

GHBLP Strategic Progress Report

2017-2021 Strategic Plan



Every five years the Grand Haven Board of Light and Power (GHBLP) convenes to create a strategic plan. This plan determines the direction of the GHBLP for the short term, allowing us to align our vision with community feedback at regular intervals.

Our FY 2017 - 2021 Strategic Plan did just that, prioritizing the collective values of the Grand Haven community and successfully meeting our goals as a utility. Through gathered feedback, community events, individual conversations and customer surveys, our customers have said time and time again that they value:

Reliability

Affordability

Sustainability

We are pleased to present the successes of our five-year strategic plan with you, including how we have worked hard to follow our community's vision for the future of Grand Haven's power supply.

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"It is important to note the accomplishments BLP has made since the completion of the Organization Checkup in 2016, as they are significant. Enough cannot be said about the leadership of BLP. Not only do they illustrate outstanding perseverance and commitment, but their teamwork is second to none. The accomplishments the team has made over the last five years far exceed what HCI typically sees in an organization of this size, let alone larger organizations with more resources."

- From an independent 2021 Business Readiness Risk Assessment of GHBLP, conducted by Hometown Connections, Inc. (HCI)



More Than Electricity

As a community-owned, not-for-profit electric utility, we know that our success depends on more than just providing power to our customers. Though this is part of what makes us successful, we know that aligning our strategies and priorities with our community's values of reliability, affordability and sustainability allows us to provide a more expansive view of success.

We can succeed and simultaneously encourage our community to thrive when we prioritize our environmental responsibility through sustainable power sources and avenues, when our customers enjoy reliable power, and when we are able to keep costs affordable for our customers.

Why Does It Matter?

GHBLP is enmeshed in Grand Haven. Our transmission and distribution infrastructure directly impacts the landscape and local environment. Our customers live and work in this community, rarely needing to use backup generators when the power goes out. Our continued success provides affordable power for every residential and business customer.

Ultimately, access to reliable, affordable and sustainable electricity determines the basic health of our community members and our surrounding natural environment. Because we are not an investor-owned, private electric utility, the decisions about how we operate our utility are made by people who live and work in this community, not by large corporations. **Public power utilities are rooted in and committed to the communities in which we exist, and we continue to invest revenue directly back into the communities we serve.**



For our customers, electrical reliability influences every aspect of their day, though most may not notice or think about it. GHBLP's mission is to meet our community's expectations for reliable electric service that returns value to our customers and ensures the economic and environmental sustainability of the utility.

RP3 Diamond Recognition

One method public power utilities utilize to measure high standards of reliability is through the American Public Power Association's Reliable Public Power Provider program, also known as RP3. GHBLP recently earned the highest distinction from APPA, the Diamond-level RP3 designation.

In alignment with the strategic plan set forward by the Board five years ago, our concerted investment in distribution technology and safety best practices helped earn this designation. The RP3 designation recognizes public power utilities that demonstrate proficiency in four key disciplines: reliability, safety, workforce development, and system improvement. Criteria include sound business practices and a utility-wide commitment to safe and reliable delivery of electricity. "Utilities receiving the RP3 designation have proven that they are committed to running a top-notch public power utility by implementing industry best practices."

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- Aaron Haderle,

Chair of APPA's RP3 Review Panel and Manager of Transmission and Distribution Operations at Kissimmee Utility Authority, Florida

SAIDI/SAIFI

Other measures of reliability that we have worked hard to improve include SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index) figures. These are common indicators of reliability for utility providers. SAIDI measures the average time a power interruption lasts for customers, while SAIFI measures the frequency of these interruptions. As you can see from the graphs below, our SAIDI and SAIFI figures have both decreased in the last four years, representing an improvement in reliability for our GHBLP customer-owners.











Distribution

The GHBLP's recent upgrades to our transmission lines improved connections to the regional network and the ability to diversify our power supply portfolio. Without regular system upgrades, our community would not have the electrical capacity to accomplish basic tasks that we take for granted, like running modern appliances and HVAC systems. The average American home in 2021 differs vastly from the average American home in 1960. Continually updating GHBLP's electrical system infrastructure to meet increased electrical demand allows Grand Haven to enjoy reliable and affordable power.





Vegetation Management

To maintain this critical distribution system, GHBLP performs regular tree trimming, sometimes called "vegetation management." As far as improvements are concerned, the largest return on investment the BLP receives in preventing possible outages and improving reliability comes from tree trimming. This seemingly simple task prevents the greatest source of power outages for our customers—downed trees and limbs. By continually performing preventive maintenance on the trees near power lines, our staff can prevent possible outages.

In addition to this maintenance, we also contracted with Osmose Utilities Services to perform our first ever system-wide wood pole integrity inspection in 2020. These utility poles are rated to last approximately 30 years but are engineered to last much longer if maintained. Cataloguing these poles allows our teams to plan ahead for future replacements and repairs, saving time and increasing reliability for our customers.





One of the highest priorities is to provide affordable electricity to our community. One of GHBLP's established Strategic Objectives is to operate in a manner that manages financial resources to provide rate stability, customer value, and address appropriate risks.

Rate Reductions

In 2015, the BLP's rates were among the highest in Michigan, in large part due to the cost of maintaining an aging coal-fired power plant that was no longer competitive in the wholesale market. Through our five-year strategic plan, we reduced base energy rates by 3% in 2016 and again in 2017, and held them steady thereafter. GHBLP rates are now very competitive with regional investor-owned utilities. The BLP has not increased rates since, and is committed to holding these lower rates steady through the 2023 fiscal year with another overall reduction of 0.8% effective July 1, 2021.

In FY 2021, Utility Financial Solutions (UFS), a national independent utility rates consultant, conducted a cost-of-service study that evaluated our economic transition away from dependence on a local single-source coal-fired power plant toward a model that draws from a diversified power supply portfolio. Upon reviewing the BLP's purchases from renewable energy and other regional power sources, UFS concluded that the BLP could reduce average customer rates in FY 2022 and then hold them steady over the next 5 years. In implementation, BLP rates decreased for some customers and increased slightly for others depending on individual usage and cost-of-service determinations for an overall reduction of 0.8%.



We are committed to conducting cost-of-service studies like the one performed by UFS in FY 2021 every 5 years, moving and adjusting our power rates with the true cost of service for our customers with each study.

Technology Updates

Advanced Meter Infrastructure

In 2020, the BLP installed advanced meters at all customer locations, modernizing our existing electrical distribution system to meet increased demands for energy, reduce energy costs and facilitate increased use of renewable energy.

Advanced meter infrastructure (AMI) takes advantage of two-way communication between GHBLP and the electric meter at your home or business, enhancing reliability and providing additional capabilities. Remote communication and data transfer enables remote meter-reading, outage notification, optional pricing programs and alerts to help with troubleshooting and preventative maintenance. All of these components increase our affordability, reducing staff time needed for meter readings and responding to power outages.



Information coming from the meters allows us to further improve our efficiency during "peak" energy usage periods, which helps keep the cost of electricity lower. Instead of using outdated analog models, utility decisions with AMI can be made utilizing real-time information. Advanced meters also increase the accuracy of electric bills and reduce staff time necessary to perform billing functions.

Other Tech Upgrades

In addition to the AMI upgrades, we replaced our outdated online payment system with SmartHub, which connects to AMI to provide customers with real time payment methods and the ability to view current and historical usage data.

To further reduce staff time, we contracted with our customer and financial systems provider to outsource bill printing and mailing. With over 14,800 customers utilizing GHBLP electric service, this has saved countless staff hours for in-house printing, stuffing, sorting and mailing.

Energy Savings Plan

Beyond the technology improvements we have made, GHBLP also continues to offer the Energy Smart Program. This program provides rebates for qualifying energy-saving updates to residential, commercial or industrial projects that reduce power consumption and improve energy efficiency.

> "This is a huge WIN for our team and a huge WIN for our customers. The energy savings we will see, along with the rebate amount, creates flexibility within our budget and provides us with the extra funds needed to address areas of our operations that are also in need of improvement. It was a smooth process and we cannot stress enough how thankful we are for the GHBLP and the Energy Smart Program."

Ryan Vredeveld, Superintendent, Grand Haven-Spring Lake Sewer Authority



"School Zone Publishing Co. is extremely grateful to be partnered with the Grand Haven Board of Light and Power in working together with the Energy Smart Program in completing the first phase of a three-phase program to replace energy hogging light fixtures with energy efficient LED fixtures. The \$19,578 grant in 2019 from the Energy Smart Program allowed SZ Pub to replace 200 Metal Halide fixtures and reduce energy consumption by 271,481.60 kilowatt hours, for a projected annual savings of over \$38,000 and a Return On Investment in 14 energy saving months!"

Grant Soule, Plant Manager, School Zone Publishing

Retraining Our Power Plant Team

Shuttering a coal-fired power plant left our employees with many questions and concerns, many of them related to job security. Throughout the entire process of scaling back and closing the JB Sims power plant and Diesel Plant, the BLP has stayed true to our promise not to lay off any of our workers. Instead, we have worked hard to provide professional development and skills training for our employees so that they may continue to achieve success as we transition operations to a more diversified power supply portfolio. In the last five years we have reduced our workforce through attrition from 72 employees to 48 without a single layoff.

Many of our employees are long-standing, working with GHBLP for 30+ years before retiring. We are grateful for their hard work and dedication throughout this transition process.



Professional Development

To retain our employees as technology has changed and to prepare them for different roles and different technologies, we have implemented professional development training programs. Power Plant Operators in particular have received extensive training, with all remaining system operators successfully completing three System Operator Certification modules through Northwest Lineman College to prepare them as they move into roles using different technologies, while others have moved to other departments within the utility such as technical services or the line department.



Similarly, our technical services team members have been working through the Northwest Lineman College Meter Technician Certification Program. The BLP continues to provide our apprentice lineworkers with required training through the Joint Michigan Apprentice Program (JMAP) Lineman Apprenticeships Program and in-house DOL-certified training for our apprentice tree trimmers. To responsibly pay for some of these certifications, we were able to utilize matching Incumbent Worker Training Grants awarded for all System Operator certification training modules through Michigan Works!.

Benefits Reconfiguration

In 2017, we restructured our employee retirement benefits to reduce current and future unfunded liabilities by first separating our general employee group from the combined City/GHBLP plan and then closing both GHBLP general and Union employee defined benefit (DB) plans to new hires. We also established a matching 401(a) defined contribution (DC) plan for new hires and offered current employees the option to stay in the DB plan or transition to the new DC plan. Our Board is committed to paying off the unfunded liability for the DB plan over a 10-year period, adjusting to changes in actuarial assumptions as they arise. Restructuring our benefits in this way maintains a competitive compensation program that has allowed the BLP to retain and attract the highly skilled workforce necessary to provide quality electric service to the community.



As an electricity provider for the community, we know our infrastructure directly impacts the environment in which we live; therefore, we established the strategic objective to maintain a sustainable, economical, and diversified power supply portfolio, consistent with proven energy risk management practices.

Decommissioning and Demolition of JB Sims

After serving the community for over 37 years, J.B. Sims coal power plant was no longer an economically or environmentally responsible way of producing power for the Grand Haven area. The cost to operate, repair and maintain the plant rose year after year while alternative power supply became less expensive and more sustainable. Customer surveys also made it clear that our community strongly values sourcing power from more sustainable resources so long as we can also maintain reliable service at stable, affordable rates.

With this in mind, we halted the purchase of coal, and depleted the remaining inventory as costeffectively as possible. The plant officially closed in February of 2020 with demolition beginning shortly after.



Did You Know?

Demolition of JB Sims reduced GHBLP's carbon emissions from the plant from 290,107 tons of CO₂ in 2017 to zero in 2021.



Remediating Long-Term Environmental Concerns

The Sims site has an environmentally difficult history, far predating the construction of the power plant. Harbor Island was previously used for waste disposal dating back almost 100 years. The Island was built using city trash, dredge materials and coal ash, and it was also home to other industrial uses.

Clean up of the Unit 3 impoundments at the site has already been completed at the recommendation of Golder Associates, a nationally recognized environmental engineering firm, and the BLP will soon be complete final closure activities in this area. These impoundments, engineered and built in the early 1980s as two separate above ground clay-lined ponds, were used to collect and temporarily store ash until it could be removed and disposed of at a licensed landfill.

We are also working on our remediation plan for the older impoundments of Sims Units 1 & 2. To prevent disruption and potential contamination of the Grand River from coal ash materials deposited on the Sims site decades ago (and potentially from the city dump material this ash lays on in certain areas), we plan to continue with Golder's recommendations to stabilize, cap and monitor these materials.



Diversifying Our Power Supply Portfolio

In keeping with our community values of environmental and fiscal sustainability, as Sims was decommissioned we looked for more environmentally responsible means of sourcing our power. We worked with the experts at the Michigan Public Power Agency (MPPA) to establish a diversified power supply portfolio to ensure reliability, decrease cost and prepare for a more sustainable future.

Diversifying our power supply portfolio allows us to invest in sustainable energy sources without compromising reliability for our community. In fact, by 2024, 28% of Grand Haven's energy will come from power supply commitments with MPPA from renewable sources. This is well ahead of Michigan's Renewable Portfolio Standard for such supply of sustainable energy sources.



Much like a mutual fund or retirement plan stabilizes gains and mitigates risk through diverse investments, we can ensure greater affordability and less volatility in our power supply prices by contracting for capacity and energy from a range of networked resources. This network access allows us to purchase energy, capacity, and renewable energy from multiple regional sources, including renewable energy from wind turbines in the thumb region of Michigan, a large solar installation in Shiawassee County, solar installations in Hart and Calhoun County, and from landfill gas projects throughout Michigan.

As both solar and wind become more economical components in our overall power supply portfolio, we will continue to aggressively pursue higher levels of renewable integration.



Upgrading Systems for Modern Transmission & Grid Connection

In order to purchase from more sustainable sources and connect our system to the wider regional network, GHBLP invested \$6 million in a multi-phase replacement of outdated transmission lines and connections to the regional network (sometimes referred to as "the grid"). With these aging high-voltage lines nearing the end of their useful life and having insufficient capacity to meet maximum peak system load, we needed to install a more robust local transmission system to reliably source power to Grand Haven from remote, diversified and sustainable sources. These upgrades also provided us with improved reliability locally and increased access to lower wholesale power costs and renewable energy purchases.



These investments also allowed us access to the Network Integration Transmission Service (NITS). NITS is a higher-level transmission service from the regional network in both reliability and functionality, as compared to the more interruptible Point-to-Point transmission service used when Grand Haven locally produced most of the power it used.

The BLP received NITS access beginning in June 2020, allowing for the retirement of JB Sims. NITS continues to provide us with access to networked and integrated resources of the regional transmission system and the sustainably sourced power we enjoy.

Thank You

As we plan for the future of Grand Haven's power supply with our collective values at the forefront, we look forward to continued improvement and excellence while we create a more reliable, affordable and sustainable future for our community.



RP3 Diamond Certification



Greater Ottawa County United Way

United Way Gold



Community Brick Award