



City of Tualatin

CITY OF TUALATIN Staff Report

TO: Honorable Mayor and Members of the City Council

THROUGH: Sherilyn Lombos, City Manager

FROM: Rachel Sykes, Public Works Director
Nic Westendorf, Deputy Public Works Director

DATE: June 10, 2024

SUBJECT:

Consideration of **Resolution No. 5778-24**, authorizing the City to enter into a sole source energy performance savings contract without competitive procurement to InPipe Energy, Inc. and Tapani Inc.

RECOMMENDATION:

Staff recommends that Council adopt the resolution, which would allow the City to enter into a contract with both InPipe Energy Inc. and Tapani Inc. for the design and installation of the HydroXS Micro-Hydro Turbine on a City-owned water transmission main. The contract valuation is \$690,295.00.

PROJECT SUMMARY:

During the spring of 2023, InPipe Energy Inc. approached city staff about a burgeoning technology that may be of interest to the City of Tualatin. InPipe Energy has a patented energy recovery system that consists of micro-turbines that are installed along pressurized water distribution lines, harnessing the energy produced and converting it into usable electricity. This electricity is then diverted back into the power grid, or can be consumed at an adjacent site/property.

Tualatin's water distribution system has a number of high pressure water lines; upon further review by InPipe, a site at the intersection of 108th and Herman Road, just outside of the Tualatin City Services Center, rose as a prime opportunity for the installation of a turbine. Here, the turbine would be installed in place of an existing pressure reducing valve. Based on pressure levels and water flow volumes, it is estimated that a turbine at this site would generate approximately 278,000 kWh of electricity annually. Electricity generated can be 'net-metered' back into the power grid, or could be consumed on site at the City Services Center. This offers a financial incentive, as electricity costs are lowered on site or metered back into the power grid for a monetary incentive offered by PGE. The proposed scope of work includes purchase of the turbine, design and consultation services provided by InPipe, and installation/construction services provided by Tapani.

External Funding and Payback Period

As part of the proposed contractual agreement, InPipe Energy will provide assistance in obtaining external funding for the proposed project, to help cover the contract cost identified above. Grants and incentives are available from PGE, Oregon Department of Energy, and the Energy Trust of Oregon, among others. This funding can help significantly lower the project cost, allowing for a faster payback period on the project investment. Ideally, a payback period of 7-years or less can be reached by obtaining external funding. Financially, this would mean an initial investment of approximately \$214,000, which would pay itself off in 7-years. This is in comparison with a projected 30-year life span of the turbine, meaning that the next 23-years of the turbine's lifespan would bring additional monetary value.

Sole Source Procurement

Staff are requesting Council consideration to award the proposed contract to InPipe Energy and Tapani on a sole source basis. Staff feel that the sole source award is justified, because findings indicate that this is a patented energy recovery system that is only available from one source, InPipe Energy. InPipe's unique design provides the ability for the turbine to integrate seamlessly with the City's existing water distribution system, meaning there is no disruption or impact on the water system or its end users. A copy of the City's Notice of Sole Source Procurement, along with InPipe Energy's Justification Letter for Sole Source procurement have been attached as exhibits to this report.

Alignment with Goals

The proposed project is in alignment with Tualatin City Council's vision, particularly the endeavor to be, "an environmentally active, sustainable, responsible, and forward-thinking community". The City's Community Climate Action Plan identifies a goal of reaching net-zero carbon emissions by the year 2050. While not specifically called out as an action in the Climate Action Plan, this project is an example of additional, related projects that can be undertaken with benefits that align with the goals and strategies outlined within the plan.

From an operational perspective, electricity generation through an existing and abundant source (water flowing through City water lines) is opportunistic, and can lead to cost efficiencies and potential resiliency measures. As electricity costs grow, the value of the electricity generated will increase over time. This, paired with the large quantity of external funding opportunities to ideally lower the City's cost of the project and lead to a

During the Council Work Session, staff will provide a presentation with further details about the proposed project for which authorization is sought, with more information about how the turbine works, project costs, possible external funding opportunities, and a closer look at the target payback period.

OUTCOMES OF DECISION:

Adopting the resolution would allow the City to move forward with the execution of the proposed contract with InPipe Energy and Tapani Inc., allowing the project to move forward.

FINANCIAL IMPLICATIONS:

The total proposed cost of the project is \$690,295.00. Funds for this project are not currently in the

City's adopted budget. The first phase of the project (\$48,500), includes engineering/design work, regulatory/permitting work, and grant writing services. The second phase of the contract includes purchase of the equipment, site upgrades and installation costs (\$641,795). Contract approval commits that the City will pay for work in phase one. As written into the proposed contract, proceeding to phase 2 of the project can be contingent on receipt of external funding, at the discretion of the City. As mentioned above, external funding can bring the project cost down significantly. If the City does not receive external funding in the form of grants or incentives that brings the projected payback period to 7-years or less, meaning an investment of \$214,000, the City can elect to cancel the contract and not proceed.

ATTACHMENTS:

Resolution No. 5778-24

City of Tualatin Notice of Sole Source Procurement

InPipe Energy Sole Source Procurement Justification Memo

Powerpoint Slide Deck

