

GRAND HAVEN BOARD OF LIGHT AND POWER
MINUTES
JUNE 28, 2018

A regularly scheduled meeting of the Grand Haven Board of Light and Power was held on Thursday, June 28, 2018, at 3:15 p.m. at the Board's office located at 1700 Eaton Drive in Grand Haven, Michigan.

The meeting was called to order at 3:15 p.m. by Chairperson Smart.

Present were Directors Kieft, Naser, VanderMolen, Witherell and Smart.

Meeting Closed for a Periodic Personnel Evaluation Review of a Public Officer —

Director Witherell, supported by Director Naser, moved to adjourn the open session and enter into closed session pursuant to Section 8(a) of the Open Meetings Act for the purpose of performing a periodic personnel evaluation of a public officer. In a roll call vote of the Board, those in favor: Directors Kieft, Naser, VanderMolen, Witherell and Smart; those absent: none; those opposed: none. The motion was unanimously approved.

Return to Open Session — Director Witherell, supported by Director Kieft, moved to adjourn the closed session and reenter open session. In a roll call vote of the Board, those in favor: Directors Kieft, Naser, VanderMolen, Witherell and Smart; those absent: none; those opposed: none. The motion was unanimously approved.

Also present were David Walters, General Manager; Renee Molyneux, Administrative Services Manager and Secretary to the Board; Lynn Diffell, Accounting and Finance Manager; Rob Shelley, Distribution and Engineering Manager, Erik Booth, Power Supply Manager; Bradley Saad, Black & Veatch; and Tom Weeks, Michigan Public Power Agency.

Director Witherell, supported by Director Naser, moved to approve the meeting agenda. The motion was unanimously approved.

18-6A Director Witherell, supported by Director Naser, moved to approve the consent agenda. The consent agenda includes:

- Approve the Minutes of the May 17, 2018 Board meeting
- Accept and file the May 2018 Financial Statements and Power Supply and Sales Dashboard
- Approve paying bills in the amount of \$5,152,213.28 from the Operation and Maintenance Fund
- Approve paying bills in the amount of \$334,460.60 from the Renewal and Replacement Fund
- Confirm Purchase Requisition #15013 to Northern Boiler Mechanical Contractors in the amount of \$68,710 for initial April spring shutdown work in the scrubber and boiler

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- Confirm Purchase Requisition #15016 to Buist Electric in the amount of \$5,060 for contract electric and I & C support
- Confirm Purchase Requisition #15033 to Survalent Technology Inc. in the amount of \$9,340 for annual SCADA software support
- Confirm Purchase Requisition #15037 to Northern A-1 Services, Inc. in the amount of \$5,026 for confined space rescue stand-by services
- Confirm Purchase Requisition #15042 to Renew Valve & Cleveland Valve in the amount of \$5,024 for auxiliary steam valve repairs
- Confirm Purchase Requisition #15050 to Monarch Welding & Engineering in the amount of \$5,671 for outage work in scrubber
- Confirm Purchase Requisition #15053 to Network Environmental, Inc. in the amount of \$6,238 for 2nd quarter stack testing for MATS compliance
- Confirm Purchase Requisition #15055 to Northern Boiler Mechanical Contractors in the amount of \$7,878 for steam and condensate piping repairs
- Confirm Purchase Requisition #15070 to Northern Boiler Mechanical Contractors in the amount of \$91,605 for final boiler and scrubber repairs during spring outage
- Confirm Purchase Requisition #15075 to Buist Electric in the amount of \$13,846 for contract electric and I & C support

The motion was unanimously approved.

18-6B Public Comment Period — Jeff Miller, resident and BLP ratepayer stated the most important thing for communications is education. He acknowledged the BLP for the November/December customer newsletter article regarding how electricity gets to and from Grand Haven. Miller also acknowledged the Grand Haven Tribune on their informational articles regarding the plant closure recommendation.

Shawn Kuck, BLP employee and Executive Committee Officer of the Utility Workers Union of America, AFL-CIO Local 582 read the following statement to the Board:

To our Community,

For over 122 years, the employees of the Board of Light and Power (Utility Workers Union of America Local 582) have faithfully served the Grand Haven community.

The Grand Haven Board of Light and Power is at a pivotal point on what to do with the Sims Power Plant. We have listened with great interests in the comments made by both the Board of Light and Power and the Grand Haven City Council. As employees that staff the plant 24 hours per day for 365 days per year, we can attest that the Condition Assessment of the Sims Power Plant that was presented to the Board in February is accurate.

The utility, and the community, face the decision to either spend money on a 35 year old plant that is reaching the end of its useful life or begin transitioning the community to a future

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power supply plan that will increase reliability, cost our customer's less money in the future, provide some local generation for the next 30-40 years, and will be less carbon intensive. We agree with Management and the Board of Directors that it is time to retire the Sims Power Plant.

This does not mean that we do not care about this facility as we sacrifice a great deal to keep it operating on a daily basis. While we understand the financial commitment this community made almost 40 years ago, we also understand the amount of money that will be needed to extend the life of the plant in a safe and reliable manner along with the higher costs of continual operations of the plant. This does not mean that we will give up our community's energy independence or local control. It also does not mean that we will buy all our power needs off the Grid as some are suggesting.

Having direct knowledge of working in this industry we have clearly witnessed how drastically the utility world has changed in the last decade, which is forcing utilities to change how they do business. Significant investments have been made to the modern electrical grid, which has greatly improved reliability. Additionally, renewables along with low natural gas prices have flipped the economics of coal fired generation plants. This is why you are seeing so many coal plant retirements, some of which are not even as old as the Sims Plant. Our community needs to adapt and develop an energy plan that is flexible if we are to continue serving in our customer's best interest. Our smaller size will allow us to be more capable of handling the changes in the future, which will make us more competitive than other electric suppliers. We need to work diligently to keep electric costs low so that the dollars stay in your pockets and your employer's pockets so that you can grow which in turn will help us grow.

We have appreciated the comments of concern by the governing bodies on the impacts of steam plant employees, as this new power supply plan will require a significantly reduced work force. Fortunately, the timing is perfect for this transition as the BLP is experiencing a significant amount of turnover due to the retirements in the next three to five years. This turnover will allow some plant employees to transition to a new power facility, which was recommended to the Board of Directors in February. This will also allow the remaining steam plant employees to take advantage of the turnover in the distribution, metering, and customer service departments.

A decision needs to be made on the Sims Power Plant so that direction can be set to plan, design, and engineer a new power supply plan. Management and Union are working closely and collaboratively to ensure that this transition can take place with minimal impact to employees. Our goal is to make this transition with no terminations of existing employees and we are well on our way.

While there are other issues that need to be taken into account such as the downtown snowmelt system, the financial contributions to the City from the utility, and the effects on the dredging of the harbor we have no doubt that solutions can be found with proper collaboration and leadership between the Board and City Council. These are issues that would need to ultimately be addressed at some point since the Sims Plant will not last forever. Now is the proper time to solve them.

We thank you for your support and want you to know that it is our pleasure to faithfully serve a community we hold so close to our hearts.

The members of The Utility Workers Union of America Local 582

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Andy Cawthorn, resident and BLP customer, stated he agrees with the Mayor's sentiments. He asked if we could buy from the grid and take our time on what is next. He also asked if the BLP could keep the plant on line during November and March for snowmelt.

No formal action taken.

18-6C Director Witherell, supported by Director Naser, moved to approve the following purchase requisitions:

Approve Purchase Requisition #14936 to GRP Engineering, Inc. in the amount of \$43,800 for distribution system modeling/study and development of 5-year plan

Approve Purchase Requisition #15059 to RESCO in the amount of \$12,536 to purchase eight 25-kVA pad-mount transformers to replenish stock

Approve Purchase Requisition #15062 to Power Line Supply in the amount of \$308,023 to purchase North-Sternberg steel poles for bids #2 and #3

The GRP Engineering study is a Strategic Plan initiative for an in depth study of our distribution system.

The motion was unanimously approved.

18-6D Public Act 95 Opt Out Annual Approval (RE: Low Income Energy Assistance Fund) – Director Witherell, supported by director Kieft, moved to approve opting out of Public Act 95 for FY 2019 as allowed by the Act. This is a winter season opt-out for customer collections and utility contributions to the State's low-income assistance fund, which the Act does allow municipal utilities to do, however, if we do, our customers are not allowed to draw from the fund and we as a utility are not allowed to do residential shutoffs during the winter months for delinquent customers. The motion was unanimously approved.

18-6E Presentation of Black & Veatch Sims III Life Assessment Report – Bradley Saad, P.E., Black & Veatch (B&V) thanked the Board for the opportunity to evaluate and provide an independent review of Sims III. Mr. Saad worked as the Project Lead and is the primary author of the Life Assessment Report.

The purpose of the independent assessment was to develop an action list for continued operation and provide a recommendation based on the condition of the plant.

B&V found many critical components have reached the end of useful life. The 4160V and 480V switchgear and motor control centers have a high potential for failure. Additional testing is needed for boiler high temperature materials and high energy piping. Environmental compliance requirements for the ash ponds are required by October 2018, but may be avoided if a closure date is set, and additional environmental controls will likely be required after 2020 for Effluent Limitation Guidelines.

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B&V determined Sims Unit III now requires approximately \$35 million in investments to continue safe and reliable operation. \$8 million of this amount will be required in a major overhaul in 2020. More economical power supply operations exist that would improve electric pricing and reliability. In addition, New Source Review would likely be required if the BLP were to make the substantial investments into the Plant.

Next steps include production cost modeling to identify the most economical power supply portfolio and optimize internally owned generation options. B&V recommends Grand Haven consider two dispatchable generation alternatives as part of its portfolio to optimize needs (Aero Derivative Gas Turbines or Reciprocating Engines). If local generation is desired, design and engineering work should begin along with a decommissioning and demolition study.

B&V discussed an eight step action plan:

1. Invest in all safety related items
2. Prepare and secure energy and capacity purchases during the decommissioning and demolition of Sims
3. Model and identify internally owned generation
4. Allow time for public input and comment
5. Develop a long-term external generation mix
6. Develop site abatement, demolition and mitigation plan
7. Identify best land use options for Harbor Island and a new generation facility
8. Allow time for public input and comment on final land use

Mr. Saad responded to questions raised during the meeting from the Board and public:

Capital investments in Sims would raise the cost of production from \$57/MWh to over \$110/MWh. If the investments were to be bonded out, the cost could be stretched over the life of the bond, but the bond life could also not extend past the expected life of the facility.

Operating Sims at four months on, two months off is feasible for the short term, but would require the major overhaul, now needed in 2020, to happen earlier. Running during the month of November would create a \$200,000 loss to the utility, which potentially could be used for a long-term snowmelt solution.

B&V evaluates all generation options, including renewables, and are very capable; Michigan Public Power Agency also performs such evaluations.

Cost for switch gear replacement is \$4.5 million and the turbine overhaul costs are approximately \$1.8 million.

The proposed generation options (Aero Derivative Gas Turbines or Reciprocating Engines) are gas peaking units designed to be brought online quickly to offset load and power costs. RICE units are 9.5 to 9.8 MW each and come in three or six pack units. Three units would cost approximately \$35 million to install.

These types of units offer flexibility with some dispatch options. This is also a path to diversify the BLP's portfolio.

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Safety and a potential for a catastrophic failure at Sims III were discussed. The plant has been maintained, but it is time to do more testing to determine where there may be issues. Usually, there are indicators before a catastrophic failure occurs.

Erik Booth, BLP Power Supply Manager added safety is very important to us. We reviewed the safety list and are already addressing what was identified. We feel we can minimize the investments and get to 2020 safely.

Solar was discussed. Municipals do not own solar because we are tax exempt and gain no tax benefits from the thirty percent investment tax credit. Thirty percent of the cost (for solar) is covered by federal government provided tax subsidies to private party investors. Municipals need to buy through power purchases with private parties who take advantage of the tax incentives.

Mr. Saad thanked the Board for the opportunity stating he feels Grand Haven has a great opportunity to move forward with new technology.

No formal action taken.

18-6F MPPA Energy Services Presentation – Tom Weeks, Wholesale Market Operations Lead, provided an overview of Michigan Public Power Agency (MPPA) and the services provided to its 22 municipal members. Of those 22 members, there are three municipals that generate base load power. Grand Haven is one of the three. The other two are Holland, which is almost four times the size of the BLP's system, and Lansing, which is more than seven times our size. Holland and Lansing also participated in Belle River and Campbell 3 through MPPA. Grand Haven did not.

MPPA provides three primary services to its members, Energy Resource Management, Energy Supply Services and Market Operation Services. It also provides 'back office' services such as accounting, finance, credit, risk and human resources and Service Committee opportunities.

Mr. Weeks recommended the following action if a GHBLP plant retirement occurs:

1. Update the BLP's Hedge Plan Policy with MPPA
2. Purchase smaller diverse blocks of energy for calendar years 2021 and 2022
3. Add monthly purchases of energy for the remaining months of 2020 (June through December)

Discussion regarding MPPA's year long solar project investigation occurred. Costs are very competitive. Several developers are pitching projects in Michigan with 25 year pricing that is very competitive. MPPA is at the late stages of evaluating risks and costs of each location. They are hoping to make a recommendation in the next several months. MPPA has also executed an agreement on another large wind project.

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Mr. Weeks recommended Grand Haven move to a more diversified portfolio.

MPPA is a non-profit, municipal corporate organization established in 1978 in conjunction with Public Act 448. They are not 'power suppliers.' MPPA is the BLP's 'agent' in power supply transactions. Member costs are determined by its members. As a member of MPPA, Grand Haven is assessed actual costs for project administration for the projects we participate in. Grand Haven also participates in the Energy Services function. MPPA administrative costs are included in the BLP's power supply costs.

Short term purchases do not allow for specific generation selection. Long term purchases may. MISO has a mix of approximately 35% coal. MISO balances generation resources and load for its entire footprint.

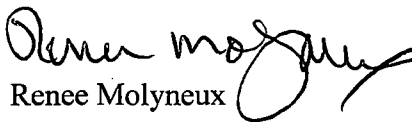
No formal action taken.

18-6G Sims Employee Turnover Discussion – Erik Booth provided a staffing analysis presentation to the Board. Under normal operations, we staff the plant with 39 employees, (28 Union and 11 non-union). We are currently down to 27 employees, which is 31% below normal operations. With upcoming retirements and transitions within the utility, the Production Department will be down approximately 49% by 2020. While this level of staffing is not sustainable for the long term, we feel we can make it to 2020 (without hiring replacements) by contracting out some of the work and through our employee's willingness to shoulder a heavier workload. We will need an operation center regardless of whether we build new generation or not. We believe we can make this transition without terminating employees.

No formal action taken.

At 6:35 p.m. by motion of Director Witherell, supported by Director Naser, the June 28, 2018 Board meeting was adjourned.

Respectfully submitted,


Renee Molyneux
Secretary to the Board

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