

To: All Councilmembers
From: CURO
By: Shannon Oldfield
CC: David Gavlinski, Eric Granderson, and Theresa Becher
Date: June 28, 2019
RE: SWBNO Meeting 5.15.19

### **EXECUTIVE SUMMARY**

The Sewerage and Water Board of New Orleans (SWBNO) Board of Directors (the Board) met Wednesday, May 15, 2019. The full packet for the meeting can be found <u>here</u>. The Board received updates on the general standing of the Sewerage and Water Board.

### I. <u>The Executive Director's Report – May 12, 2019 Rain Event</u>

#### A. Overview

On May 12, 2019, New Orleans experienced a heavy rainfall where 5" of rain fell between 11:00 p.m. and 6:00 a.m. During this rain event, parts of the city received more than 3" of rain within an hour, which is considered a major storm. SWBNO states that the drainage system was designed to manage 1" of rainfall the first hour and  $\frac{1}{2}$ " of rainfall for every hour thereafter under dry weather conditions.

SWBNO produced 46 MW of power to energize the drainage pumping stations for this rain event. The pumping stations were monitored through the Emergency Operations Center (EOC) where power outages are also monitored. SWBNO was able to produce enough power to effectively operate the system. Footage from the QOL cameras was used throughout the city to identify locations where street flooding was present and the time it took for the locations to drain.

Nine areas throughout the city experienced significant flooding; however according to SWBNO, there is no evidence that this flooding resulted from a failure of pumps or power. An after action review meeting of SWBNO departments occurred on May 17, 2019. More details of the event may be found in the Legislative Report attached as Attachment 1.

The Federal Emergency Management Agency (FEMA) has a map that identifies areas and their risk of flooding; maps maybe searched <u>here</u>.

B. <u>Drainage Pumping Stations (DPS)</u> (A map of the drainage pumping station locations may be found <u>here.</u>)

115 of 120 pumps were available during this rain event. Three pumps have returned to service since the event.

# 1. <u>DPS 2</u>

DPS 2 has a total of 6 pumps. At 7:21 a.m. a single pump (Pump D) tripped offline due to thermal overload. Pumping was restored with the use of an additional pump and the impacts are believed to been negligible.

2. <u>DPS 7</u>

DPS 7 works in conjunction with DPS 12 and DPS 6 to pump the overall area of Lakeview. 17 pumps serve this area. DPS 7 houses 5 pumps with 3 being major pumps. Power was lost to 1 of the major pumps at approximately 5:12 a.m. due to a lighting strike. SWBNO informed Entergy of the outage and transferred to generator power approximately 1 hour later; the station remained on generator power for the duration of the event, which is recommended protocol. SWBNO does not believe that the loss of this single unit for the hour has any quantifiable impact on the amount of water that flooded the streets. This station was manned and resources were allocated accordingly. Entergy reported to City Council at the Utility, Cable, Telecom & Technology meeting May 15, 2019 that upon review of the incident; the lightning entered the system from the ground and came through fuse cabinets. According to Entergy there is no engineering solution to prevent this type of event. Entergy power was restored at 9:00 a.m.

3. DPS 17 (Station D)

DPS 17 (Station D) houses frequency changers. At 8:29 a.m., 2 pumps trip offline, one at DPS 3 and one at DPS 4. The breaker was reset and 9 minutes later both pumps were reported to be working. At 8:47 a.m. DPS 3 pump trips again and was reset and all pumps were back on line and working at 9:00 a.m. By the time these pumps had tripped offline the flooding had peaked and SWBNO reports that this did not impact the drainage.

# II. <u>New Infrastructure Funds</u>

The state appropriated a one-time payment of \$50 million dollars to SWBNO to settle outstanding debts. Approximately \$6 million will pay vendors; \$28 million will pay back the monies the drainage system borrowed from the sewer, and \$16 million dollars is intended for Hazard Mitigation Grant Program (HMGP) reimbursements. The projects that comprise the HMGP reimbursements include; weatherizing turbine 6 (T6) so it may be operated in temperatures below 45°F; installing frequency changers to limit use of steam turbines; and, building more redundancy into Entergy feeder system.

# III. SWBNO Immediate Priorities

- **1.** Initiate master plan effort (2-3 year, \$3-5 million endeavor)
- 2. Weatherize Turbine 6 (T6) so it can be operated in temperatures below 45°F. SWBNO estimates \$16 million dollars to be used for the hardening of T6.
- **3.** Convert from SWBNO-generated steam power to Entergy electricity to power SWBNO assets.
- 4. Build more redundancy into Entergy feeder system.
- 5. Install automated metering infrastructure (AMI).

### IV. Hurricane Season

SWBNO reports that in preparation for hurricane season that the pumping capacity is at its peak.

### V. Changing Organizational Culture

#### A. Leadership Training

Four leadership training cohorts have been developed with one new leader cohort per month. The leader development trainings are on schedule to occur monthly. The training is a twoday training course with a minimum 20 supervisory level employees at a time. The training groups meet at unspecified intervals after training to discuss the application of the concepts they have learned in their training and any challenges they may have experienced or are experiencing to receive feedback.

#### B. Customer culture

Two customer service cohorts have been developed and a basic course in customer service is being conducted. An Advanced Customer Service course is underway partnering with Delgado Community College (DCC). Admiral Callahan recommends that all employees of the SWBNO attend this training including Executive level personnel and laborers.

# C. Safety Culture

SWBNO is seeking to renew the safety culture in the organization. The planned steps are to create a safety management system, train the entire workforce, and Provide OSHA 10 for all employees and OSHA 30 training for supervisors. Several classes have been conducted through a partnership with DCC. A new updated Safety Manual has been created along with a Personal Protection Equipment (PPE) program. SWBNO also hired a safety manager, Vernon Crandall, to lead the Safety Culture Liaison Program.

# D. Training

A partnership with DCC is being developed called the "H2O Academy." The syllabi are under review. This partnership is intended to develop the workforce with a primary focus on Leadership Development and Safety. This program may also add components to develop Project Managers and customer service personnel. DCC has assisted SWBNO with funding these programs and has provided \$100 thousand dollars' worth of training through the GE Grant this year. This grant opportunity is not anticipated to be continuously available.