



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** December 16, 2013

**TO:** Barbara C. Berlin, Director  
Zoning Evaluation Division, DPZ

**FROM:** Chris Caperton, Chief  
Public Facilities Planning Branch, DPZ

**SUBJECT:** Section 15.2-2232 Review  
**Application 2232-V13-17** (concurrent with **PCA 2000-MV-034**)  
Furnace Associates, Inc.  
Lorton Solar Energy Park  
10018 and 10100 Furnace Road, Lorton 22079  
Tax Map 113-1 ((1)) 12 and 13

Pursuant to Va. Code Sec. 15.2-2232, the Facilities Planning Branch of the Planning Division offers the following comments and recommendation on the proposed Furnace Associates, Inc., Lorton Solar Energy Park.

### PROJECT DESCRIPTION

The applicant, Furnace Associates, Inc., proposes to construct a solar energy generation facility on an 8.86 acre parcel adjacent to an existing landfill as described in the 2232 Review Application. The proposal is also subject to review and approval of PCA 2000-MV-034. The proposed state-of-the-art solar energy electric generating facility ("solar energy park") would eliminate the previously approved use on the site.

### BACKGROUND

The Office of the County Attorney opined that a solar farm is considered a public utility and therefore requires 2232 review and approval. The proposed facility is summarized below and within the 2232 Review Application (Attachment A) and includes, by reference, the plans within the PCA 2000-MV-034 staff report.

**Location:** The 8.86 acre property is located on the west side of Furnace Road generally south and/or east of the Fairfax County landfill, incinerator, and the Landfill Energy Systems facility at 10018 Furnace Road, Lorton 22079 and 10100 Furnace Road, Lorton 22079.

**Site:** The site is currently zoned to the I-6 Heavy Industrial District, subject to proffers dated January 8, 2001, and is approved and planned to be utilized as a mixed waste reclamation facility. Preliminary site preparation work for the reclamation facility is completed. The industrial zoning of the subject property will remain unchanged.

**Proposed Facility:** As depicted on Sheet 7 of the Plan submission included within the application materials, the applicant proposes a solar panel area of approximately three (3) acres in size. Each of the proposed individual solar panels is approximately 50 feet in length x 25 feet in width x 30 feet in height. The applicant states that the size proposed may be increased or decreased based upon the prevailing technology at the time of installation. Additionally, the actual number and location of the individual solar panels may be adjusted provided that no minimum setback distances are affected by their locations. As stated in the application, the remaining surface area on this property may also be used for additional solar infrastructure, or other renewable energy options, should the applicant elect to build out additional renewable energy capacity.

The applicant has also applied concurrently for an amendment to a special exception on the adjacent landfill property which is addressed via 2232-V13-18. To support the proposal on the adjacent parcel, the applicant proposes the 8.86 application parcel also provide for a permanent, 19 space visitor parking lot with shuttle service to serve the uses proposed on the adjacent parcel, subject to approval of the special exception amendment.

## **COMPREHENSIVE PLAN CITATIONS**

Fairfax County Comprehensive Plan, 2013 Edition, Area IV, Lower Potomac Planning District as amended through April 9, 2013, LP2 Lorton-South Route 1 Community Planning Sector, pages 58-105, page 75 specifically states:

“Sub-unit B3

These two triangular-shaped pieces of property west of Furnace Road together contain about 27 acres. The northern piece of property is planned for light industrial use and for public open space when the adjacent landfills are covered. The southern piece of property is planned for industrial use for a recycling center and/or recycling related industries with an option in the long range for public open space when the adjacent landfills are covered.”

## **Policy Plan**

Fairfax County Comprehensive Plan, Policy Plan, 2013 Edition; Environment, as amended through February 12, 2013, pages 19-20 state:

**“Objective 13: Design and construct buildings and associated landscapes to use energy and water resources efficiently and to minimize short- and long-term negative impacts on the environment and building occupants.**

Policy a. Consistent with other Policy Plan objectives, encourage the application of energy conservation, water conservation and other green building practices in the design and construction of new development and redevelopment projects. These practices can include, but are not limited to:

- Environmentally-sensitive siting and construction of development.
- Application of low impact development practices, including minimization of impervious cover (See Policy k under Objective 2 of this section of the *Policy Plan*).
- Optimization of energy performance of structures/energy-efficient design.
- Use of renewable energy resources. . . .”

**STAFF ANALYSIS**

**Fairfax County Department of Planning and Zoning (DPZ) - Planning Division – Historic Preservation (Attachment B)**

- o Because there are two National Register of Historic Places (NR) Historic Districts in the vicinity of the application property, one of which the applicant has documented will be visible from the proposed installation of the solar panels and wind turbines, staff recommends the applicant comply with Section 106 of the National Historic Preservation Act of 1966, as amended, as may be necessary. If federal licensing or permitting for the installation of the solar panels and wind turbines is required, this may be considered an undertaking that requires Section 106 review. The applicant should contact the VDHR for guidance.
- o The applicant should provide to the DPZ, Planning Division, documentation as to whether or not Section 106 review is required in order to be reviewed and included in the staff report for PCA 2000-MV-034. If Section 106 review is required, or has been previously completed, the applicant should provide a copy of the completed Section 106 to DPZ, Planning Division, in order to be reviewed and included in the staff report for the PCA application.
- o The Town of Occoquan should be given the opportunity to comment on this 2232 application.

## **CONFORMANCE WITH THE COMPREHENSIVE PLAN**

Va. Code Sec. 15.2-2232, as amended, requires the Planning Commission to determine whether the general location or approximate location, character, and extent of the proposed facility, as amended, are substantially in accord with the adopted Comprehensive Plan:

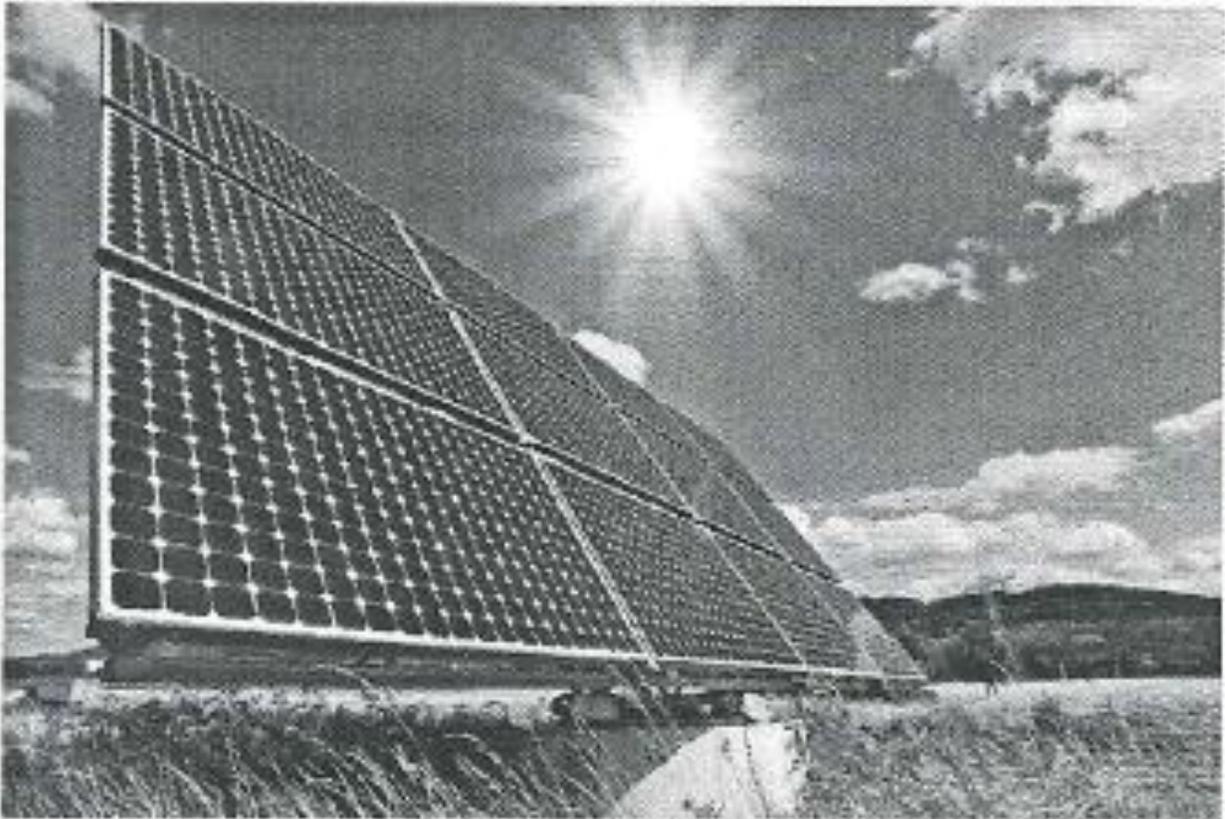
### **Location, Character and Extent**

As noted in the Historic Preservation memorandum (included as Attachment B), the subject property is not included within the boundaries of an Historic Overlay District and is not listed in the Inventory of Historic Sites or the National Register of Historic Places. However, it is noted that the D.C. Workhouse and Reformatory Natural Register Historic District extends across 511 acres in the vicinity of and/or adjacent to the application property.

The proposed solar electric generating use is a permitted use in the I-6 zoning district and as stated by the applicant, “would capture and reuse energy. . .” As noted in the applicant’s submission, redevelopment of the site provides a unique opportunity to create and operate a pilot renewable energy project within Fairfax County. By maintaining the I-6 zoning and character of the 8.86 parcel of land by replacing a waste reclamation facility with a solar energy park, the proposal maintains the industrial use and is consistent with Plan objectives previously noted, which encourage application of energy conservation in the design and construction of new development and redevelopment projects and the use of renewable energy sources. Staff believes the proposed reuse of an already industrially zoned parcel maintains the character of the property and surrounding properties. It is noted that although the solar infrastructure will be operated by the applicant for its useful life, fifty percent (50%) of any revenue the applicant receives, in excess of 2.5 cents per kilowatt hour, from the sale of the electricity produced by this solar infrastructure is proposed to be donated to Fairfax County.

As shown in the image on the following page, the type of solar panel facilities proposed would be approximately 50 feet in length, 25 feet in width and 30 feet in height. As outlined in the statement of justification, most solar panels now are designed with at least one anti-reflective layer and may have multiple layers thereby further reducing reflectivity. It is noted that the glare from summertime sun at high noon would have the highest potential for impact to the surrounding area; however, based on a Geosyntec analysis provided by the applicant, the potential for glare on surrounding residents was found to be minimal because the reflection would be primarily away from those residents.

The proposed solar energy facility appears to be much less intense than the currently approved recycling reclamation facility given that no landfill related or recycling related truck traffic will occur with approval of the proposed solar energy park. The only truck traffic would be that required to deliver and install the solar energy park and to perform minimal maintenance associated with the renewable energy uses proposed for the property. Additionally, as shown on Sheet 5 of the Plan submission dated June 7, 2013, as revised through December 10, 2013,



*Illustrative image as shown on Sheet 7 of the Plan submission included within the application materials*

the previously approved 25' transitional screening along Furnace Road and 30' transitional screening along the northwestern and southern property boundaries will be retained with approval of the new use.

It is staff's opinion that any potential visual, noise, light, air and water quality, environmental, and transportation impacts associated with the proposed solar energy park would not have an adverse impact on surrounding properties given the property is surrounded by dense wooded areas and road frontage along Furnace Road.

## **CONCLUSION AND RECOMMENDATION**

Staff concludes that the subject proposal, as amended, by Furnace Associates, Inc. at 10018 and 10100 Furnace Road, Lorton 22079, satisfies the criteria of general or approximate location, character, and extent as specified in Va. Code Sec. 15.2-2232, as amended.

Therefore, staff recommends that the Planning Commission find the subject Application **2232-V13-17** substantially in accord with provisions of the adopted Comprehensive Plan.

CBC/DLP