Agenda Date: 07/11/08
Agenda Item: 8D

STATE OF NEW JERSEY

Board of Public Utilities
Two Gateway Center
Newark, NJ 07102
www.nj.gov/bpu

CLEAN ENERGY

IN THE MATTER OF THE RAHWAY VALLEY SEWERAGE AUTHORITY (RVSA) – RENEWABLE ENERGY ADVANCED POWER (REAP) PROGRAM	)	ORDER DOCKET NO. EO06020117

(SERVICE LIST ATTACHED)

BY THE BOARD:

By Order dated February 7, 2007, in the above captioned matter the Board authorized, a Renewable Energy Advanced Power (REAP) program grant in the amount of $500,000 to the Rahway Valley Sewerage Authority (RVSA) for the purpose of designing, constructing and installing a digester gas powered internal combustion system to the RVSA's Cogeneration/Sludge Drying Facility to Energy Project (Project). The system that was approved by the Board was to operate one of four engines on digester gas. The Project will provide all electrical power necessary to run the RVSA's expanded and upgraded wastewater treatment facility and will eliminate the need for an onsite emergency generation plant and the replacement of the existing diesel blower drives.

By letter dated June 12, 2007, RVSA notified the Board's Office of Clean Energy (OCE) of changes to the original design adding a gas blending system which is intended to blend the digester gas with natural gas and operate all four engines on this blended fuel, rather than operating one engine solely on unblended digester gas. RVSA identified the following benefits of the modified gas blender system: maximizes the use of the digester gas in the facility operations; evens out the engine wear and maintenance of the engines; provides for continuous operation; avoids shut downs and other operating procedures to switch fuels; and reduces wear upon the mechanism due to the ability to pace the use of gas with its generation.

Staff has reviewed these benefits and believes that blending the digester gas with natural gas and using the blend in all four engines will provide greater operational flexibility for engine use and reduce wear and tear on the equipment, thereby resulting in less overall maintenance of the equipment. The Project will utilize the same amount of digester gas as it would if based on dedicating the digester gas to one specific engine. The RVSA modifications do not change the scope, grant amount, or timing for completion of the Project. The Project remains consistent with the grant solicitation and with the goals and objectives of renewable energy electricity production in the Clean Energy program. In particular, the same volume of digester gas will generate the same amount of renewable energy and the same amount of Renewable Energy Certificates (RECs) whether all of the digester gas is combusted in one engine or in four separate engines. While the four separate engines will produce four times the amount of total energy, the percentage of the renewable energy generated is based on the volume of the digester gas combusted and the higher heat value (in BTU/cubic feet) of the digester gas. The

total BTUs of thermal energy produced by the digester gas and the total amount of energy generated from those BTUs will be tracked based on the volume of digester gas produced. Accordingly, Staff recommends the Board approve this modification for a gas blending system as proposed by RVSA. The Economic Development Authority, which had previously reviewed the Project for economic viability, has informed Staff that its approval of this project is unaffected by this technical change.

Findings and Conclusions

Having reviewed the proposed modifications to the Project and Staff's recommendation, the Board FINDS that the modifications will provide operational and economic benefits. The Board further FINDS that the technical modifications for which approval is sought do not significantly alter the Project as previously approved by the Board, which remains consistent with the renewable energy goals of the Board, generating the same amount of renewable energy. Nor do these modifications change the scope, grant amount, or timing for completion of this project.

Therefore, contingent upon receipt of any additional permits or permit modifications required by the New Jersey Department of Environmental Protection, the Board AUTHORIZES the proposed modifications to the design, construction, and installation of the digester gas powered internal combustion system. Except as modified herein, all other terms and conditions of the grant and of the Board's February 7, 2007 Order remain in effect.

DATED: 8/19/08

BOARD OF PUBLIC UTILITIES
BY:

JEANNE M. FOX
PRESIDENT

FREDERICK F. BUTLER
COMMISSIONER

JOSEPH L. FIORDALISO
COMMISSIONER

NICHOLAS ASSELTA
COMMISSIONER

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COMMISSIONER

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities

ATTEST:

KRISTI IZZO
SECRETARY