



Staff Report 02/11/2016

Owner: Joyce Duke

Applicant: Sunlight Partners, LLC

Parcel ID: 0550-01015 & 0550-01015A –
Parcels to be reconfigured

Location: 6372 NC Hwy 39 South

Current Zoning: (A-R)
Agricultural Residential

Quasi-Judicial Hearing:
02/11/2016

Prepared by:
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Description of Conditional Use Permit Request:

The applicant is requesting a conditional use permit to allow construction of a 5 MW solar farm under the use category of “Solar Energy System, Large Scale”.

Exhibits as follows:

- Exhibit 1.** Application & signature pages
- Exhibit 2.** Project Narrative & Justifications
- Exhibit 3.** Owner Consent Form & Obligations to Remove Facility
- Exhibit 4.** NCDOT driveway permit application
- Exhibit 5.** NCDENR Erosion & Sedimentation Control Plan Approval
- Exhibit 6.** Interconnection Request
- Exhibit 7.** Decommissioning Plan
- Exhibit 8.** Aerial photography/surrounding Zoning map
- Exhibit 9.** Site Photos
- Exhibit 10.** Boundary Survey
- Exhibit 11.** Solar Farm regulations (as per zoning ordinance)
- Exhibit 12.** Conditional Use Permit Check List
- Exhibit 13.** Site plan

DRAFT Findings of Fact

1. The request is for a conditional use permit to allow a 5 MW solar farm on a parcel zoned (A-R) Agricultural Residential.
2. The property is owned by Mrs. Joyce Duke.
3. The property is located at 6372 NC Hwy 39 South and includes area within two parcels (Tax parcels 0550 01015 and 0550 01015A). The parcels are to be reconfigured and a proposed recombination plat is included in the application materials.
4. Both parcels together consist of 71 acres of which approximately 24 acres will be the array footprint.
5. The majority of the property is open with portions of existing woodland on the eastern, western and northwestern sides. The applicant plans to clear approximately 11.8 acres.
6. The property was rezoned from R-30 to A-R on December 7, 2015. A solar farm is an eligible conditional use within the A-R zoning district.
7. The application requesting a conditional use permit was filed on August 24, 2015.
8. The adjoining property owners were notified on January 27, 2016.
9. The property was posted on January 29, 2016.
10. Project was continued to the March 11, 2016 Board of Adjustment meeting to allow the applicant the opportunity to revise the site plan and provide copies for review.

Staff Comments

The applicant is requesting a conditional use permit to construct a 5 MW solar farm. As proposed, the solar farm project area would be leased from the current property owner and cover approximately 24 acres. The site plan calls for an 8 ft. security fence with 3 strands of barbed wire. No exterior lighting is proposed for the site.

The property is relatively flat with an open area in the middle and existing vegetation on the eastern, western and northwestern sides of the property. The applicant intends to clear approximately 11.8 acres of woodland which would be located within the fenced area. There does not appear to be any blue-line streams within the solar farm area. The site plan shows use of existing vegetation on all sides with a 50 foot planted buffer along the north and the south in areas to fill in gaps in the existing vegetation. The proposed

buffer would consist of staggered vegetation consisting of 2 rows of shrubs/bushes, 1 row of evergreen understory trees, and 1 row of evergreen canopy trees. The shrubs will be species expected to reach a minimum height of 8 feet with a minimum spread of 6 feet within 3 years. The understory trees will be planted a minimum of 4 feet and the canopy trees will be a minimum of 8 feet at planting.

The applicant has obtained an e-911 address (6372 NC Hwy 39 South) and has received NCDENR approval of the erosion and sedimentation plan. The applicant has not submitted an NCDOT driveway permit, but has begun the process of applying for a driveway permit. The applicant has applied for the interconnection agreement with Duke Energy Progress and the point of interconnection to electric grid is shown on the site plan near the site entrance. All electric lines from the interconnection point will be underground.

Overall the site plan appears to meet the county's setback requirements of 100 feet on the front and 50 feet on the sides for all equipment and fences. The solar panels will have no moving parts and will have a relatively low profile with a height of 12 feet (ordinance requires less than 25 feet).

Staff Review Items

- Plan includes reconfiguring parcels to meet 1,000 foot separation requirement between solar farm located to the north along NC 39 South. A condition of approval should be the finalization and recordation of the included survey.
- No construction staging or materials storage area is shown on the site plan. Board should consider adding condition that all materials, vehicles and activity will be outside of the Right-of-way.
- The executed pages of the interconnection agreement with Duke Energy Progress need to be submitted prior to releasing conditional use permit – could be condition of approval.
- Driveway permit has not been submitted.

Continued from February 11, 2016

- Applicant has provided a revised site plan that shows the property division.
- Staging area is identified in the notes section.
- Final driveway permit has not been provided to staff.