4

Project Highlight

Roseburg Urban Sanitary Authority, OR

AMERESCO 🖓

Driving Renewable Energy Innovation and Resilience in Wastewater Management

Technology Type:

Battery Energy Storage Systems (BESS) | Solar PV |
Energy Savings Performance Contract (ESPC) |
Technical Energy Audit (TEA) | Grant Assistance

Facility Size

3 facilities

Grant Funding Secured

~\$2.9 million

Total Solar PV Size

1,250 kW

Annual Electricity Generation

~1.8 MWh





Summary

Ameresco and the Roseburg Urban Sanitary Authority (RUSA) collaborated to enhance energy resilience and sustainability at RUSA's facilities, including its main office, wastewater treatment plant, and Natural Treatment System. The Energy Savings Performance Contract (ESPC) project involved the integration of solar PV systems and Battery Energy Storage Systems, based on a comprehensive Technical Energy Audit. Ameresco secured nearly \$2.9 million in grants, supporting local economic development and job creation, particularly for disadvantaged businesses.



Solution

The collaboration between RUSA and Ameresco aligns with a broader industry shift as public utilities increasingly explore renewable energy solutions to reduce costs, boost energy resilience, and meet community needs. Ameresco oversaw the design, construction, and integration of solar PV systems, building on a comprehensive Technical Energy Audit (TEA) conducted to identify energy-saving opportunities. RUSA received a \$1,000,000 grant for an 800kW solar PV system to generate 1.2 MWh annually, supporting sustainability goals. Another grant of \$870,870 funded a 50kW solar PV array and 186kW battery storage at RUSA's administrative offices, a critical hub for sanitary sewer operations. Additionally, a \$1,000,000 grant was awarded for a 400kW floating solar PV system at the Natural Treatment System (NTS), enhancing energy generation, land efficiency, and ecological health. Specific solutions included:

- 3 solar PV projects totaling over 1,250 kW
- Leveraging unused land to maximize energy production and minimize overall carbon footprint
- Floating solar PV installation to minimize the land needed for solar arrays
- Guaranteed energy savings and optimal system performance through an ESPC

Our work with Ameresco is more than an investment in renewable energy; it is an investment in the future of our community. By reducing our energy costs and strengthening our infrastructure's resilience, we are positioning ourselves as leaders in sustainable wastewater management while ensuring that we continue to serve the public effectively during emergencies.

General Manager, RUSA



Benefits

The solar PV installations play a crucial role in reducing energy consumption across RUSA's facilities. This strategic move reflects the growing recognition within the wastewater treatment industry of renewable energy's environmental benefits and financial viability. Other benefits include:

- Estimated energy usage offsets of 44% at WWTP, 100% at the adminstrative offices, and 64% at the NTS
- Annual energy generation over 588,000 kWh
- BESS installation to guarantee uninterrupted operations at the main office



Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy and water solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.