

The Future is Bright

Innovations at Array Technologies

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March 2, 2019



AMERICAN
SOLAR
ENERGY SOCIETY

I was lucky enough to tour Array Technologies and learn about tracking systems, wind loading, and bifacial design. Along with a handful of other tour-goers, I spent a few days in Albuquerque, New Mexico learning about Array, their values, technology, and innovation in all things solar. Array is a company that produces large scale solar trackers and is known for being leaders in solar technology innovation, which I got to see first-hand!

We began the tour with Ron Corio, who founded Array Technologies and pioneered solar tracking technology in Albuquerque back in 1989. He has since passed the leadership of the company over to new CEO Jim Fusaro, so that he can focus on more research, development, and innovation within the company.



Tour group walking through solar fields. © Courtesy of Array Technologies

After the meet and greet, the tour went into Array's facilities where we saw how the trackers are built. Array's attention to detail on everything from the bolts to easy assembly for the end user is polished and well maintained. Corio and his team of engineers at Array have improved the tracking system from its original design. For example, they now use an octagonal torque tube instead of spherical to enhance structural integrity; it also offers a sleek look. Array has made other improvements to increase efficiency, minimize maintenance, and eliminate gaps to use less land.

We then observed dynamic response to wind loading (high winds). Array's trackers are so responsive to changes in the weather that the solar arrays mounted to the trackers will

move themselves into a less vulnerable position during high winds to minimize structural damage to the system. Array achieves this through system design; it does not require the trackers' motors – crucial if the power goes out as a result of a storm. Being somewhat of a solar technology novice, learning this just blew me away! One of their arrays has 90 solar modules per row, and they are all held together by one bolt per module, making the system extremely easy to assemble and maintain.



Array Technologies media group touring a facility displaying Array's panels, ASES Membership Services Director Carly Cipolla is fifth from the left. © Carly Cipolla

I look forward to other opportunities to see and touch other solar applications and technologies "up close and personal"! Working for ASES has its benefits!

About the Author

Carly Cipolla is the Membership Services Director for ASES and a graduate from the University of Colorado Boulder with a degree in Environmental Studies and minor in Atmospheric and Oceanic Science.