



Staff Report

File #: 22-195

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Date: 5/23/2022

Item #: 3.2a.

TO: Mayor and City Council

THROUGH: Kristin Retherford, Interim City Manager

FROM: Peter Fernandez, PE, Public Works Director

SUBJECT:

Oregon Department of Energy Community Renewable Energy grant.

Ward(s): All Wards

Councilor(s): All Councilors

Neighborhood(s): All Neighborhoods

Result Area(s): Safe, Reliable, and Efficient Infrastructure.

SUMMARY:

The Oregon Department of Energy Community Renewable Energy grant will be used to partner with Portland General Electric (PGE) to construct a distribution system microgrid. This microgrid will provide a resilient power system to the new Public Works Operations Building and develop additional incremental storage capacity at the nearby Salem Smart Power Center. The new Operations building is a critical facility that will house the department's Operations Center, which is the hub for Public Works Department response to emergencies. The microgrid technologies and increased capacity at the Salem Smart Power Center will serve the new building during a power outage or emergency, thereby ensuring a continuous power supply during times of need. This grant program from the Oregon Department of Energy will help the City meet multiple Climate Action Plan strategies for increased community and energy resilience. A City Council Resolution is required as part of the Oregon Department of Energy Community Renewable Energy grant process (Attachment 1, Resolution 2022-28).

ISSUE:

Shall Council adopt Resolution 2022-28 authorizing the City Manager to apply for and, if successful, accept an Oregon Department of Energy Community Renewable Energy grant for the purpose of enhancing emergency power supply and resilience at the Public Works Operations Building?

RECOMMENDATION:

Adopt Resolution 2022-28 authorizing the City Manager to apply for and, if successful, accept an Oregon Department of Energy Community Renewable Energy grant for the purpose of enhancing emergency power supply and resilience at the Public Works Operations Building.

FACTS AND FINDINGS:

The Oregon Department of Energy's Community Renewable Energy Grant Program was established under House Bill (HB) 2021. This new grant program has four separate grant opportunities. Up to \$1,000,000 is available for constructing a community resilience project and 100 percent of eligible costs can be covered. No match is required.

The new Public Works Operations Building will be constructed with renewable energy features including solar panels capable of producing 124 kilowatt-hours of energy and four electrical vehicle (EV) charging stations. Designed to an Immediate Occupancy seismic standard, the building will house the department's Operations Center. The Operations Center is a critical facility during an emergency, directing and managing the restoration of essential services. Additionally, the Operations Center functions as the Incident Command Center for Public Works' field response during citywide events such as flooding, snow storms, ice storms, and other situations that may disrupt the City's normal delivery of services. A diesel-powered generator is presently planned as a backup power source for the new building.

The grant funds will be used to create a microgrid that will automatically isolate the main power grid in the vicinity of the Operations Building and increase incremental power storage at the nearby Salem Smart Power Center, which is located one block away on Oxford Street SE. During a power outage, the microgrid technologies and additional power storage installed by this grant-funded project will allow PGE to maintain power to the Public Works Operations Building and to homes and apartment units in the immediate vicinity. Additionally, when excess power is available from the solar panels installed on the Public Works Operations Building, the power will be used to recharge the nearby power storage, which will lengthen the viability of the microgrid. This proposed grant-funded project will increase resiliency to the system, reduce greenhouse gas emissions (through increased utilization of the onsite solar capacity, and reduced use of the diesel generator), and ensure continuity of power during an emergency.

The proposed project would be the first-ever "community microgrid" in Oregon. This community microgrid creates a network of electricity users that includes the new Public Works Operations Building and nearby residences. The microgrid can operate autonomously from the traditional power grid thereby providing increased reliability and resilience.

Should the grant be awarded, the City will contract with PGE for the proposed improvements. PGE has been involved in the planning and scoping of this project. Any project costs not covered by the grant will be the responsibility of PGE. The awarding of the grant will not adversely impact the construction schedule of the Public Works Operations Building.

BACKGROUND:

The Oregon Legislature passed HB 2021 that established clean energy targets and created a \$50 million fund at Oregon Department of Energy to provide grants for planning and constructing community renewable energy and energy resilience projects. The proposed grant-funded project for the City addresses multiple Climate Action Plan energy strategies for increased resilience.

The Salem Climate Action Plan (CAP) was accepted by City Council on February 14, 2022. Energy strategy EN26 of the CAP recommends “work with PGE to implement a plan to increase renewable-powered microgrids and energy storage for critical sectors/buildings (e.g., hospitals) to improve resilience. Potentially leverage funding available from HB 2021 to install community-based renewable energy projects.” The new Public Works Operations Building will house the department’s Emergency Operations Center and is considered a critical facility.

Energy strategy EN29 of the CAP recommends the City “work with PGE, Salem Electric, and Energy Trust of Oregon to create a network of renewable-base microgrids throughout Salem.” This grant will address this recommendation and will also result in the first community microgrid in Oregon.

The City is currently constructing a 50,000-square-foot Public Works Operations Building west of 23rd Street SE at the Salem City Shops Complex. The new building will serve as the central headquarters for Public Works Operations, Engineering, and Administrative personnel. The building will serve as a hub for departmental operations during emergency response. It will provide an open and welcoming public lobby area for conducting City business as well as a large training room available for public meetings. If awarded, this grant will pair the City’s current investment of renewable energy facilities on the project with an energy resilience project.

Robert Chandler, PhD, PE
Assistant Public Works Director

Attachments:

1. Resolution 2022-28