**Questions & Answers**

**RFP#14-9637-7CS**

**Energy utilization of water reclamation facility digester gas**

**COUNTY OF HENRICO, VIRGINIA**

**November 7, 2014**

General Requests:

Please provide an electronic copy of the Water Reclamation Facility Final Master Plan referenced at the pre-proposal meeting.

See Exhibit E attached.

Q1. Please provide 6-12 months of power bills and the rates charged by Dominion Virginia Power for this facility.

A1. See attached electric bills and Dominion Schedule 130 rate structure.

Q2. What are the power demand requirements for the facility – high/ low / average?

A2. See attached electric bills.

Q3. Is the digester operating at maximum capacity?

A3. The facility is currently designed to treat 75 MGD and is currently operating with annual average flows of 39.65 MGD The digester capacity mirrors current flow/design capacity.

Q4. What is the average retention time of the sludge in the digester?

A4. The average retention time through the digesters is 20 – 30 days.

Q5. Would Henrico County be interested in alternative proposals other than the type of commercial arrangement outlined in the RFP, such as a cogen Power Purchase Agreement – which would also represent a no risk, turnkey solution for the County?

A5. The County is interested in a vendor that can utilize the excess digester gas. We would consider proposals that include selling the electricity generated by the vendor directly back to the site. This arrangement would likely require modifications to the existing Dominion sub-station and/or County switch gear or other infrastructure. Coordination and agreement with Dominion Power will be the Successful Offeror’s responsibility. We are not interested in energy assessments, performance contracts, or additional requirements on County resources.

Q6. Are all (100%) of digester heating needs satisfied with digester gas fired boilers?  If not, could you approximate how much thermal energy is provided by digester gas and how much is provided by another fuel source to heat digesters?  What’s the other fuel source, if applicable?

A6. Yes the digester gas fired boilers meet the heating needs for the digesters. However, No. 2 fuel oil is provided as back up if needed.

Q7. Are digester gas fired boilers used to heat anything else beside the digesters (admin buildings)?

A7. The boilers provide heat for 4 other buildings – Administration building and three maintenance buildings.

Q8. How much does the WRF spend annually on boiler maintenance for the boilers firing on digester gas?

A8. The County currently budgets $11,000 per fiscal year dedicated to the routine preventive maintenance tasks for ALL 8 boilers on the WRF site. There are five boilers dedicated to the digester complex.

Q9. Is the digester gas conditioned/cleaned in any way prior to feeding the boilers?  If so, what is done to improve the condition of the digester gas?

A9. The only treatment is cooling and removal of moisture through drip/condensation traps associated with the gas piping.

Q10. What Dominion Power Rate Schedule is currently being utilized by the WRF?

A10. Schedule 130 applies to this facility. See attached Dominion Schedule 130 rates.

Q11. Would the County be interested in taking high strength waste into the digesters sometime in the future if there were benefits to doing so?

A11. Such an expansion of work load would require additional facilities and personnel. At this time, the County is not interested in this type of “expansion”.

Q12. If the answer to question #5 is yes, is there anything that the County is absolutely not interested in exploring as part of the Digester Gas Utilization RFP or are all viable options on the table?

A12. The County is not interested in energy assessments, performance contracts, or additional requirements on WRF resources.

Q13. What are the top 3 priorities (ranked in order) as the County seeks to beneficially use the digester gas currently being flared? (this will help us to tailor a proposal to meet the specific priorities that are most important to the County)

A13. The top priority is to sell the digester gas for a beneficial use.