

Memorandum

To: Bonnie Hammersley, County Manager

From: Gayle Wilson, Director - Department of Solid Waste Management
David Stancil, Director - Department of Environment, Agriculture, Parks and Recreation

Subject: BOCC Follow-up – Potential for Solar Energy Project at Closed Landfill

Date: September 29, 2014

At the April 15, 2014 meeting the Board of Commissioners requested that David Stancil and Gayle Wilson provide information regarding the potential for alternative energy producing opportunities at the closed landfill on Eubanks Road such as solar. A preliminary investigation into the subject resulted in the following feedback.

County staff asked the county's engineering consultant HDR Engineering of the Carolinas to consider the Board's request and help staff to develop an informed response. HDR contacted Jay Cobb with Strata Solar. Strata Solar is a turn-key developer for the installation and operations of solar energy projects with their corporate office located in Chapel Hill. HDR provided a summary of the Orange County Facility and indicated that the County had an interest in meeting with a representative of Strata Solar to discuss the potential for developing a solar project on the site. Mr. Cobb said that normally they would conduct an initial meeting with an interested party to do a site evaluation and complete a financial model to determine if it is advantageous to continue with development of a project. However, he felt that it would not be feasible at this time to pursue a solar project with Orange County for the following reasons:

1- The key to financial feasibility of solar projects is that they are contingent upon the tax credits available to the project and since Orange County cannot use the tax breaks it reduces the available revenue for a project. In other words, the turn-key solar development companies are not as interested in the public sector as they are in the private sector since the revenue possibilities are much greater for the latter. A project at Eubanks Road would provide revenues to the County in the form of lease payments for use of the property which would generally be low.

2- The cost of installation of the solar panels on a closed landfill is much higher due to the cap system which must be taken into account when designing the support system. For green field areas the posts that support the rack system are generally driven 6 to 8 feet in the ground. This is not possible on a closed landfill because it would impact the cap system. The use of a ballasted system, which is comprised of concrete blocks on which the solar panels are installed, are required on a closed landfill to protect the integrity of the cap system. Strata Solar has developed and installed this type of system on a research and development basis but has not used it in a project due to its higher installation cost.

The main issue here is that Strata Solar, along with the other solar developers, has a number of projects available to them that can use a "cookie-cutter" approach to development which keeps the installation costs low and through tax credits with private owners can maximize the revenues from a project. They are not currently pursuing the installation of solar energy recovery at old landfills at this time but may have interest in the future.

Based on HDR's conversation with Strata Solar, staff believes it would be in the best interest of Orange County to hold off pursuing a solar project at Eubanks Road currently, but revisit it in the future as conditions may change. Staff is available to answer any additional questions on this issue as necessary.