

National Park Service – Little River Canyon Solar PV Array Installation



“The National Park Service seeks every opportunity to reduce its impact on the environment and demonstrate a sustainable path to its millions of visitors. To help us in this effort we have found a great partner in E4E Solutions. We utilize their technical resources to help guide us to practical and financially viable solutions.”

Brian Cook, *Regional Sustainability Manager*, **National Park Service**

10% Total energy needs from solar energy

SAVINGS EQUIVALENTS

TONS OF CO2 SAVED	100
GAL OF GASOLINE	12,059
kWh OF ELECTRICITY	6,412
RAILCARS OF COAL	.59

Brief

Little River Canyon is a pristine mountain river canyon that provides visitors with spectacular views and outdoor recreational opportunities. To minimize the impact that the NPS's facilities have on the environment and reduce their carbon footprint, the park contracted with E4E Solutions to install a 5 kW solar photovoltaic array. This solar array provides power to the park's maintenance facility and generates about 10% of the facility's total energy needs.

Approach

As many clients are interested in renewable energy without pre-defined goals, E4E Solutions first performed a feasibility study to determine realistic power and financial return goals. At this point the project engineers designed an optimized array utilizing quality, American-made products positioned to avoid all shade and optimize solar exposure. Aggregate losses were kept below the typical minimum through the use of advanced distribution techniques.

Over its 20+ years of expected life, this use of solar energy will reduce greenhouse emissions by over 100 tons. This is the equivalent to the carbon benefits of saving 250 barrels of oil or a full acre of trees.