

**NORMAN PLANNING COMMISSION  
REGULAR SESSION MINUTES**

**MARCH 12, 2020**

The Planning Commission of the City of Norman, Cleveland County, State of Oklahoma, met in Regular Session in the Council Chambers of the Norman Municipal Building, 201 West Gray Street, on the 12<sup>th</sup> day of March, 2020. Notice and agenda of the meeting were posted at the Norman Municipal Building and online at <http://www.normanok.gov/content/boards-commissions> at least twenty-four hours prior to the beginning of the meeting.

Chair Lark Zink called the meeting to order at 6:30 p.m.

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Item No. 1, being:

**ROLL CALL**

MEMBERS PRESENT

Matthew Peacock  
Erin Williford  
Lark Zink  
Erica Bird  
Dave Boeck  
Sandy Bahan

MEMBERS ABSENT

Nouman Jan  
Tom Knotts  
Steven McDaniel

A quorum was present.

STAFF MEMBERS PRESENT

Jane Hudson, Director, Planning &  
Community Development  
Roné Tromble, Recording Secretary  
Lora Hoggatt, Planner II  
Ken Danner, Subdivision Development  
Manager  
David Riesland, Traffic Engineer  
Beth Muckala, Asst. City Attorney

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Item No. 6, being:

**O-1920-42 – DG CENTRAL 1, L.L.C. REQUESTS SPECIAL USE FOR A PUBLIC UTILITY FOR A GROUND-MOUNTED SOLAR PHOTOVOLTAIC SYSTEM ON 15 ACRES OF PROPERTY ZONED A-2, RURAL AGRICULTURAL DISTRICT, AND LOCATED APPROXIMATELY ½ MILE SOUTH OF EAST ROBINSON STREET AND ½ MILE EAST OF 48<sup>TH</sup> AVENUE N.E.**

**ITEMS SUBMITTED FOR THE RECORD:**

1. Location Map
2. Staff Report
3. Aerial Photo Site Plant
4. Pre-Development Summary

**PRESENTATION BY STAFF:**

1. Lora Hoggatt reviewed the staff report, a copy of which is filed with the minutes.

**PRESENTATION BY THE APPLICANT:**

1. Adam Siegelstein, representing the applicant – I work for NextEra Energy Resources. I'm here on behalf of DG Central 1, L.L.C. which is a project entity. I'm also joined by a couple consultants supporting the project, and they will present shortly: Alfred Fuentes, from RRC Engineering – he's a civil engineer; and Jay Robinson is an environmental consultant from SWCA. I provided just a brief presentation for you. First, I wanted to introduce you all to NextEra Energy. We do have a large presence in Oklahoma, but in case you hadn't heard of us I did want to take a minute to introduce us to you and tell you a little bit about our approach to renewable investment and how we like to engage with the communities we invest in. Of course, I'll talk a little bit about the project itself, some overview and some details. I've added quite a few pictures for those of you who haven't seen a solar tracking project, there'll be plenty of illustrations that will show you kind of what a comparable system would look like. Then Alfred will present a little bit on some of the civil engineering aspects, and environmental compliance will be covered as well.

So first off, by way of background, NextEra Energy – as I said, I work for NextEra Energy Resources. We are the largest owner and operator and producer of renewable energy in the world. It is one of two main subsidiaries beneath NextEra Energy, which is a multi-billion dollar company with nearly 95 years of history behind it. The other main subsidiary is FPL or Florida Power and Light, which is one of the largest utilities in the country. As I said, DG Central 1, L.L.C. is an indirect, wholly owned subsidiary of NextEra Energy Resources.

Here are a few things that we're pretty proud of, reflecting on our experience in Oklahoma. We have a long-standing experience in Oklahoma, actually close to seventeen years. We've invested over \$5 billion in the state. We contribute over \$32 million in annual payrolls. We contribute in excess \$10 million to land owners in the form of annual land payments. And we produce over \$9 million a year in property tax revenues across the state. We own and operate fifteen wind energy centers; there are three more in development, one transmission line in development; and we also have several solar projects and a battery energy storage project also in development.

We like to invest in communities where our facilities are located. STEM and education in general is a very important thing to us that we like to kind of take the extra measure and go above and beyond and connect. Here are a couple of good pictures of Future Farmers of America visiting a wind site in Minco, Oklahoma. We also donated a K9 to the Sheriff's Office in Caddo County. And similarly, for this project there will be educational aspects that we're proud to highlight as well. I'll go into some of them in a minute. But the land itself is owned by Norman Public Schools and Norman Public Schools, as well as the interconnecting utility, Oklahoma Electric Coop or OEC, do intend to use the facility to kind of showcase and provide educational experiences, tours, for students and other members of the public.

So digging into the project a little bit and providing some overview. Again, we're requesting a special use permit for the Norman Solar Project. It's a two megawatt AC ground-mounted solar project. As previously discussed, the development is 15 acres, as part of a 40-acre parcel. The parcel, as I said, is owned by Norman Public Schools and we're just about five

miles east of where we are right now. It's halfway between Thunderbird Lake and downtown Norman.

Some more particulars on the projects. The parcel is zoned A-2, Rural Agricultural, as is the surrounding parcels. The project will be comprised of approximately 7,000 solar panels. They'll be mounted on a single-axis tracking system that tracks the sun from east to west over the course of the day. At full tilt one of these – I guess the edge of a module is typically about 8 feet off the ground, sometimes as high as 10 feet – so certainly not very tall, by any means. The project will also be comprised of other equipment: cable, inverters, transformers, switch gear, and similar type of equipment. The project will be surrounded by a 7-foot security fence, typically 6-foot chain link plus 1 foot of barbed wire. And, of course, the ground will be fully planted with typically low-growth shade-tolerant grasses throughout year around. As I mentioned, the interconnecting utility is Oklahoma Electric Cooperative or OEC. The project will interconnect directly into their distribution system.

For those of you who aren't familiar with how solar works, pretty high-level picture, but, in essence, solar energy is converted into DC electricity via the solar array; DC electricity is then converted into AC electricity – the output will be about 600 volts -- via an inverter, and then we step up that voltage via transformer into the distribution system.

You've seen a site plan. This is just a slightly updated version of it. This has the topographical lines – the contours shown as well. Here is a view looking south from East Robinson. The site itself has pretty interesting topography, in that the elevation rises as you move south from East Robinson, and then it drops, which is interesting because the solar project will actually be so low that you won't even be able to see it from East Robinson. Not that they're unattractive at all; I think they're very cool looking projects. But, nevertheless, it won't even be visible from East Robinson.

Here's just a couple illustrations of comparable projects. These are all single-axis trackers. But, as I said, if you haven't seen one before, this will actually be very similar to what the project would look like. This is an example in California. Here is one in Minnesota – a little closer up as well – closer to ground view. Here is kind of a real close-up side view looking down one of the rows and a close-up of what a tracker motor looks like. So, again, this is really close to what you're going to be seeing with this project. And, with that, I'm going to pass it on to Alfred, who will talk a little bit about some of the civil engineering aspects of the project.

2. Alfred Fuentes – I'm a civil project engineer with RRC Power and Energy, assisting NextEra. Here I have some main points regarding the site development that I wanted to share with you all as we developed the engineering. So here we've analyzed that the storm water flows originating from offsite do not affect the project. As you'll see on the next exhibit – on the drainage exhibit, you'll see kind of why that is. As we performed the stormwater analysis, we determined that primarily from the road construction – this adds impervious cover which increases the average runoff coefficient onsite from 0.35 to 0.36, which is a very, very small increase when you consider the grand scheme of things. With that said, we've determined that a detention pond, with a volume of at least 0.23 acre-feet, may be required on the site so that post-development flows are released at pre-development rates. The existing pond, as you'll see in the exhibit, in the southeast corner meets the capacity requirement. We'll have to make some modifications to it to make sure that we do meet the requirements of the City of Norman engineering design criteria that the post-development equals the pre-development rates. While performing our analysis and meeting all the requirements of the engineering design criteria, we made sure that we performed the analysis to the 2, 5, 10, 25, 50 and 100-year storms, using the rational method outlined in the design criteria. During the 100-year 24-hour storm our localized flow depths of less than 1 foot are predicted on the site. The driveway construction – this is the driveway on Robinson Street. It will be a new access to be able to access the solar array. There are two criteria for the basis of design that we'll be using. These are the City of Norman engineering design criteria and standard specifications and construction drawings. The driveway will also be consistent with design requirements of Norman Public Schools. During the construction, or before the construction, I should say, we will be developing a work zone traffic

control plan that will be submitted and reviewed by the City Traffic Engineer. All barricades, lights, and traffic control devices erected and maintained during driveway construction will be in accordance with the work zone traffic control plan.

This was the exhibit I was referring to earlier. It's basically a drainage map. The different colors you see there are the different watersheds in the vicinity of the project area. Our site is at a relatively high ground, and you can see with the arrows how the water would behave during a storm event. And I'll hand it off to Jay.

3. J.T. Robinson – I'm with SWCA Environmental Consultants. I'm actually based here in Norman. Live over by Westwood. I'm kind of the local liaison for this project. I'm also the biologist that conducted the field reconnaissance for compliance with the Endangered Species Act as well as the Clean Water Act. In conducting that reconnaissance, there was no endangered species habitat encountered. There was also no potentially jurisdictional waters and wetlands or waters that would be under jurisdiction of the Clean Water Act Section 404. There were a couple of ponds that are on the larger parcel, but not the area to be developed for the solar site, and they will not be – they were not likely to be jurisdictional waters as well as will not be impacted by the project as it's designed so far. I surveyed the area for bald eagles and bald eagle habitat; being near the Lake Thunderbird watershed, it's a favorite area of bald eagles for stop-over habitat, and there were no trees of sufficient size or strength for supporting bald or golden eagles as they would migrate through. With that, that concludes our presentation. So if you have any questions or any comments for us, we'd be happy to field those.

**AUDIENCE PARTICIPATION:**

None

**DISCUSSION AND ACTION BY THE PLANNING COMMISSION:**

1. Mr. Boeck – I applaud this project. I've been trying to get OG&E to do solar for ten years, and they just said it's not on their stockholders' agenda. I'm very happy for this project. I'm an architect and I do passive solar houses. So the idea that anyone, including Norman Public Schools, is doing a solar array is something to be applauded for them to do that. Like the wind energy – OU is 100% wind energy. When I moved into my house I could sign up for 100% wind energy, which is just the relative comment about sustainability through OG&E. Is this electricity just going into the grid? And did you say how many megawatts it was?

Mr. Siegelstein – The DC capacity is 2 megawatts.

Mr. Boeck – So can you tell me about how many homes that would provide electricity for? A comparison just for the public record here so people can equate that to something they'd understand.

Mr. Siegelstein – It could be, certainly, in excess of 300 homes. And we have a contract for off-take with Western Farmers Electric Cooperative. They're the power supplier for OEC. My understanding is Western Farmers and OEC, in turn, have a contract. Like I said, it interconnects directly into OEC's distribution center. I'm not aware of any sort of subscriptions or things like that. That would be a question for OEC. But, of course, the electrons themselves will go to where the load is, so immediate proximity.

Mr. Boeck – I've heard that if we had 100 mile square solar array someplace, that we could provide all the electricity the United States would need. I don't know if that's true or if that's just urban myth. But I wish there was more.

Mr. Siegelstein – Sure. Well, for what it's worth, NextEra Energy is developing a much larger utility scale project as well for Western Farmers. I think its 250 megawatts AC. Quite a bit bigger.

*Dave Boeck moved to recommend adoption of Ordinance No. O-1920-42 to City Council. Sandy Bahan seconded the motion.*

There being no further discussion, a vote on the motion was taken with the following result:

YEAS	Matthew Peacock, Erin Williford, Lark Zink, Erica Bird, Dave Boeck, Sandy Bahan
NAYES	None
MEMBERS ABSENT	Nouman Jan, Tom Knotts, Steven McDaniel

Ms. Tromble announced that the motion, to recommend adoption of Ordinance No. O-1920-42 to City Council, passed by a vote of 6-0.

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