



Fixed and Tracking PV Solar Array Installations

BACKGROUND

Material Integrity Solutions, Inc. (MIS) has provided design and engineering for a number of fixed array and tracking PV solar panel installations totaling over 5,000 kW. MIS' scope of services to a major supplier of solar systems to design and permit these installations include:

- Civil/Structural design and engineering
- Electrical (high voltage) engineering
- Development of special connections
- Field engineering support



Roof Mounted Fixed PV Array providing Power and Architectural Accent

DISCUSSION

As utility costs continue to increase, many industrial, commercial and public entities have opted to reduce electricity costs and emissions and/or take advantage of state sponsored energy incentives by installing PV panels at one or more of their facilities.



Parking Structure Roof with Fixed PV Array providing Power and Shade

PV systems which have been supported by MIS range from ~40 kW to 5,000 kW. In most applications, MIS reviewed, civil and structural information of the site, designed and engineered the supporting structure for the PV system, helped with the method of attachment to existing structures (if required), coordinated and supported acquisition of permits, and provided field/construction support.



Roof Canopy Fixed PV Array System providing Power and Shade (Hawaii)

CONCLUSION

MIS has successfully met or exceeded expectations of its client and continues to provide civil/structural/electrical engineering support on an ever-growing list of PV array projects, both fixed and tracking. MIS has also equipped its offices with a new solar PV system indicating its commitment to this industry.



Tracking System providing Power and Shade