Racking System with UR-40 Rail  
Subject: Engineering Certification for the State of Minnesota

PZSE, Inc. – Structural Engineers has provided engineering and span tables for the SnapNrack Ultra Rail Racking System with UR-40 Rail, as presented in PZSE Report # 2017-03227.11, "Engineering Certification and Span Tables for the SnapNrack Ultra Rail Solar Photovoltaic Racking System". All information, data, and analysis therein are based on, and comply with, the following building codes and typical specifications:

- Building Codes:
1. ASCE/SEI 7-10, Minimum Design Loads for Buildings and Other Structures, by American Society of Civil Engineers
  2. 2015 Minnesota Building Code, by Minnesota Department of Labor & Industry
  3. 2015 Minnesota Residential Code, by Minnesota Department of Labor & Industry
  4. AC428, Acceptance Criteria for Modular Framing Systems Used to Support Photovoltaic (PV) Panels, November 1, 2012 by ICC-ES
  5. Aluminum Design Manual 2010, by The Aluminum Association, Inc.
  6. ANSI/AWC NDS-2012, National Design Specification for Wood Construction, by the American Wood Council

Design Criteria:

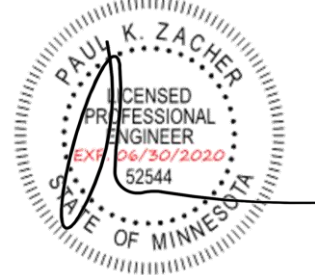
Risk Category II  
 Seismic Design Category = A - E  
 Basic Wind Speed (ultimate) per ASCE 7-10: up to 190 mph  
 Ground Snow Load = 0 to 120 (psf)

This letter certifies that the loading criteria and design basis for the SnapNrack Ultra Rail Racking System with UR-40 Rail Span Tables are in compliance with the above codes.

If you have any questions on the above, do not hesitate to call.

Prepared by:  
PZSE, Inc. – Structural Engineers  
Roseville, CA

DIGITALLY SIGNED



I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature: [Signature]  
 Typed or Printed Name: Paul K. Zacher  
 Date: 08/06/2019 License Number: 52544