



Department of Utilities Wastewater Treatment Plant 2006 East Newberry Street Appleton, WI 54915 p: 920-832-5945 f: 920-832-5949 www.appleton.org/government/utilities

# MEMORANDUM

| Date:    | June 6, 2025  |
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| То:      | Chairperson Vered Meltzer and Members of the Utilities Committee                  |
| From:    | Chris Stempa, Director of Utilities   |
| CC:      | Ryan Rice, Deputy Director of Utilities   |
| Subject: | Information: Pending Letter of Intent with Renewable Natural Gas (RNG)<br>Company |

## PURPOSE AND BACKGROUND:

This memorandum is to inform the Utilities Committee of a pending Letter of Intent (LOI) between the City of Appleton and a renewable energy company that has expressed interest in purchasing biogas generated at the Appleton Wastewater Treatment Plant for use in a Renewable Natural Gas (RNG) production facility.

The Appleton Wastewater Treatment Plant produces up to 700,000 cubic feet per day of methane gas or biogas as a byproduct of anaerobic digestion. Bacteria inside the anerobic digesters naturally break down organic waste and produce raw methane (CH4), carbon dioxide (CO2) and other gases. Historically, this biogas has been used for on-site heat through the use of direct feed boilers with the balance of the unused biogas sent to flares. Raw methane is between 55% and 70% pure, which is not acceptable for commercial use. RNG facilities can effectively treat, or "upgrade," biogas to remove contaminants. After RNG is upgraded, it can then be injected and transported through natural gas pipeline networks and used as a substitute that is virtually indistinguishable from natural gas. The difference is RNG is produced from biological materials instead of fossil fuel deposits.

With the growth of the RNG market, companies are increasingly interested in upgrading raw biogas into pipeline-quality RNG that can be sold into energy markets or used for transportation fuel under programs such as the Renewable Fuel Standard (RFS) or Low Carbon Fuel Standard (LCFS).

## **PROPOSED ENGAGEMENT:**

A company has approached the Department of Utilities with a proposal to explore a long-term biogas purchase agreement. As a first step, both parties are working to finalize a non-binding Letter of Intent that outlines shared goals, expectations, and the intent to proceed with feasibility assessments and potential project development. It is noteworthy that the interested party will be required to conduct an extensive preliminary engineering evaluation with a scope that includes but is not limited to funding, design, construction, operation, and maintenance of a new facility that will collect, dehydrate and deliver the biogas produced at the AWWTP to an offsite RNG facility for further refinement.

Key LOI components include:

- General framework for further due diligence, technical studies, and financial modeling.
- Non-binding terms regarding potential future revenue sharing.
- Timeline of the definitive agreement, good faith negotiation terms, and exclusivity period pending City review and approval

#### **NEXT STEPS:**

Once the LOI is finalized, City staff will advance detailed discussions with the RNG company to evaluate feasibility, financial impact, regulatory requirements, and operational considerations. Staff will return to the Utilities Committee with findings and a formal recommendation before any binding agreements are made. It should be emphasized that the preliminary engineering evaluation could identify factors which would prohibit a future project or formal purchasing agreement from occurring. Regardless, the Utilities Committee will be kept informed.

#### CONCLUSION:

The potential partnership represents an opportunity to convert a renewable waste stream into a valuable, low-carbon energy resource while generating revenue and supporting environmental goals. This venture would also allow the Utilities Department to defer or eliminate near future costly capital upgrades to existing biogas utilization infrastructure and equipment which has reached its useful life. We will continue to keep the Committee informed as discussions progress.

If you have any questions regarding the potential partnership, please contact Chris Stempa at ph: 832-5945.