ROCK HILL Schools
YORK COUNTY DISTRICT THREE

July 2017
Final

Applied Technology Center Solar Power Hosting Partnership

with

YEC YORK ELECTRIC COOPERATIVE, INC.
Your Touchstone Energy® Partner

ENERGY STAR PARTNER

An Overview for our Community Stakeholders

Introduction and Goal

The Applied Technology Center (ATC) prepares high school students in Rock Hill for careers in the technical trades and skilled services. ATC strives to provide latest, state-of-the-industry career technical education for your children.

The York Electric Cooperative (YEC) provides reliable, affordable and environmentally responsible electric power for its community members. Solar energy is a key part of our rapidly developing renewable energy portfolio. YEC's Community Solar Program is an affordable, low-risk way for community members to benefit from solar energy.

The Rock Hill Schools is the first district in SC to establish an Environmental Sustainability Policy, and is "committed to fostering… sustainable practices throughout the school district."

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Introduction and Goal

- YEC has proposed the use of open land in front of ATC as a solar hosting site for its community solar program
- RHS is partnering with YEC in a long-term land use agreement to host a 1.1 acre solar station at this location, for the mutual benefits listed in this overview.
- **As community stakeholders, the partners and ATC ask for your review and comment on this agreement.**

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ATC BEARTROLLIONS

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Solar Hosting: Mutual Benefits

- ***Background: YEC proposal***

What is "Solar Hosting"?

- "Solar Hosting" refers to an agreement allowing York Electric Cooperative, Inc. to locate an efficient solar panel generation facility on the Solar Host's (Rock Hill School District) property.
- While it is a long-term land use agreement, it does not require a change in land ownership, nor does it require any ongoing site maintenance obligations other than an easement to the solar panels.
- Solar hosting makes it possible to create larger, more effective solar power generation and more efficient maintenance of the system.

Lesslie 50kW Solar Substation
Springdale Road
September 2016

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Solar Hosting: Mutual Benefits

- *<u>As a Solar Host, RHS will:</u>*
  - Provide the entire community a more effective path to renewable energy… with substantial economic and environmental benefits.
  - Show a significant commitment to sustainability and corporate social responsibility, publicized in multiple media by YEC to the community and the region.
  - Incur **no cost to taxpayers** for construction, operation and maintenance of the station,
  - Receive a revenue stream and operations savings from the Land Use Agreement equal to **$66,900** over the 25 year term.

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ATC Solar Project Overview

Land Area:
0.88 Acres

Capacity:
201 kW DC
150 kW AC

Panels:
627 (320W each)

Agreement Term:
25 years

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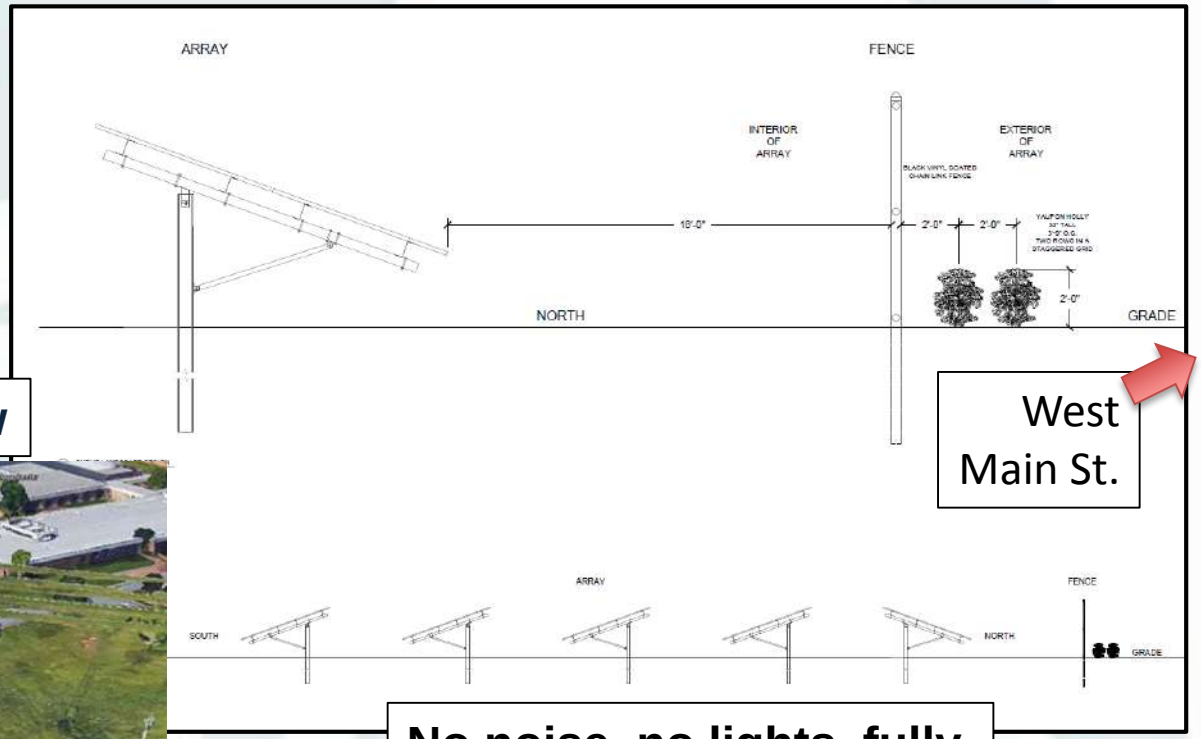
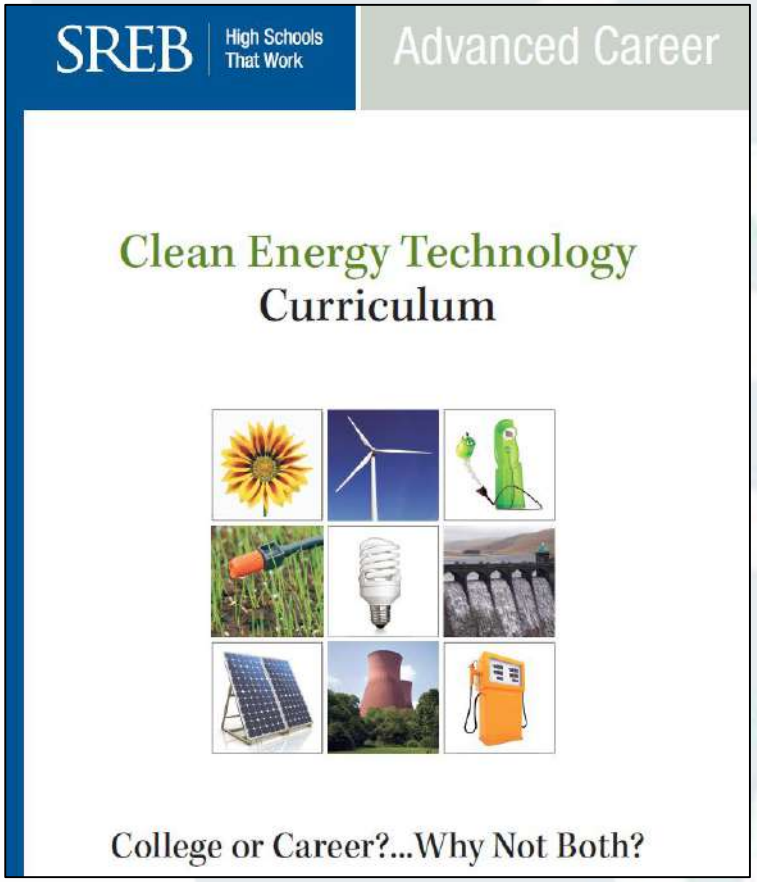
ATC Solar Project Overview

Existing Site – Street View



No noise, no lights, fully secured and landscaped

Curriculum Partnership



This Station will serve as a "Living Classroom". YEC will assist the ATC Electrical Systems Instructor with developing and teaching courses for advanced, cutting-edge careers.

Advanced Career
Clean Energy Technology Curriculum

Clean Energy Technology is for students who want to apply their science and math skills and apply engineering processes as they tackle the world's energy needs within a green point of view.

Course 1: Clean Energy Systems

This course exposes students to three sources of renewable energy: wind, solar and biofuels. Working with solar, thermal, chemical and mechanical sources of clean energy teaches students how to apply physics, geography, chemistry, biology, geometry, algebra and engineering fundamentals. Students learn the most efficient and appropriate use of energy production as they explore the relevant relationships among work, power and energy. Students will engage in a wide variety of hands-on projects and lab activities that both test their knowledge and illustrate the interrelationships between the various forms of clean energy.

Course 2: Clean Energy Applications

This course builds on the foundation of Course 1 and introduces nuclear power, steam generation, fuel cells, geothermal power, water power, AC/DC power generation, heat transfer and the laws of thermodynamics. In addition, students now use chemical and thermal energy principles to create, store and use energy efficiently to power a variety of mechanical and electrical devices. Students will engage in a variety of hands-on design projects to demonstrate principles using advanced technology hardware and software.

Course 3:

Students in this course utilize applicable skills from the foundational courses to tackle challenges associated with the implementation of clean energy technology.

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SREB, The Southern Region Education Board recognizes South Carolina as a national leader in Clean Energy Technology and other Advanced Careers Curricula

We Need Your Feedback!

- Take our 5-minute survey!
  https://www.surveymonkey.com/r/VNRKHPC - or…
- E-mail or phone in comments to:
  - Kim Melander kmelander@rhmail.org 803.981.1156
  - Brian Vaughan BVaughan@rhmail.org 803.980.2020
  - Mychal Frost Mfrost@rhmail.org 803.981.1008
  - Anthony Cox Acox@rhmail.org 803.981.1010
- **Questions?** Contact Anthony Cox, or…
- **Join us at Rawlinson Road Middle School Auditorium on August 3rd at 6:00 pm for a "Neighborhood Meeting" !**

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