



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:

Informational Presentation about Proposed InPipe Micro-Hydro Turbine Project

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.

Further information can be found in the staff report titled, "*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.*", under the consent agenda for the June 10th meeting.

ATTACHMENTS:

Powerpoint Slide Deck

