

**Chester County Zoning Board of Appeals
Minutes of September 10, 2019**

The September 10, 2019 meeting of the Chester County Zoning Board of Appeals was held at 6:00 pm in council chambers at the R. Carlisle Roddey Government Building in Chester, SC.

Notice of Meeting: Notice of time, date, place and Agenda for this meeting were posted in the County Office Government Complex, Chester County Court House and published in the August 21, 2019 issue of the Chester News & Reporter. All properties listed on the agenda were properly posted.

Quorum Established: Chairman Walley, Vice Chairman Jackson, Commissioners Mosley, Gilchrist, and McBrayer were present

Absent: Commissioner Spann was absent without prior notification

Late Arrival: Commissioner Hayes arrived at 6:08 (after voting for approval of agenda and prior minutes)

Staff: Director Mike Levister, Nicole Hutchins and Katie Jordan were present

Call to Order: Chairman Walley called the meeting to order

Approval of Agenda: Chairman Walley asked if there were any additions or amendments to the Agenda as presented by staff. There were none. Commissioner Mosley made the motion to approve the agenda as presented; seconded by Commissioner Gilchrist. Vote was 5-0 to approve.

Approval of Prior Minutes: Chairman Walley asked if there were any additions or amendments to the minutes of the May 14, 2019 meeting as presented by staff. Chairman Walley stated on page two, fifth paragraph, second line, sane should be same. Commissioner Mosley made the motion to approve the minutes with the correction; seconded by Vice Chairman Jackson. Vote was 5 to 0 to approve.

New Business:

Reference: CCSE19-01

Applicant: Sparrow Solar LLC

Request: Approval of Special Exception from Chester County's Zoning Ordinance § 5-701 Solar Farm District and Design Standards #2 items a through k

Location: 2676 Catawba River Road, Fort Lawn, SC 29714

Tax Map #: 165-00-00-002-000

Chairman Walley asked if anyone was here for this to step to the podium. Ms. Federico stepped to the podium and stated her name as Lisa Federico, speaking on behalf of Sparrow Solar LLC. She is the Senior Manager of development for NARENCO, which is short for National Renewable Energy Corporation. I'm here tonight to request a special exception in zone R2 for a Solar Farm.

Ms. Federico wanted to thank a few people from Chester County, Mike and Nicole. She said I thank you so much. Especially Nicole, I've been in contact with since April of this year. She helped provide a zoning letter for the site and answered many, many emails asking questions about the zoning process. Secondly, Sally Hudson helped to establish the E-911 address for the site, she was very helpful. Also, Karlisa Parker Dean in the Chester County

Economic Development office. She was helpful answering a few questions about the process as well. Thank you everyone I've worked with this far. I hope to continue working with you to bring the project to fruition.

I've provided a few print outs. Everybody should have a copy. First you have NARENO's statement of qualifications. There's a packet there to provide background on our company, and some of the projects we've recently completed. Secondly, I have a site plan there and also a document called demonstration of compliance, where I walk through each item in the ordinance. I've also provided a certificate of liability insurance to include in the request for our special exception.

Quick background on NARENCO. We are founded in 2009 in Charlotte North Carolina. We're an independent power producer and we currently focus on utility scale power projects, such as this one. Our expertise includes development, construction and operation and maintenance of solar farms. NARENCO is headquartered in Charlotte, and the majority of our projects are located within the Carolinas. Since inception we've constructed almost thirty utility scale solar ground mounted solar farms in the Carolinas. We currently operate and maintain more than twenty in the area. As a company, we give back to our local community through volunteering and donating to non profit organizations such and Ace and TJ's Grandkids and Carolina Thread Trails. NARENCO takes pride in being a good neighbor and resident of the local community as well. As a neighbor, our projects produce no odor, no noise, and minimal traffic beyond the initial installment of the solar farm. As a resident, we pay taxes, and we bring jobs to the area during construction of the project.

Chairman Walley said you said no odor? Ms. Federico said that's right and no noise. He then asked if it produces any chemical? She said any chemicals, nope.

Ms. Federico gave a little background on the project, Sparrow Solar. Our site selection process involves identifying land in close proximity to existing sub stations and utility electrical lines. We try to find land with minimal slope and minimal wetlands, which helps us from impacting the existing landscape as much as possible. We identified this site on Catawba River Road in Fort Lawn. I've put an aerial map, if it's helpful, in your packet in case you're not familiar with where the site is. It's north of downtown Fort Lawn. We've signed a lease with the landowners, Hayden and Andre Shepherd in 2016. They couldn't be here tonight but are eagerly awaiting a report on how this hearing went and anxious to see this project come to fruition. Soon after we signed the lease, we submitted an interconnection request with Duke Energy Carolinas. Since then Duke has been studying the project. In February of this year we got conformation that their system can adequately support a 2MW project at this location. That was very good news. We received those results in late February of this year. Now Duke is in the final phase of their process where they determine the final cost estimate of physically connecting our project to their system. They have to build out electrical poles that our project will connect to.

Ms. Federico said she's here tonight requesting a conditional approval for a special exception so I'm not requesting a permit that would expire in six months. I'm requesting approval that would go into effect once all of our documents are submitted. There are two outstanding documents, the interconnection agreement with Duke and the DHEC storm water study approval. I will demonstrate how this project will be fully in compliance with the ordinance prior to construction. The reason I'm requesting the conditional approval is twofold. First, we've provided a very short and a very strict timeline to make the interconnection payment to Duke. We're expecting an interconnection agreement with them any day now. Upon receiving that agreement, we have sixty calendar days to make a nonrefundable payment to them to build out their facilities and they've estimated that payment to be over \$100,000. It's a sizeable payment. Nonrefundable. When we go to write that check we want to make sure that we've already come before you, The Zoning Board, and presented our project to insure we're in compliance with your rules and that we have your support to go forward with the project. The second reason I'm requesting

the conditional approval, is due to the construction timeline. As is the case with the interconnection agreement, the timing of the construction facilities is also in Duke's hands. We can't build our project until Duke builds out their facility. There's no way for us to connect to the grid without them building out their poles. Once we sign the interconnection agreement, usually about a month later, is when they will tell us what their timeline is for the construction of those facilities. I don't know today when that will be. I can say from other projects one year is a good estimate. This project based on their study hopefully will be less because it seems like very minimal work that they need to do.

Before I go into the ordinance, are there any questions about my request for the conditional approval? Commissioner McBrayer said conditional approval, that does leave the door open for potential problems with Duke Energy because you don't have that yet. You may be assured it, but you don't have it. Ms. Federico said right. The interconnection agreement, it's like a permit by right. 100% we will get an interconnection from Duke, it's just the matter of timing. Ideally, I would come and apply for this permit, this special exception, a couple of months before we would be building the project because we would be in that six-month window, but as I just explained that would be after we have to make that payment to Duke, so the timeline is tricky. I'm just trying to make sure that we have everything in order besides the two outstanding things.

Commissioner McBrayer said I'm familiar with the area, did you say DHEC had to make their approval or whatever in relation to stormwater? Ms. Federico said yes, when we get close to construction our EPC.....So I'm on the development team and the EPC team, Engineering Procurement and Construction team, They hire the civil and structural engineers that finalize the design of the site and they design the stormwater basins. So that plan will get submitted to DHEC for their approval. Commissioner McBrayer said so you submit the plans, DHEC either approves them or disapproves them. Ms. Federico said they will approve them, or they will request changes. We make the changes and then they approve them. They don't just not approve it.

Commissioner McBrayer said in actuality your company is actually selling electricity to Duke Energy. Ms. Federico said that's right. Commissioner McBrayer said will there be any economic impact on customer on the grid in that area, one way or the other? Ms. Federico said nope. We have an agreement with Duke to sell their avoided cost rates, so they're not paying any extra for our power than they would for any other source of generation.

Commissioner McBrayer asked what are the cost of the cells? Commissioner Gilchrist said he had the same question. Ms. Federico said the life of the cell is approximately forty years. The warranty of the panels is good for at least twenty-five years.

Commissioner McBrayer asked how do you dispose of those things? Ms. Federico said it's part of their lease agreement with the landowner that we remove all improvements from the site within six months of termination of the lease. Commissioner McBrayer asked when you remove them what are the steps of disposing them? Ms. Federico said she thinks there are recycling facilities. It's a little difficult to answer that questions because the life of the solar farms are so long that we've never had one that's come to end of it's life yet. I think we will see an increase of recycling facilities for these projects as more and more of them come to end of their lifetime. Commissioner McBrayer said but there's no way they end up in Chester County Land field, because that would be against the law? Ms. Federico said right. Absolutely, we wouldn't break any laws. Commissioner McBrayer said you would probably have to take them out of the area because there's no recycling facilities around here. Ms. Federico said right. Yes. We would find an adequate recycling facility and dispose of them properly. We wouldn't just put them in the trash.

Chairman Walley asked during the construction phase, if it remains Duke Power its fine, if it remains Sparrow Solar its fine. What happens if one of those companies change hands? Ms. Federico asks the utility company or Sparrow? Chairman Walley says either one. She says Sparrow is its own unity, for that reason if it were to be sold all of the permits, all of the agreements with Duke Energy go with Sparrow Solar. So, if there is a new owner, they would have to follow all the same rules and agreements.

Commissioner McBrayer asked if something is written up or included in these contracts that says if you guys dissolve, or bankrupt, and we've got all these cells there, who will be responsible for clean up? Ms. Federico says if NARENCO goes bankrupt, someone else would buy Sparrow Solar or acquire Sparrow Solar. The way these projects work, it's a huge upfront payment. Huge upfront cost to build the site. Once its operating, its bringing in money from the electricity that's selling to Duke. It's very profitable once that initial payment has been made. If NARENCO wasn't running the site, someone else would come in and run it. However, like I said, our agreement with the landlord is that if the Solar Farm is not operating, we would have six months to remove everything, all of the improvements from the site, so it wouldn't just be left there.

Chairman Walley then tells Ms. Federico that she could continue. Ms. Hutchins from staff asked to clarify something. The conditional that's she talking about, that's not for the special exception. That's for the permit. Once she applies for the permit, it's for six months. Does that make sense? Commissioner McBrayer said that does make since.

Ms. Federico says lets walk through the site plan in the zoning ordinance. This is section 5-701. We're looking at part two because the post project parcel is zoned R2.

A. Site plan shall include:

1. ground level profile drawings of structure

Inset in top left-hand corner of the site plan demonstrates the side profile of the solar equipment from the ground

2. the designed snow, wind and ground loads

Requirements set by the American Society of Civil Engineers are listed in the legend of the site plan

Our engineers ensure that we are meeting the requirements set by the American Society of Civil Engineers. That's based on the location of the project, the ground, snow load and the wind load. Those are found in the legend of the site plan. Ten pounds per square foot, and 105 miles per hour.

3. buffer requirements

Type B buffer shown on site plan will separate the solar farm from neighboring residential uses

From section 5-301 in the ordinance, B buffer is ten-foot-wide, and requires the following per 100 feet. Two deciduous canopy trees, forty to sixty feet on center, with a minimum insulation height of eight feet. And a mature size of twenty-five feet. Also, eight evergreen plats ten feet on center with a minimum insulation height of six feet and a mature size of ten feet.

4. placement of security fence and type

Site plan shows 7ft high security fence including 6ft chain link with 1 ft of barbed wire along the perimeter of the project

B. copy of permit letter from electric service provider

A fully executed Interconnection Agreement between Sparrow Solar LLC and Duke Energy Carolinas will be submitted to Chester County

After my discussion with Nicole, I interpreted this to be the interconnection agreement with Duke Energy so as I explained, we are expecting that any day now so we could, once we have a fully executed agreement, we can submit that to the county.

C. copy of DHEC storm water impact study

The Stormwater Pollution Prevention Plan and approval by the SC Department of Health and Environmental Control will be submitted to Chester County

I understood that to be the storm water pollution prevention plan that we design, and we submit to South Carolina Department of Health and Environmental Control. Once we submit that plan, and we have their letter of approval, we can submit that to the county.

D. proof that all necessary insurance is in place before land development begins

Please see enclosed Certificate of Liability Insurance for Sparrow Solar LLC

I've given you a copy of our certificate of liability insurance.

E. systems, equipment and structures shall not exceed 25 feet in height when ground mounted. Roof mounted systems shall not exceed the maximum height for the applicable zoning district

Besides the interconnection poles, which will be constructed to match the height of Duke's interconnection poles, the solar facility will be ground mounted and will not exceed 25 feet in height

This is a ground mounted solar farm and it will not exceed twenty-five feet in height. The only exception would be the interconnection poles could be higher than that. They are built to match Dukes connection poles. Everything else actually on the site will be less than twenty-five feet in height.

F. ground mounted solar energy systems as part of a solar farm shall meet the minimum zoning setback in which it is located

The site is zoned R2 and the site plan shows the setbacks listed in the Zoning Ordinance Section 4-104; We increased the rear setback to 25ft since it is on a road

We have the front setback as twenty-five feet, the side set back as fifteen feet. The rear setback for this zone is twenty feet, but we've increased it to twenty-five feet just to be safe because the rear edges of the parcel are on a road, so we just made that twenty-five feet as well. And that was from the zoning ordinance 4-104

G. electric solar system components must have UL listing or equivalent

To be approved for interconnection to Duke's grid, our system components are required to be UL listed or equivalent, so we will be in compliance

This is also part of our process with Duke. They won't let us connect to their grid if our system components are not UL listed or equivalent.

H. all photovoltaic systems shall comply with the current National Electrical Code; off grid systems shall be exempt from this requirement

It is our standard practice, as well as a requirement to interconnect to Duke's grid, that our systems comply with the current National Electrical Code

Commissioner Gilchrist asked what is an off grid? Ms. Federico said she interprets that to be a behind the meter system. Ours would be an on-grid system. We're directly connecting to Dukes facilities, where an off-grid system would be as if you had solar panels on your house. Director Levister said an off grid is where you would have solar panels where you're proving service to yourself.

I. it is the responsibility of the company managing and/or owning the Solar Farm, whether the property is outright owned by the company managing or owning the Solar Farm or whether property is being leased, to remove

within twelve months all obsolete or unused systems to include the concrete pads, solar panels, wiring and all related equipment necessary for the operation of the Solar Farm

This is addressed in the lease agreement with the landowner: The lease states that within 6 months of expiration or termination of the lease, the tenant shall remove all improvements

- J. security fence will surround the perimeter of the solar farm with a 6-foot-high woven or barbed wire fence or from the ground up

Site plan shows 7ft high security fence including 6ft chain link with 1 ft of barbed wire along the perimeter of the project

As demonstrated on our site plan, and required by the NEC code, the solar facility will be surrounded by a six-foot chain-link fence with one foot of barbed wire on top

- K. reasonable accessibility for emergency service vehicles shall be required to have a 25-foot easement or right-of-way

The site is designed with a 25ft access road to give emergency service vehicles access inside the security fence

Commissioner McBrayer asked after Duke Energy does the interconnect, after the contract and all this other stuff, they are out of the picture except for paying you guys for the energy that's being produced. They don't control it?

Ms. Federico says they are paying us for the energy that's being produced. We also will pay them a monthly facility charge, so they are responsible for maintaining their facilities. Commissioner McBrayer says their facility, but nothing to do with yours. Ms. Federico says that's right, because of our agreement, we would be in default of our power purchase with them if we weren't producing electricity. Commissioner McBrayer says, bottom line is, if they weren't buying it, that's probably the only customer you would have, Duke Energy? Unless you could convince the city of Fort Lawn or something like that. The Town of Fort Lawn. Ms. Federico said yeah, so we're in Dukes service territory, so they have a monopoly on the market, so we sell it to them. Commissioner McBrayer said they are required to buy your energy as long as you fulfill your end of it? Ms. Federico said right. Commissioner Gilchrist said once you sign the agreement with them? Ms. Federico said right. Commissioner Gilchrist said and once you pay them \$100,000. Ms. Federico said \$100,000 is a lot of money but its also very in line with all of the other projects we've done so this isn't unusual. Its just we wanna make sure we have all our ducks on a row before we make that payment.

- L. no signage is allowed on the solar farm fencing except for a sign, not to exceed 32 square feet, displaying the facility name, address and emergency contact information

No signage will be on the site beyond what is required by the authority having jurisdiction, such as "Warning – High Voltage" signs on the fence

The only signage that would be on the fence besides that, we're usually required to have a Warning – High Voltage sign on the fence and that would be when we go to get our electric permit from the county. They usually require that, so that's the only thing beyond there.

That brings me to the end of the ordinance. Are there any other questions I can answer? Commissioner Mc Brayer said I mentioned Fort Lawn, I guess that's outside of the town limit? Ms. Federico said yes.

Commissioner Hayes said so your purpose is to provide energy to Duke Power, and you will prove the solar panel grids and then sell the energy to Duke Power and Duke Power will sell it to their customers in the surrounding area. Ms. Federico said, they will sell electricity to their customers, yes. Commissioner Hayes said you guys will be like the middle man pretty much. Ms. Federico said Dukes kinda the middle man. Commissioner Hayes said but you will be the main power source. Ms. Federico said yes for the generation of electricity. Commissioner Hayes said are the grids in the area, I know you've got buffers and everything like that but what's the.....is there any way they can produce some kind of energy that will go out and effect human or animal vegetation of any type or have that been proven that's not a case. You know sometimes when you're around certain towers and stuff they start producing kind of a cancerous cells and in your bodies and stuff like that. Ms. Federico said right, yes, our solar farm is safe, and it doesn't cause any harm to humans or animals. I don't have the studies with me but there are studies on electromagnetic radiation, I think

maybe that's what you're referring to. They've been proven to be safe. We wouldn't be able to build a farm like this if it was causing adverse effects.

Commissioner Gilchrist asked how many MW did you say this was? Ms. Federico said 2MW

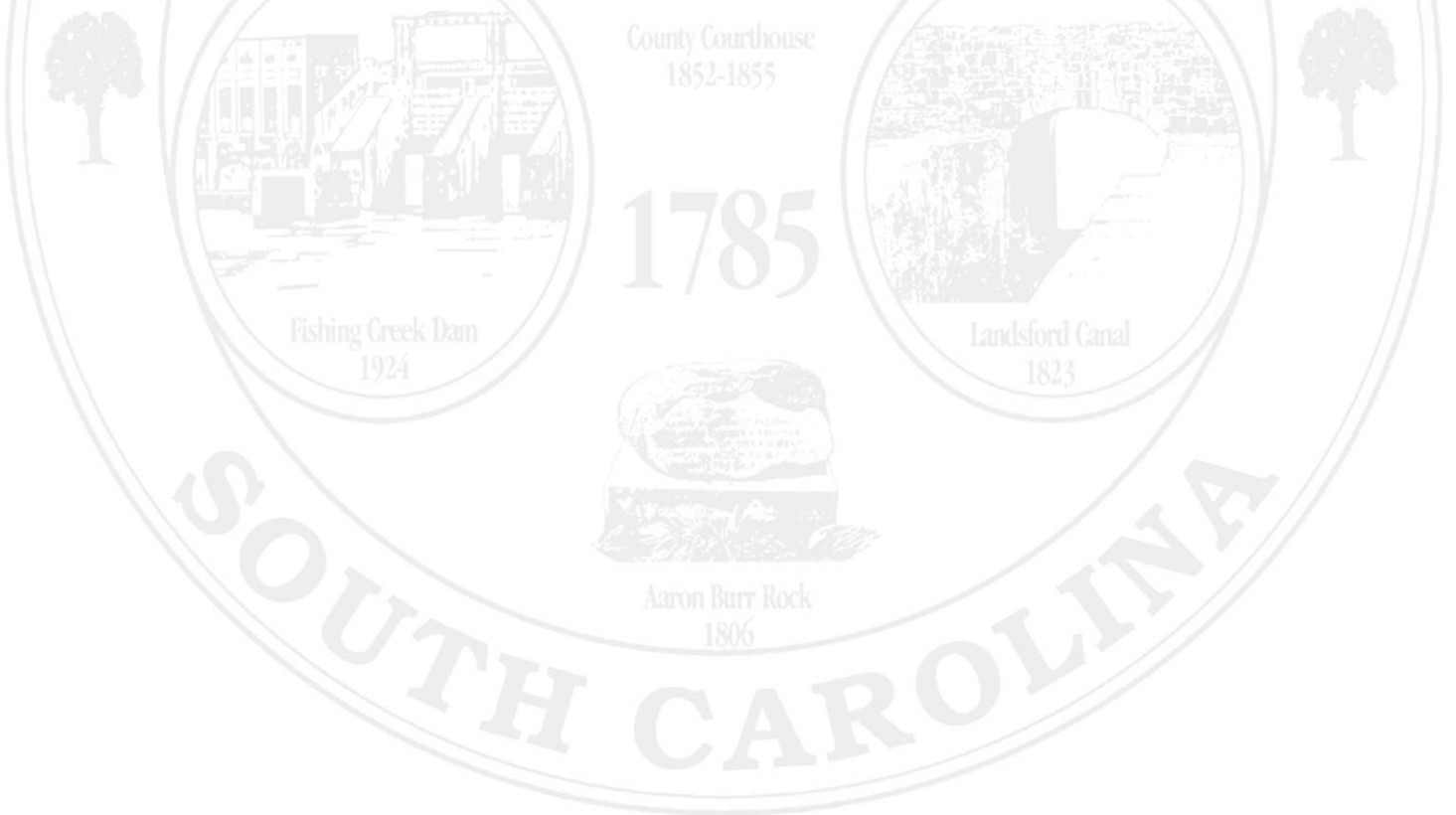
Chairman Walley asked if any energy would be stored on site? Ms. Federico said no.

Chairman Walley asked if there were any other questions. Commissioner McBrayer asked, the conditional approval for six months, what happens after the six months? Ms. Hutchins said that's only in getting a permit, so as long as they are continually doing work and getting inspections, they're fine.

Chairman Walley asked if anyone was here to speak against this? There was none.

Commissioner Gilchrist made a motion to approve the special exception; seconded by Commissioner McBrayer. Chairman Walley asked for any discussion. Commissioner McBrayer if we had someone coming before us in relations to land use for instance, building something, requiring different setbacks, most of the time we've had people that surrounds their property either submit letters to support or they show up against it. In a situation like this, the people surrounding this, there's a church down the road, is there any reason for them to be involved in this? Commissioner Gilchrist said there were probably signs posted. Director Levister said yes. Commissioner Mosley said she knows quit a few of the residences that do have a problem with it. Chairman Walley said we have a motion and a second and called for a vote. Vote was 6-0 to approve.

Commissioner Gilchrist made a motion to adjourn; seconded by Commissioner Mosley. Vote was 6-0 to adjourn.



This is a summary of proceedings at the September 10, 2019, 2019 meeting of the Zoning Board of Appeals; and not a verbatim transcript of the meeting. This summary, and an audio recording of the meeting is retained by the Chester County Building & Zoning department, and available if requested. This summary represents the facts of this meeting; not the opinion or interpretation of the Secretary.