

Orrville

UTILITIES



ANNUAL REPORT
2023

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Mission Statement

The Mission of the Department of Public Utilities

Provide quality services in a timely and efficient manner to ensure Orrville continues to be an exceptional Community.

To fulfill this mission, the City of Orrville is committed to:

- Attain the highest level of customer service.
- Achieve quality growth through economic development.
- Plan for the future needs of the Community.
- Ensure a safe work environment.
- Promote teamwork.
- Provide training, education, and recognition of employees.
- Maintain a responsible workforce.

Public Power Benefits Our Community

Citizens of this community receive electricity from a public power electric utility. What does that mean for you?

- Not-for-profit rates - Our utility works to provide essential electric service efficiently and at a reasonable cost to you.
- Local control - Through your elected officials and in public meetings, you have a voice in your utility's operations.
- Community ownership - Our electric system belongs to every citizen of our community, not to private owners.



Mayor's



Message

Dear Citizens,

The 2023 year did not see a lot of huge projects for us. However, that does not mean nothing was completed. Street work and paving projects were on a small scale this summer, meaning only that the projects were fewer and more on neighborhood streets. We did not work on our main artery streets such as Main, Market, Crown Hill and High. The smaller streets that we did do, had a lot done to them. More than a general "mill and fill" as is sometimes all that is needed. This year's streets involved large amounts of base work, curbs and gutters, catch basins and more. For those reasons, the citizens who live on those streets had more disruptions. We thank you for your patience as we make those improvements.

As with so many large or small projects, it involves our Service Department working with the Utilities. Be it the Electric/Distribution, Water or Wastewater Departments, they all work together very well. In much the same way, our Police Department works hand-in-hand with the Orrville Fire Department. I tell you, that kind of cooperation does not happen everywhere. I know I have said it before, but when you see that kind of cooperation on a daily basis, it is worth mentioning more than once.

One of the bigger projects for the year was the completion of Orrville's Skate Park. Winter and spring had our guys clearing some trees, literally moving the dog park, and having the location ready for construction. The American Ramp Company installed the equipment and the opening day was a big success in early June.

2024 will see some improvements come to the Depot area parking lot, made possible by some grant work. This will probably be a project that spills over into 2025. The project will improve the area for our existing downtown events and open the door for some new ones. As always, the City and the Utilities will work well together to help make a better downtown area for all citizens.

In closing, I would say it has been my pleasure working with the City and Utility employees the last 16 years as Mayor of Orrville. We work together to make Orrville a better place for all of our citizens and visitors.

Sincerely,

Mayor Handwerk



Public Utilities Board



Michele Abel,
President



Steve Combs,
Vice President



Joe Messenger



Russell Miller



Rich Corfman

The Public Utilities Board was established to act as the governing body in respect to developing rules and regulations for the operation of Orrville Utilities. The five member board is appointed by the Mayor and serves a five year term with an optional second and third term. Each member works very closely with the utility management team on providing the people and businesses of Orrville with exceptional service at a very low cost. The Board also maintains a strong communication link with City Council in recommending major utility expenditures and keeping council abreast of critical utility issues. Some small communities throughout the state operate under this form of government. It allows the City and Utilities to be flexible and responsive when dealing with issues confronting the Electric, Water, and Wastewater Utilities.

Officers:

President: Michele Abel
Vice President: Steve Combs

Committees:

Finance/Policy: Michele Able (Chairperson) and Steve Combs
Electric: Joe Messenger (Chairperson) and Rich Corfman
Personnel: Steve Combs (Chairperson) and Russell Miller
Water: Russell Miller (Chairperson) and Michele Abel
Wastewater: Rich Corfman (Chairperson) and Joe Messenger

Director's



Message

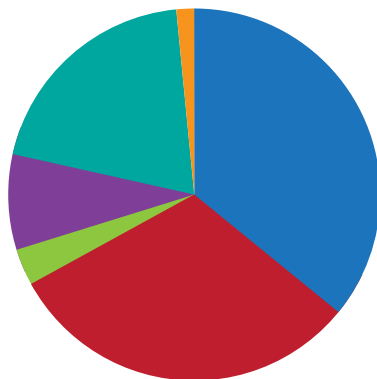
Dear Customers of Orrville Utilities:

In 2023, we rebounded from the high energy & fuel costs associated with the Ukraine war. Supply chain-related issues are expected to impact most industries next year. Although the power plant operated at its lowest level on record, we were able to maximize it during peak grid demand periods allowing us to off-set 88% or \$8.1M in fees which would have been charged to our customers. Our water and wastewater departments focused again on infrastructure improvements to ensure our utilities will be able to sustain service for the future.

The utility industry continues to be more complex and challenging. Climate change, shifts to more renewable energy sources, water security, labor challenges and increasing regulations limit our flexibility and options but our staff is committed to pursue these issues to insure and improve the levels of service expected.

We continue to evaluate diverse power supply options to position us for the future. The chart below shows the resources we used to help us maintain rate stability again this year.

2023
Sources of
ENERGY



36%	Fremont Gas Project
31%	Market Purchases
3%	Orrville Generation
11%	Prairie State Project
18%	Hydro Projects
1%	Solar Projects
0%	Diesels

Total Renewables 19%

Orrville Utilities will continue to provide our community with reliable, exceptional services that are safe, environmentally responsible and competitively priced. We're glad to be part of the continuing success that makes living and doing business in Orrville so beneficial.

It is our pleasure to serve you as we work to improve our community and your businesses.

Sincerely,

Jeff Brediger
Jeff Brediger



Jeff Vogelhuber | Electric Distribution Superintendent

Electric Department

Electric Department – Sales were down slightly last year due to moderate temperatures coupled with a slight turndown in business activity, sales were down slightly from last year. The power plant operated at its lowest capacity in decades. Our AMP generation projects performed well which lowered our needs to purchase energy from the market.

Our cross-trained power plant staff continues to meet the challenges of intermittent operation safely and effectively. The distribution department received national recognition for system reliability.

Accomplishments:

- ▷ Successfully peak shaved during high grid demand periods which significantly off set fees to our customers.
- ▷ Sold our transmission system assets to divest of complicated and long-term obligations.
- ▷ Replaced the small stack and boiler house roofs
- ▷ Renewed our certification to perform high pressure piping welds in-house.
- ▷ The distribution & power plant had zero lost time accidents.

Upcoming and continuing work:

- ▷ Continuation of second transmission interconnection design. We expect receive three transformers for substation upgrades.
- ▷ Purchase the power control center for a new substation at the power plant.
- ▷ Renew the operating permit for the power plant.
- ▷ Complete the rate study.



Bruce Lab
Power Plant Maintenance
Superintendent



Craig Zerga
Power Plant Operations
Superintendent

Electric Department

Operating Income and Expense Report

3 - Year Summary

Description	2023	2022	2021
Electric Utility Operating Revenue	\$37,304,318	\$36,864,403	\$34,387,393
Electric Utility Operating Expenses	\$33,593,955	\$35,638,271	\$36,529,438
Debt Service	\$0	\$0	\$0
Transfers	\$3,668,748	\$1,306,544	\$4,672,850

Operating Statistics Report

3 - Year Summary

Description	2023	2022	2021
System Sales (retail), kWh	290,389,664	300,257,483	296,744,018
Gross Generation, kWh	12,323,201	33,847,767	30,340,643
Wholesale Sales, kWh	38,301,235	71,718,064	67,749,654
Wholesale Revenues	\$1,244,849	\$7,803,292	\$3,256,718
Fund Cash Balances			
Revenue	\$13,546,965	\$7,065,430	\$8,048,421
Replacement and Improvement	\$3,084,843	\$3,072,262	\$3,032,490
Utility Reserve	\$39,646,188	\$31,701,748	\$40,491,346
Total Fund Balance	\$56,277,996	\$41,839,440	\$51,572,257
Coal Burned, tons	3,630	15,076	9,805
Natural Gas Burned, MCF	99,240	153,217	211,339
Peak System Demand, kW	59,560	61,640	59,360



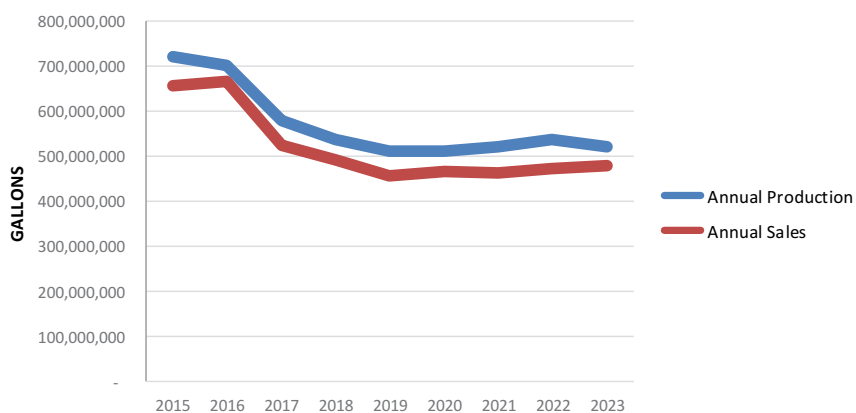
Kevin Givins | Water Department Superintendent

Water Department

The Orrville Water Department

treated 522 million gallons (MG) of water in 2023 (a decrease of 15.2 MG from 2022) for an average of 1.43 MG per day. The annual production decline can be attributed to lower demand from the Orrville Power Plant and consumer conservation through more efficient products and fixtures. The overall water demand trend is slightly declining to flat over the past several years. The peak day occurred on September 6th when 2.48 MG were pumped into the distribution system.

2015-2023 Water Totals



The department continues to produce high quality water while meeting or exceeding all EPA mandates. The Orrville water system has approximately 3,200 residential services and 350 commercial and industrial customers. The major areas of focus for the upcoming year will be to maintain production requirements, submit the service line inventory to Ohio EPA (mandated by 10/14/23), replace failing meters and ERTs (Encoder Receiver Transmitter) and perform upgrades to our 100+ year old water system as time and materials permit. While many of the post-Covid supply chain issues have been alleviated, meters and ERTs are backordered for 6 to 12 months.

Projects completed in 2023:

Distribution System Upgrades:

- ▷ Replaced a 4" cast iron main on Lenore Street/Garfield Street from McGill to Paradise. This section of pipe saw 7 breaks over a 10 year period. The new main was upsized to 6 inches and 3 new main valves were installed along with a new fire hydrant and copper services to all the customers in the project area.
- ▷ Abandoned the 6 inch cast iron water main on Wayne Street from E Paradise to Homestead Pointe and moved all the affected services and hydrants to an existing 16" ductile iron main in the same area. This project was completed to improve water quality and turnover in this section of the distribution system.
- ▷ The mandated Triennial Lead and Copper Survey was concluded in July and all samples were below the action level for both parameters.
- ▷ The water distribution flow model was updated for the first time since 2006. Burgess & Niple Engineering used information from the Citywide GIS system as well as flow and pressure data gathered by the water plant staff to calibrate the model and make recommendations about current needs and future projects in the system.



Water Department

Other Projects in 2023;

Installed variable speed drive recycled from the raw water pump station on High Service Pump #5 and integrated control into the plant SCADA system; modified the fluoride pumping system to prevent overfeeding; installed new security cameras to monitor areas around the facility; repaired 5 water main leaks; completed installation of a new in-line chlorine analyzer to monitor disinfection residuals 24/7 and record trends; re-furbished #57 & #79 production wells; completed 16 residential service taps; painted 371 fire hydrants; and replaced 8 – 6 inch valves in the distribution system. Also, at the request from the Orrville Fire Department, lubricated or replaced damaged or inoperable caps on all hydrants in the system.

Upcoming projects in 2024:

- Ongoing preventative maintenance programs including:
- ▷ Distribution system flushing
 - ▷ Roadway valve maintenance (1/3 of system)
 - ▷ Fire hydrant maintenance
 - ▷ Water meter change out
 - ▷ Clean and recondition production wells #63 & S-1
 - ▷ Replace the roof on the Water Plant Maintenance Garage
 - ▷ Install new check valves on High Service Pumps #2, #3 & #4
 - ▷ Evaluate pressure and flow across all 3 pressure zones during peak demand and determine the fate of the Central Elevated Tank on Water Street.
 - ▷ Coordinate with the Street Department to make valve repairs/replacements or main replacement ahead of road resurfacing projects
 - ▷ Tuck pointing and caulking the treatment plant and maintenance shop to prevent water intrusion of the buildings
 - ▷ Replace the motor “soft starts” on High Service Pumps #2, #3 & #4

Operating Income and Expense Report 3 - Year Summary

Description	2023	2022	2021
Water Utility Operating Revenue	\$4,196,032	\$4,050,765	\$4,897,236
Water Utility Operating Expenses	\$2,755,209	\$3,685,686	\$3,643,204
Debt Service	\$21,667	\$104,268	\$335,000
Transfers	\$150,515	\$1,341,203	\$1,172,207



Wastewater Department

Steve Carathurs | Wastewater Department Superintendent

In 2023 the City of Orrville's Wastewater Treatment Plant treated 682 million gallons of residential, industrial and commercial wastewater. Two hundred fifty six tons of bio-solids were removed from the influent flow and land applied to local farm fields as soil amendment. The facility operated at 47% of its daily rated capacity. Ten employees maintain and operate the facility, along with two lift stations in the system and forty two miles of sanitary sewer line.

2023 Accomplishments:

- ▷ Plant met all compliance parameters
- ▷ Hired full time Mechanic II
- ▷ Completed Blower system upgrade
- ▷ Replaced Raw Influent Pumps
- ▷ Upgraded SCADA system controlling blowers and pumps
- ▷ Started work on improving collection system I&I
- ▷ Main Sanitary Line repair

2024 Goals

- ▷ Continue work on Backup Screening Project
- ▷ Replace MCC panel in raw pump building
- ▷ Televis collection system for baseline assessment
- ▷ Update Fats, Oils & Grease Program (F.O.G.)



Crew lining broken sanitary main



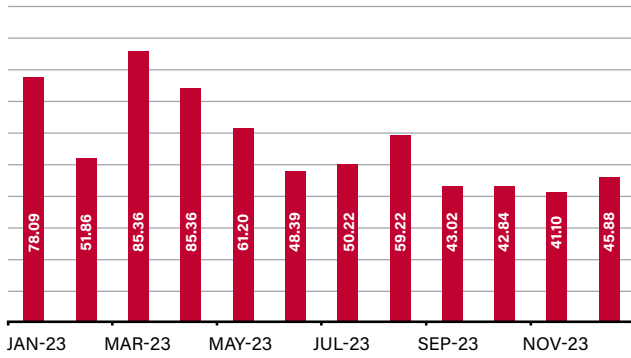
2 New VFD controlled process blowers



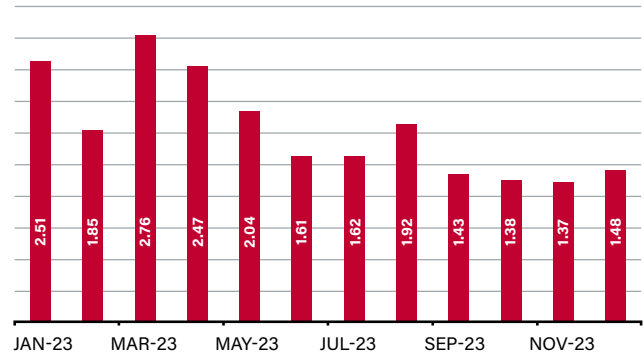
New VFD controlled Influent pumps

Wastewater Department

Total Million Gallons Per Month



Million Gallons Per Day Avg.



Operating Income and Expense Report

3 - Year Summary

Description	2023	2022	2021
Wastewater Utility Operating Revenue	\$2,933,656	\$2,668,167	\$2,526,708
Wastewater Utility Operating Expenses	\$2,694,085	\$3,054,972	\$2,504,031
Debt Service	\$0	\$0	\$0
Transfers	\$236,557	\$543,475	\$461,257



Jeffrey Fenningsdorf | Manager

Technical Services

The Technical Services department provides a variety of critical telecommunications, information technology, and information system services in support of the City and Utility departments. Technical Services includes the following:

- ▶ **Information Technologies (IT)** – Installs, upgrades, and maintains the computer network, private cloud, applications, data, network storage, backup systems, workstations, printers, phone system, security cameras, and door security system for the entire organization.
- ▶ **Telecommunications** – Installs, upgrades, and maintains fiber optic, copper network cabling, industrial and residential metering. Performs installation of security cameras and door security systems for IT.

The major work for 2023:

IT

- ▶ Staff successfully replaced the network firewall with a highly available Fortinet system.
- ▶ Purchase new Fortinet switches to replace the core network in 2024.
- ▶ Begin augmenting multi-factor authentication with hardware keys.
- ▶ Staff has implemented a cloud based SEIM system to log security events.
- ▶ Begin to switch over to Verkada security cameras.
- ▶ Kept the tape backup system instead of using the cloud. Replaced library for more storage capacity.
- ▶ The staff has performed yearly IT audits and reported all information requested by the state.

Telecommunications

- ▶ The staff supported and maintained the city-wide fiber-optic and copper network.
- ▶ Staff continues to maintain the electric meter system.
- ▶ Install Verkada cameras for IT.
- ▶ Department staff attends yearly meter training.
- ▶ Upgraded select tools used to maintain the fiber network.



Technical Services

2024 Projects:

IT

- ▷ Finish upgrading the Harris ERP and billing system.
- ▷ Purchase Microsoft 365 and switch over from Google Workspace.
- ▷ Implement a .gov domain name.
- ▷ Evaluate Microsoft's multifactor authentication offerings and possibly over from Duo by 2024 or 2025.
- ▷ Evaluate EDR platforms and possibly replace Cylance in 2024.
- ▷ Research timelines for replacing the door security system with Verkada, as the current system is quickly approaching its end of life.
- ▷ Continue to upgrade all workstations to Windows 11 for the 2025 deadline.
- ▷ End-of-life security cameras will continue to be retired and replaced with Verkada units.

Telecommunications

- ▷ Evaluate, test, and replace fiber connections as needed.
- ▷ As required, test, install, or remove meters and connections to residential and industrial customers.
- ▷ Audit documentation of the fiber system and field equipment.
- ▷ Assist instrumentation with connection needs.
- ▷ Assist with testing the new metering system.



Director of Utilities

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207 N. Main Street

Electric Distribution Superintendent

Jeff Vogelhuber

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1100 Perry Street

Power Plant Maintenance

Superintendent

Bruce Lab

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Steve Carathurs

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