Generation Interconnection Combined Feasibility/System Impact Study Report

PJM Generation Interconnection Request Queue Position #U1-048

Reichs Ford Landfill

December, 2008

© PJM Interconnection 2008. All rights reserved.

General

The Northeast Maryland Waste Disposal Authority (NMWDA) & Frederick County Government, the Interconnection Customer, has proposed a 2 MW energy (2 MW capacity) methane gas fueled generating facility to be located at the Reichs Ford Landfill in Frederick County, Maryland. The generating facility will consist of one (1) 2 MW generator. The proposed in-service date for the project is February 2009.

Attachment facilities and local upgrades (if required) along with terms and conditions to interconnect U1-048 will be specified in a separate two party interconnection agreement between the Transmission Owner and the Interconnection Customer as this project is considered FERC non-jurisdictional per the PJM Open Access Transmission Tariff (OATT). From the transmission system perspective, no network impacts were identified as detailed below.

Point of Interconnection

U1-048 will interconnect with the Allegheny Power (AP) distribution system via a tap of the 12.5 kV Holly Hills circuit at pole number F75727 (see Attachment 1). The Holly Hills circuit is a radial distribution line from AP's Eaglehead substation.

Network Impacts

U1-048 was studied as a total injection of 2 MW into the AP system as a tap of the Holly Hills 12.5kV circuit. The project was evaluated for compliance with reliability criteria for summer peak conditions in 2012.

Generator Deliverability

(No Contingencies, Single or N-1 contingencies for the full energy output)

No problems were identified.

Multiple Facility Contingency

(Double Circuit Tower Line, Line with Failed Breaker and Bus Fault contingencies for the full energy output)

No problems were identified.

Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

© PJM Interconnection 2008. All rights reserved.

No problems were identified.

Short Circuit

No breakers on the transmission system were identified as being over their maximum interrupting rating as a result of U1-048.

Stability and Reactive Power Requirements

Not required due to size of project.

New System Reinforcements

(Upgrades required to mitigate reliability criteria violations, i.e. Network Impacts, initially caused by the addition of this project generation)

None

Contribution to Previously Identified System Reinforcements

(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project may have a % allocation cost responsibility which will be calculated and reported for the Impact Study)

None

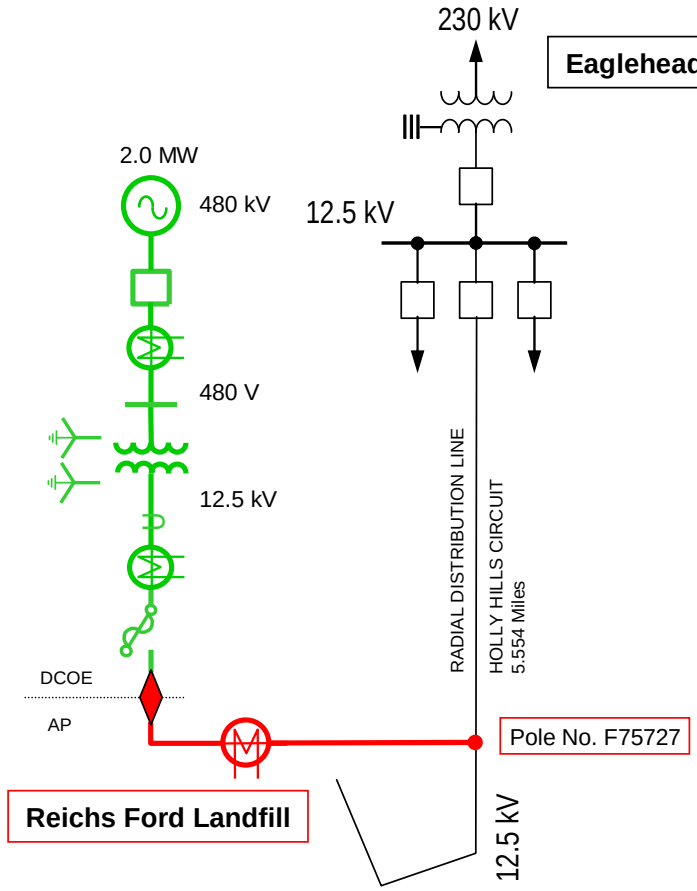
© PJM Interconnection 2008. All rights reserved.

Attachment 1

Reichs Ford Landfill Gas

PJM Queue U1_048

1 methane gas generator will be connected for a total generating capability of **2 MW**.



AP	7/1/2009	
DCO Energy, LLC	7/1/2009	
POINT OF INTERCONNECTION		
UNDERGROUND		

SOURCE: R. A. Boyd	Allegheny Power PLAN	DRAWN: 10-9-08 P. L. Zawelensky	PLAN NUMBER
CAD FILE: U1_048 reich ford landfill plan.ppt	**REICHS FORD LANDFILL** **Provide Interconnection Facilities For** **DCO Energy, LLC Landfill Gas Generation** **Frederick Service Center**	CHKD	
REVIEWED		SCALE: NS	
APPROVED DATE		AUTHORIZATION	REV

© PJM Interconnection 2008. All rights reserved.