Delta Solar
Powering the Future

SYSTEM DETAILS:

SIZE: 181.7KW

MODULES: TRINA 395W

TECHNOLOGY:
HIGH EFFICIENCY
MONOCRYSTALLINE

INVERTERS:
FRONIUS PRIMO 15KW

RACKING: FIXED TILT (25°)

MODELED PRODUCTION:
1475 KWH/KW

HISTORICAL PRODUCTION:
1501 KWH/KW

Boyd Family Farms

Rison, Arkansas

Boyd Family Farms owns and operates multiple poultry houses in Rison, Arkansas. Stephen Boyd became interested in solar after a recent expansion of his farm which now includes two 25,000 sq ft houses, two 20,000 sq ft houses, and two 16,000 sq ft houses for a total of 122,000 sq ft under management. The farm currently keeps birds for 8 weeks with 4 flocks per year and anticipates getting to a 7.5 week keep time with 5 flocks a year based on market conditions. The target average weight is 7.35lbs which is accomplished with a bird density of 0.87 square foot per bird.

Like most agricultural producers, Boyd Family Farms has a variety of electric meters that cover the poultry houses, general farm operations, and residences. Each of these meters has a unique energy use profile and thus the effective cost-per-kWh of electricity can vary. Several system designs were considered prior to settling on a system that offsets substantially the entire electric needs of the farm. The result is a low-maintenance investment in the future of the farm with an anticipated break-even point of under 5 years.

Boyd Farms Selected Rewards and Accolades

2021 Cleveland County Farm Family of the Year
2020 USDA REAP Grant Recipient

Boyd Family Farms

What is Net Metering:

Net Metering is a policy that accounts for both power consumption and generation. Arkansas has 1-to-1 net metering which means that if someone puts a kilowatt-hour (kWh) onto the grid, they can take that kWh back at any time. The energy returned to the grid is never converted to money; it is simply available for use in the future. This means that the value of the power stays the same as the rates they are charged. **As a result, the most crucial step in considering solar is making sure you work with an installer that can accurately determine your effective cost-per-kWh.**

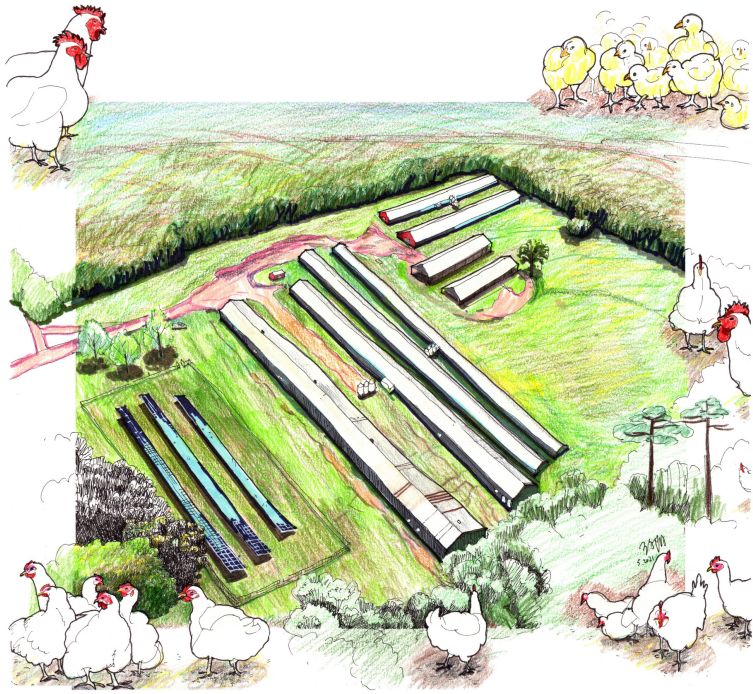
What is Meter Aggregation:

Meter aggregation is a policy that allows an energy customer to provide a list of accounts to which any excess net metering credits should be credited. The solar field's electricity will first be applied to the meter to which it is connected, and any surplus credits will be applied to other meters on the list until all of the credits have been used up.

For the agricultural community, the combination of Arkansas net metering and meter aggregation policies is crucial. Electric consumption on any given meter in farming might fluctuate dramatically from month to month and year to year. These regulations allow Boyd Farms to invest in solar power with the confidence that any extra power they create will offset their future use, regardless of variations in when they have birds in the houses.

"It was important to us to work with the best and not just the cheapest company. Delta Solar was the clear choice and also happened to be the most cost-effective by a significant margin."

- Stephen Boyd, Owner, Boyd Family Farms



DID YOU KNOW:

Tyson Foods has partnered with Auburn University to test solar-powered poultry houses, and the business has set a goal to reduce its supply chain's overall carbon impact by 50% by 2030. Boyd Family Farms is a leader in sustainability, having become the first chicken producer in Arkansas to use solar to offset nearly all of their power consumption.

LEARN MORE ABOUT THE USDA REAP GRANT:

The USDA REAP Grant can help you go solar with a grant for up to 25% of the system cost. Delta Solar will help you with the entire application process.

Visit deltasolar.com/reap-grant for more information.