



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-V13-18 (concurrent with **SEA 80-L/V-061-2**)
Furnace Associates, Inc.
Green Energy Wind Turbine and Solar Panel Electric Generating Facilities and
Quasi-Public Use
10001, 10201, 10209, 10215, 10219 and 10229 Furnace Road, Lorton 22079
Tax Map 113-1 ((1)) 5 pt., 7 and 8; 113-3 ((1)) 1, 2 and 4

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 green energy wind turbine and solar panel electric generating facilities and quasi-public use.

PROJECT DESCRIPTION

The applicant, Furnace Associates, Inc., proposes to construct green energy wind turbines and solar panel electric generating facilities and a quasi-public use on a 249.82 acre parcel as described in the 2232 Review Application. The proposal is also subject to review and approval of SEA 80-L/V-061-2. The applicant proposes to phase implementation of four renewable energy technologies, including solar panels, wind turbines, methane gas to energy and geothermal heat exchange.

BACKGROUND

The Office of the County Attorney opined that two of the four renewable energy infrastructures proposed, specifically, the solar panels and wind turbines, are considered a public utility and therefore require 2232 review and approval. The proposed facility is summarized below and within the 2232 Review Application (Attachment A) and includes, by reference, the plans included within the SEA 80-L/V-061-2 staff report.

Location: The 249.82 acre property is generally located between Interstate 95 (I-95) and Furnace Road, south of Lorton Road and east of the County landfill, incinerator, and the Landfill Energy Systems facility at 10001, 10201, 10209, 10215, 10219 and 10229 Furnace Road, Lorton 22079. Two parcels adjacent to the application property, also owned by the applicant, are located on the west side of Furnace Road.

Site: The subject property has operated as a landfill since the 1970s and is currently zoned to the R-1 zoning district, subject to development conditions dated November 16, 1981 and amended on January 8, 2007. The current approval allows the existing landfill operation with closure in 2019.

Proposed Facility: The concurrent SEA application proposes several uses on the subject property to be performed in a total of six (6) phases of development through 2050. The purpose of this 2232 review is solely for the solar panels and wind turbines proposed at the maximum 412-foot elevation of the landfill. As noted in application 2232-V13-17, the applicant is committing to install a separate solar panel farm on its adjacent property on the west side of Furnace Road subject to PCA 2000-MV-034 approval.

Initially, the applicant proposes to install three (3) wind turbines, approximately 180 feet in height, to begin operation during Phase 1 on the southern portion of the site, as depicted on Sheet 6 of the Plan submission included within the application materials. The SEA proposes the creation, in Phase 5, of a 40-acre platform at the maximum 412-foot elevation of the landfill. A maximum of twelve (12) additional wind turbines and/or a solar panel farm will be provided by the applicant at this phase of development. The initial three (3) turbines are proposed to be removed and/or replaced for a maximum of twelve (12) turbines at the end of Phase 5 of development.

During Phase 4, the applicant proposes to create a 10-acre elevated platform at the southern end of the landfill for the potential establishment of a solar panel farm. The applicant indicates that the potential for additional solar renewable energy facilities would also exist by the end of Phase 5 on the 40-acre platform.

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:

“The land use plan in the Lorton-South Route 1 area includes: "gateway" site and building design; low and high density residential areas; industrial areas; "Town Center" and related uses; public facility use; recreational area; and environmentally sensitive areas. Although these uses are generally contained in one or two distinct subareas of the sector, it is envisioned that they will work in concert to create a comprehensive and interrelated

community. Descriptions of the general concepts and recommendations are summarized below. . . .

Recreational Area

The largest area planned for recreation or public park uses in the sector is located south of Dixon Street, west of I-95 and east of Furnace Road. While the area currently contains a large private debris landfill, it is envisioned that when landfill operations cease that this area will be developed with private or public recreational uses such as a golf course. . . .

Sub-unit B4

Sub-unit B4 contains a private debris landfill. To help mitigate any visual impacts upon the surrounding area, buffers should be maintained around the landfill. When the landfill is built-out, it is recommended that the site ultimately be developed with active recreational uses such as a golf course.”

STAFF ANALYSIS

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

- 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 visually affected by 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.
- 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 SEA 80-L/V-061-2. 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 SEA application.
- 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. Although the placement of the wind turbines may be visible from the adjacent property, staff does not believe it would cause an adverse visual impact due to the location of the proposed wind turbines, atop the expanded landfill. Staff believes the subject property is considered a suitable location for this type of use. The turbines will be situated at a height and location as to minimize visual impacts from area residential neighborhoods to the north and the D.C. Workhouse and Reformatory Historic District west/northwest of the landfill. I-95 to the east serves as a buffer to this use, as does the existing landfill and open space to the south and west. No noise impacts are expected to emanate from the turbines.

The applicant has indicated that unlike conventional power plants, wind power plants emit no air pollutants or greenhouse gases and provide a clean, safe, non-polluting source of energy. As stated above, the applicant proposes to install three (3) wind turbines, approximately 180 feet in height, to begin operation during Phase 1 of development and located at the southern end of the property. They would not be visible to the residents of Lorton Valley, which is the community closest to the subject property. The applicant proposes the first wind turbine installation no later than 18 months after all necessary County, State and Federal approvals for the landfill and turbines have been obtained. The second and third wind turbines will be installed within 36 months after receiving such approvals. The final 40-acre platform at the maximum 412-foot elevation of the landfill will provide space for up to twelve (12) total wind turbines and/or a solar panel farm. With regard to the solar panels, they would be placed low to the ground and fixed in their locations and therefore should not create a negative visual impact on adjacent properties.

Multiple photo simulations were provided to staff for review depicting existing and projected conditions of the application property in 2013, 2019, 2033, 2040 and 2050. During review of the photo simulations, and as shown in the image on the following page, although a total of twelve (12) wind turbines are proposed to be located on the 40-acre platform at the 412-foot elevation of the landfill, it is staff's opinion that the proposal as requested would not appear to have any adverse negative visual impacts given their distances from residential properties. Also depicted in the image, the applicant proposes a more natural screening effect on the north and east slopes of the landfill providing a substantial vegetated berm in addition to a 50-foot vegetated buffer

between the immediately closest residential neighborhood to the north of the application property to soften the appearance of the wind turbines at their raised elevations.

It is noted that 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 the wind infrastructure is proposed to be donated to Fairfax County. In summary, as indicated by the applicant, these renewable energy features support the policies in the Comprehensive Plan which encourage application of energy conservation, in the design and construction of new development and redevelopment projects and the use of renewable energy resources.

LORTON STATION AT ANNETTE DRIVE - 2050 (ELEVATION 412')



Photo simulation which depicts the vegetated berm and the potential for 12 wind turbines located at the maximum elevation of the subject property

CONCLUSION AND RECOMMENDATION

Staff concludes that the subject proposal, as amended, by Furnace Associates, Inc. 10001, 10201, 10209, 10215, 10219 and 10229 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-V13-18** substantially in accord with provisions of the adopted Comprehensive Plan.

CBC/DLP