



City of Kansas City, Missouri

Docket Memo 230891

Ordinance/Resolution #: TMP-3625

Submitted Department/Preparer: Water

Revised 8/3/23

Docket memos are required on all ordinances initiated by a Department Director. More information can be found in [Administrative Regulation \(AR\) 4-1](#).

Executive Summary

Authorizing a Design-Build-Finance-Operate-Maintain (DBFOM) Agreement with Spire Missouri Inc. (Spire), for the Biogas Use Applications Project; estimating annual revenue in the Water Services Department Sewer Fund; and authorizing a contract term of twenty (20) years.

Discussion

Project Justification

The Biogas Use Applications Project consists of services for the design, construction, commissioning, and operation of a system that will accept all of the stored biogas from the Blue River Wastewater Treatment Plant anaerobic digesters (Biosolids Project), treat or condition the biogas, and then inject the biogas into an existing natural gas pipeline off-site. This contract will also be responsible for the long-term (20 years) operation and maintenance of the biogas facility and infrastructure delivered as part of this Biogas Project.

To support City Council Resolution No. 20005 and to create a stable and safe work environment while managing the treatment of biogas, KC Water solicited a biogas beneficial use project (Biogas Project) to be constructed, anticipated to begin production in 2025. Biogas produced from the digestion process is a clean, renewable energy source that can be used (but not limited to) heating applications, electricity generation, and automotive fuel. Additionally, capturing digester gas and cleaning the biogas to create renewable natural gas (RNG) reduces the on-site greenhouse gas emissions relative to combusting the gas. By removing the impurities from the biogas, utilities can replace traditionally sourced natural gas with RNG which has a broad range of potential end-uses, allowing KC Water to meet key sustainability goals and protect City's financial resources by utilizing revenues generated from the biogas to offset KC Water capital costs.

Project Description

KC Water is delivering the Biosolids Project which will replace and rehabilitate aging infrastructure and incorporate improvements to address the region's future capacity needs while providing the flexibility needed to meet future regulatory requirements through 2035. The Biosolids Project achieves this by upgrading the solids handling facility with a thermal hydrolysis process (THP) and significant improvements to the anaerobic digesters and other systems as needed to support process operations and THP. The new THP facility will produce 72 average

dry tons and 94 max month dry tons per day of Class A biosolids, eliminating the need to incinerate or landfill sludge.

A by-product of the sludge digestion process is biogas, which is a renewable energy source that may be used for (but not limited to) heating applications, electricity generation, and automotive fuel. Instead of venting, flaring off or combusting the by-product, this can be converted to renewable natural gas reducing on-site greenhouse gas emissions. This conversion is done by removing biogas impurities. This offsets natural gas sourced from traditional methods and furthers KC Water's key sustainability goals.

The Project consists of services for the design, construction, financing, commissioning, and acceptance of a system that will accept all generated biogas from the Blue River Wastewater Treatment Plant anaerobic digesters, treat or condition as deemed necessary for the project, and provide all operations and maintenance, and management services for the Project in accordance with the DBFOM Agreement.

With the DBFOM delivery approach, the preferred proposer is responsible for financing the project, with no City funds being encumbered. The term of the DBFOM Agreement is 20 years.

Solicitation/Selection

This project was advertised in accordance with the City's requirements.

On October 20, 2022, KC Water issued a Request for Proposals (RFP) for shortlisted proposers to provide Technical and Financial Proposals to identify the preferred technical approach(es) with the greatest financial benefits through the implementation of a Biogas Use Applications Project (Project) at the Blue River Wastewater Treatment Plant, located at 7300 Hawthorne Road, Kansas City, MO 64120.

This Project will be delivered using a Design-Build-Finance-Operate-Maintain (DBFOM) delivery approach. The selection utilized a two-step selection process. Proposers were previously shortlisted to three (3) from the submittal and review of each Proposer's Statement of Qualifications (SOQ).

The City-Wide Selection Committee met on May 22, 2023 to review and score the Technical Proposals received.

The public bid opening was held on May 30, 2023 at 2:00 PM CST. The highest Revenue Sharing Factor was awarded 100 points. For the other financial proposal, points were awarded based on the financial score formula provided in the RFP.

Scoring

Proposals were scored per Section 5 of the RFP. Proposers submitted a completed proposal on March 10, 2023 composed of two parts:

- (1) Technical Proposal (100 points max)
- (2) Financial Proposal (100 points max, normalized)

Technical Proposal

The City-Wide Selection Committee evaluated and ranked the responsive proposals by applying a weighted evaluation criteria set forth in the RFP for the Technical Proposal. The maximum total number of points available for the Technical Proposal was 100.

Missouri Spire Inc. was selected for this project as the Preferred Proposer with the highest total for Technical and Financial Proposals with a guaranteed gross revenue share from gas sales of 23%, with subcontracting participation of 22.95% MBE and 4.97% WBE for the design and construction of this project.

Other Bidders/Subcontracting Participation

Other proposals/bids received with proposed subcontracting participation is as follows:

- Anaergia Technology, LLC / 15% / 11% MBE & 11% WBE participation
- NextEra Energy – they were shortlisted during the qualification phase; however, they withdrew from the proposal phase prior to the proposal submittal date.

Estimated Project Cost

The estimated opinion of probable construction costs for this project is \$19,869,400.00. Spire Missouri Inc. is financing the entire project. Spire will be supplying 23% of gross revenue from gas sales to the City.

MBE/WBE Goals

CREO KC established goals of 11% MBE and 11% WBE on this project on April 11, 2022, which pre-dated the CREO KC Annual Goal Program, which is for a period of June 2022 through June 2023.

Fiscal Impact

1. Is this legislation included in the adopted budget? Yes No
2. What is the funding source?
N/A – no City funding is required
3. How does the legislation affect the current fiscal year?
It is anticipated that revenues from the project will begin in 2025.
4. Does the legislation have a fiscal impact in future fiscal years? Please notate the difference between one-time and recurring costs.
Yes. It is anticipated that this project will generate revenues to the City between \$930,000.00 and \$1,100,000.00 annually over the 20 year term of the Agreement.
5. Does the legislation generate revenue, leverage outside funding, or deliver a return on investment?

Yes. It is anticipated that this project will generate revenues to the City between \$930,000.00 and \$1,100,000.00 annually over the 20 year term of the Agreement.

Office of Management and Budget Review

(OMB Staff will complete this section.)

1. This legislation is supported by the general fund. Yes No
2. This fund has a structural imbalance. Yes No
3. Account string has been verified/confirmed. Yes No

Additional Discussion (if needed)

Click or tap here to enter text.

Citywide Business Plan (CWBP) Impact

1. View the [FY23 Citywide Business Plan](#)
2. Which CWBP goal is most impacted by this legislation?
Infrastructure and Accessibility (Press tab after selecting.)
3. Which objectives are impacted by this legislation (select all that apply):
 - Enhance the accessible, sustainable and better connected multi-modal transportation system
 - Develop environmentally sound and sustainable infrastructure strategies that improve quality of life and foster economic growth
 - Increase and support local workforce development and minority, women, and locally-owned businesses
 - Engage in efforts to strategically invest in the City's infrastructure and explore emerging technologies
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Prior Legislation

City Council passed Ordinance No. 200954 on November 12, 2020 for funding and authorization of a design-build contract, design professional services amendment, and two professional, specialized or technical services contracts for the Blue River WWTP Biosolids Facility project.

Service Level Impacts

This project will allow for a value added product to be produced from a waste product generated from providing sewer service.

Other Impacts

1. What will be the potential health impacts to any affected groups?
By capturing digester gas and cleaning the biogas already being generated by the current processes to create renewable natural gas (RNG), this project reduces the on-site greenhouse gas emissions relative to combusting the gas.
2. How have those groups been engaged and involved in the development of this ordinance?
N/A
3. How does this legislation contribute to a sustainable Kansas City?
Biogas produced from the sludge digestion process is a clean, renewable energy source that can be used (but not limited to) heating applications, electricity generation, and automotive fuel. By removing the impurities from the biogas, utilities can replace traditionally sourced natural gas with RNG which has a broad range of potential end-uses, allowing KC Water to meet key sustainability goals.
4. Department staff certifies the submission of any applicable Affirmative Action Plans or Certificates of Compliance, Contractor Utilization Plans (CUPs), Non-Discrimination documents, and Letters of Intent to Subcontract (LOIs) to CREO prior to the legislation entry request in Legistar.

Yes - I have submitted documents for CREO Review (Press tab after selecting)
Please attach or copy and paste CREO's review.

The Contractor Utilization Plan was submitted to CREO KC for review on June 15, 2023, and was approved on July 7, 2023 with 23% MBE and 5% WBE participation.

The Biogas Project consists of services for the design, construction, commissioning, and operation of a system that will accept all of the stored biogas from the Blue River WWTP anaerobic digesters (Biosolids Project), treat or condition the biogas, and then inject the biogas in to an existing natural gas pipeline off-site. This contract will also be responsible for the long-term (20 years) operation and maintenance of the biogas facility and infrastructure delivered as part of this Biogas Project. This is a DBFOM contract where the Contractor is financing the entirety of the project. The design and construction cost is expected to be \$19,869,400.00, which is what the goals apply to. The Contractor is required to make good faith efforts during the operation and maintenance phase of the project. The expected cost over the duration of the Agreement is \$40,511,955.00.

5. Does this legislation seek to approve a contract resulting from an Invitation for Bid?

Yes(Press tab after selecting)

Attach the bid tabulation form.

6. Does this legislation seek to approve a contract resulting from a Request for Proposal/Qualification (RFP/Q)?

No(Press tab after selecting)