COUNTY OF MILWAUKEE INTEROFFICE COMMUNICATION

DATE:

April 30, 2015

TO:

Marina Dimitrijevic, Chair, County Board of Supervisors

Supervisor Michael Mayo, Sr., Chairman Transportation, Public Works & Transit

FROM:

Greg High, Director, AE&ES Section, DAS-FM Division

SUBJECT:

Status Update on Solar Energy Feasibility Study for General Mitchell International

Airport - Informational Only

BACKGROUND

In 2014 the Milwaukee County Board passed a resolution (File No. 14-91) directing General Mitchell International Airport (GMIA) to undertake a study of the feasibility of developing a large-scale solar energy system on airport property. A solicitation for consultant services was performed and a qualified consultant (Harris Miller Miller & Hansen) selected. The project scope was divided into two phases: Phase I which evaluates the technical issues that could affect the feasibility of installing a large-scale system, and Phase II which considers the economic and legal issues associated with such a system. Phase II would be authorized only if Phase I results indicated there were no fatal flaws in the technical feasibility.

PHASE I RESULTS

Phase I evaluated if there are feasible sites on GMIA property to locate a one-megawatt solar array which would overlay approximately five (5) acres. Factors affecting the technical feasibility included siting restrictions imposed by FAA, glare from reflection of sun off of the solar panels, potential for interference with GMIA communication systems, availability of electrical support infrastructure, and compatibility with GMIA's master plan and core aviation activities. Fifteen (15) potential sites were determined to be capable of supporting solar arrays. Based on the report conclusions and recommendations, the consultant was directed to begin the Phase II work.

REMAINING WORK

The tasks to be completed under Phase II include:

Task 2: An analysis of GMIA's overall energy usage in comparison to the amount of electricity generated by a solar array. This in turn will drive the economic analysis of the cost to construct the solar project versus the energy costs currently paid to the local utility to underscore the potential value of reduced electricity costs displaced by solar production.

Task 3: A legal review and regulatory coordination with the local utility along with an assessment of the federal, state and local approvals necessary to proceed with the project.

Task 4: A summary of the analysis performed in Task 2 and 3 with overall recommendations to guide with future planning.

The current schedule is to have a draft report summarizing results and conclusion from the Phase II tasks ready by the first week of June.

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