



# ENTROPY

SOLAR INTEGRATORS



*“Entropy worked with me through every aspect of making a solar farm on our land a reality. I am excited to have clean energy on my property.”*

— Patricia Garrell  
Landowner

## Work Performed

- Site selection and analysis
- GIS mapping
- Title searches and ownership issue resolution
- Lease negotiation
- Permit, easement, and zoning resolution
- Project management
- Municipal and community engagement

## Case Study: Garrell Solar Farm

**Location:** Chadbourn, North Carolina

**Developing a successful solar farm entails working closely with landowners, municipalities, engineers, the utility company, and solar developer.** A solar farm requires close proximity to a sub-station and three phase power lines, and access roads on and around the property. Other aspects to analyze include terrain, environmental issues, developable acreage, easements, and the utility company involved in interconnection with the grid.

Often times, community outreach and engagement with local officials opens lines of communication, especially in rural areas where officials may not have much experience with utility-scale solar energy projects.

In this case, Patricia Garrell, a landowner from Chadbourn, North Carolina, had a property that was in a great location for a solar farm. She has traditionally leased her land to local farmers, but



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became interested in using her land to harvest energy from the sun when she learned about solar farms. Serving as a project developer for this solar farm, Entropy Solar worked closely with Ms. Garrell, town officials, environmental and civil engineers, and Duke Energy Progress to work through each phase of the process. Selecting a company like Entropy with experienced and knowledgeable project developers is key to the success of a project this size.

Entropy made an offer for leasing the property and negotiated the terms of the contract. Adding to the complexity of the

case is that her property had been passed down through generations in her family, and multiple family members had rights to the land. Entropy helped her work through the legal process of getting all the heirs in agreement of using the land for solar energy. Once this was finalized, Entropy completed the contract and secured control of the site for the next phase of the process. Entropy met with town officials, went to board meetings to answer questions and pursue rezoning, easements, and other municipal ordinance issues. Next, they worked with surveyors and engineers to complete a site plan. Entropy's solar developer also worked closely with the utility company to assist with interconnection to the grid, and served as the liaison with the solar developer that would finance and install the project.

In order to bring a solar farm to fruition, it is critical for the project developer to thoroughly understand the process. There are many potential roadblocks along the way, making it even more critical for the project manager to build relationships and stay in front of the process so they can work out any issues before they become problems. Entropy can manage and handle these complexities from start to finish.

## Financial & Environmental Benefits

- Offset 3,300 tons of CO<sub>2</sub> per year
- Power the equivalent of 730 homes per year
- Local, clean energy production over the next 30 years
- Lease payments to the landowner for the initial term of 15 years
- Job creation due to the construction as well as an annual maintenance of the solar farm
- Investment in the local community and region
- Quiet and non-toxic

## System at a Glance

- 5.016 megawatts
- 16,720 panels
- 26 acres
- 7,850 megawatt hours of electricity production per year



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*"I am excited to give back to the community by using natural resources to power our lives."*

*- Patricia Garrell  
Landowner*