SVERDRUP ENGINEERING SERVICES
PROJECT EXPERIENCE

ENR2 Rooftop Agrivoltaic Solar Canopy

Tucson, **AZ**

Engineering for 63KWAC Agrivoltaic Rooftop Solar Canopy at the University of Arizona Environment and Natural Resources 2 (ENR2) Building. ENR2 is located on University of Arizona's main campus, is LEED Platinum certified and designed to display sustainability in a desert environment while providing state-of-the-art learning and meeting spaces for students and faculty in Tucson, Arizona. Tucson Electric Power and U of A partnership has pushed U of A's most sustainable building even more green.

Electrical design included 276 REC Solar 270 watts solar modules in 23 module strings at 1000V DC and connected to one SMA 62.5kW Core1 480VAC Inverter. The modules were attached to the canopy structure on the roof at a fixed tilt facing south. The inverter 480VAC output transitions from the rooftop to the utility meter located on 1st floor. Modules were bolted to carport structure and weeb washers were used to ground the modules to provide the most efficient connection. Lighting and grounding were provided. Design drawings include; site plan, demolition, foundations, lighting, grounding, stringing, details, single line diagram, three-line diagrams, DC line diagrams, signage, and equipment data sheets.

Owner: University of Arizona

Design: February 2020

In Service: January 2021