A regularly scheduled meeting of the Grand Haven Board of Light and Power was held on Thursday, December 20, 2018, at 4:00 p.m. at the Board's office located at 1700 Eaton Drive in Grand Haven, Michigan.

The meeting was called to order at 4:00 p.m. by Vice Chairperson Witherell.

Present were Directors Kieft, Naser, and Witherell.

Present via telephone: Chairperson Smant.

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; Mike Borgstadt, Burns & McDonnell; and Dale Rietberg, Varnum.

Director Kieft, supported by Director Naser, moved to excuse Director VanderMolen from the meeting. The motion was unanimously approved.

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

18-12A Director Kieft, supported by Director Naser, moved to approve the consent agenda. The consent agenda includes:

- Approve the Minutes of the November 8, 2018 Board meeting
- Accept and file the November 2018 Financial Statements and Power Supply and Sales Dashboard
- Approve paying bills in the amount of \$4,975,561.56 from the Operation and Maintenance Fund
- Approve paying bills in the amount of \$857,940.69 from the Renewal and Replacement Fund
- Confirm Purchase Order #20279 to Galloup Company in the amount of \$11,769 for a replacement valve for the chlorine system intake structure
- Confirm Purchase Order #20359 to Buist Electric in the amount of \$7,644 for the Auxiliary Boiler controller installation
- Confirm Purchase Order #20375 to Renew Valve & Cleveland Valve in the amount of \$5,628 to blowdown the throttling valve
- Confirm Purchase Order #20377 to Underwater Construction Corporation in the amount of \$5,678 for divers to inspect the intake at Sims
- Confirm Purchase Order #20380 to Nalco Company in the amount of \$5,322 for boiler chemicals
- Confirm Purchase Order #20385 to MECA in the amount of \$17,735 for annual safety program training services

- Confirm Purchase Order #20387 to Datavoice International Inc. in the amount of \$18,424 for annual OMS software services
- Confirm Purchase Order #20388 to Futura Systems, Inc. in the amount of \$16,800 for annual GIS mapping software services
- Confirm Purchase Order #20389 to Itron Energy Info. Systems in the amount of \$9.189 for annual handheld meter software services
- Confirm Purchase Order #20394 to Double L Enterprises in the amount of \$16,359 for snowmelt valve excavation
- Confirm Purchase Order #20395 to Renew Valve & Cleveland Valve in the amount of \$13,069 for Auxiliary steam valve rebuild
- Confirm Purchase Order #20397 to McCormick Sand, Inc. in the amount of \$22,438 for ash pond cleanout and transportation
- Confirm Purchase Order #20401 to Duratech System, LLC in the amount of \$57,632 for rubber repairs in scrubber module B
- Confirm Purchase Order #20403 to Northern A-1 Services, Inc. in the amount of \$9,611 for services associated with cleaning tanks and pits
- Confirm Purchase Order #20410 to Network Environmental, Inc. in the amount of \$6,238 for 4th quarter MATS compliance stack testing
- Confirm Purchase Order #20426 to State of Michigan in the amount of \$8,700 for annual NPDES permit fee
- Confirm Purchase Order #20441 to Northern Boiler Mechanical Contractors in the amount of \$160,000 for the inspection, testing and safety condition assessment of Sims' high energy piping system
- Confirm Purchase Order #20442 to Burns & McDonnell Michigan, Inc. in the amount of \$18,437 for additional engineering services associated with power supply planning efforts
- Confirm Purchase Order #20443 to Northern Boiler Mechanical Contractors in the amount of \$130,000 for fall outage contract work
- Confirm Purchase Order #20448 to Black & Veatch in the amount of \$36,698 for 7 months of Sims remote monitoring, diagnostics and software

The motion was unanimously approved.

18-12B Public Comment Period — No comments were heard. No formal action taken.

18-12C Director Naser, supported by Director Kieft, moved to approve the following purchase orders:

 Approve Purchase Order #20384 to RESCO in the amount of \$31,016 to purchase 4 x 150 kVA Padmount transformers

- Approve Purchase Order #20411 to Bridgwell Resources, LLC in the amount of \$11,974 for power poles to replenish inventory
- Approve Purchase Order #20431 to Raymer Water Supply Contractor in the amount of \$9,000 to repair Sims firewater pump.

The motion was unanimously approved.

18-12D Director Naser, supported by Director Kieft, moved to receive the final GHBLP Power Supply Plan for information.

Mike Borgstadt from Burns & McDonnell provided an overview of the final GHBLP Power Supply Plan to the Board. No changes were made to the structural aspects of the report. The final report includes public feedback and comments received at November's public forums and an economic analysis of the four proposed paths.

At the Board's request, a high-level system resiliency analysis was also performed following feedback at November's public forums. The analysis concluded designing and operating GHBLP's local system to provide long-term power supply through solar and energy storage resources in the event of an extended grid outage is cost prohibitive, even when supplying a small fraction of GHBLP load. The cost of covering 10% of load would be approximately \$250M. The analysis did not include costs associated with upgrading distribution assets, microgrid costs, device protection or system hardening costs. Burns & McDonnell recommends GHBLP focus its power supply planning efforts on providing low cost, reliable energy to its customers under the assumption access to the grid will be available and that grid resiliency is under the purview of federal agencies, MISO, and transmission system owners and operators.

A high level analysis of local community solar was also performed at the Board's request. At current capacity credits and cost levels, local solar may provide a low-cost source of capacity and energy. If GHBLP wishes to pursue a local solar option, Burns & McDonnell recommends assessing the local market by pursuing a small-scale community solar project on Harbor Island after construction of the new plant. The size of the project would be determined by the level of participation from GHBLP customers.

Based on the combination of economics, public feedback and Board & Council policy statements, Burns & McDonnell concluded:

- Ongoing operation of Sims Unit 3 is higher cost than other options; Sims Unit 3 should be retired by June 2020.
- The installation of a 35 to 40 MW reciprocating engine plant on Harbor Island will
 provide a local generation resource while allowing increased flexibility and should be
 pursued.
- GHBLP should meet additional capacity requirements through market purchases or agreements.
- This path provides GHBLP enhanced flexibility to be both proactive and reactive to changes within the power industry regarding advances in technology and power prices.

- If market conditions change in the future, additional generating units may be added to the Harbor Island plant while avoiding the risk of overbuilding today.
- As desired by customers, GHBLP should continue to evaluate the potential of a small-scale community solar facility.

The Action Plan going forward includes:

- Demolition and decommissioning of Sims Unit 3
- Remediation and mitigation of the site
- Design and construction of a new reciprocating engine plant
- Snowmelt (transition and permanent solutions)

The full report will be shared on GHBLP's website for public review.

The motion was unanimously approved.

18-12E Director Kieft, supported by Director Naser, moved to approve the Resolution to accept City Council's November 5 Resolution, which allows for the closure of Sims on June 1, 2020, conditioned on the commitment of GHBLP to have the capacity to generate the majority of the community's electricity within the BLP's service territory and to include capacity to partner and support the City's snowmelt system.

RESOLUTION OF COMMITMENT IN RESPONSE TO GRAND HAVEN CITY COUNCIL SIMS CLOSURE RESOLUTION

WHEREAS, the Board of Light and Power, at its meeting on April 24, 2018, approved ceasing operations of the Sims Power Plant on June 1,2020 and to begin further plant closure planning efforts as may be necessary and prudent.

WHEREAS, in a letter to the Mayor and City Council dated April 26, 2018, the Board notified Council of its action to approve ceasing operations of Sims, and requested Council's review and approval of this decision.

WHEREAS, the Board of Light and Power and City Council have worked cooperatively together to gain additional information on the potential closure of Sims, assess the impacts, review future power supply options, and gain further public input.

WHEREAS, City Council, at its meeting on November 19, 2018 unanimously passed a resolution of its own to authorize the decommissioning of the Sims Power Plant, effective June of 2020 conditioned on receiving commitments from the Board of Light and Power "that by June of 2023, Grand Haven will have the capacity to generate a majority of the local electricity within the service area and that future facilities will include capacity to partner in the support of the snowmelt system."

NOW THEREFORE, BE IT RESOLVED, the Board of Light and Power hereby is providing City Council a commitment to place in operation by June of 2023 future facilities within the service area that will have a capacity to generate a majority of the electrical needs of

the system and that these facilities will include capacity to continue to partner in the support of the snowmelt system.

BE IT FURTHER RESOLVED, that in providing these commitments, the Board deems the conditions associated with Council's resolution to authorize the decommissioning of the Sims Power Plant effective June of 2020 to be satisfied.

The motion was unanimously approved.

18-12F Black & Veatch was contracted to supervise the inspection, testing, and safety condition assessment of the High Energy Piping System during the Sims fall shutdown. Acuren provided the testing, and Northern Boiler provided the prep work. Black & Veatch and Acuren focused on the areas of most concern and concluded the plant is safe to run for the scheduled 9 months. The testing also confirmed the plant has reached the end of its useful life.

No formal action taken.

18-12G Director Naser, supported by Director Kieft, moved to proceed with an environmental insurance recovery investigation. Matt Ward was contracted to review potential funding sources and grants for upcoming site remediation, which included environmental insurance cost recovery options. There are entities who will evaluate former insurance policies for claim recovery. Mr. Ward located a firm who will review former policies on a contingency basis. If a claim is collected, they would collect 35% of the award.

The motion was unanimously approved.

18-12H Director Naser issued a statement that he is concerned with moving forward without a contingency plan should there be a catastrophic grid failure. He is also concerned the plant we are planning to build will produce a large amount of greenhouse gas. Director Naser added, while he agreed to accept the final Burns and McDonnell power supply plan report, he is not happy about it.

No formal action taken.

18-12I Director Kieft, supported by Director Naser, moved to adjourn the open session and enter into closed session pursuant to Section 8(h) of the Open Meetings Act to consider written communications protected by the attorney-client privilege and exempt from disclosure under Section 13(1)(g) of the Freedom of Information Act. In a roll call vote of the Board, those in favor: Directors Kieft, Naser, Witherell, and Smant; those absent: VanderMolen; those opposed: none.

The motion was unanimously approved.

18-12J Director Kieft, supported by Director Smant, moved to adjourn the closed session and reenter open session. In a roll call vote of the Board, those in favor: Directors Kieft, Naser, Witherell, and Smant; those Absent: VanderMolen; those opposed: none.

The motion was unanimously approved.

18-12K Director Kieft, supported by Director Smant, moved to direct the Chair and Vice Chair to draft and send a letter to City Council in response to City Council's November 5, 2018 Resolution regarding Section 14 of the Charter. Board members will have the opportunity to review and comment on the letter before it is sent.

The motion was unanimously approved.

At 6:47 p.m. by motion of Director Kieft, supported by Director Naser, the December 20, 2018 Board meeting was adjourned.

Respectfully submitted,

Renee Molyneux Secretary to the Board

RM