

# The Sewerage & Water Board OF NEW ORLEANS

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## **February 15, 2024**

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and Orleans Parish Delegation:

This report is delivered in accordance which Revised Statute 33:4091, Section F, which states: "In addition to the other requirements of this Section, the board shall send a report, by electronic mail, to the members of the Orleans Parish legislative delegation and the members of the governing authority of Orleans Parish detailing the pumping and electrical power of its facilities and the available manpower no later than twenty-four hours prior to a hurricane entering the Gulf of Mexico as determined by the National Weather Service and no later than forty eight hours after a flood watch or warning or thunderstorm watch or warning is issued by the National Weather Service for any area of Orleans Parish."

In the early morning hours of Sunday February 12, 2024 a strong thunderstorm system moved through Orleans Parish. The initial predictions from the National Weather Service indicated that the storm would bring scattered storms and high wins, with the potential for tornadic activity. The status of SWBNO's pumping and power equipment before and during the events is detailed below.

#### STORM IMPACTS

This storm resulted in a high intensity, short duration rain and thunderstorm event that impacted the entire Metro area. The majority of the rainfall was accumulated during the hours of 2am and 5am on Monday morning. High rainfall intensities were recorded across the City with a peak of 8.16 inches/hour at Central Control, and an average of 4.2 inches across the City\*. Other notable intensity recordings were 6.12 inches/hour at Station A in the Treme and 5.88 inches/hour at DPS 2 in Mid City. Accumulations exceeding 1 inch in an hour were recorded at Station A in the Treme (1.3 inches), SWBNO's Central Control facility in Hollygrove (1.1 inches), and at

DPS 2 in Mid City (1.0 inches). The maximum recorded rainfall accumulation was 1.65 inches at Central Control; with an average of 0.75 inches in other areas\*.

No incidents of flooding were reports by the Real Time Crime Camera (RTCC) center.

\*Note that rainfall data was not available for DPS 7, 15, 16, 17, and 20.

### **PUMPING AND POWER**

Below is the status of SWBNO's pumping and power equipment at the outset of the event.

## **Drainage Pumps:**

A total of 92 of 99 drainage pumps were reported in service at the outset of the event. However, repairs to discharge piping at DPS 15 #3 pump were completed just prior to during the rain event; as such 93 drainage pumps were available.

DPS 3: 25-hz pump out of service due to replacement of bearing housing unit. RTS March 2024.

DPS 10: No. 1 pump (60-hz) out of service. Vendor selected to refurbish pump. RTS August 2024.

DPS 13: No. 4 pump (diesel pump) is for emergency use only. Additional drainage funding is needed to move forward with repairs.

DPS 15: No. 1 pump gearbox repairs are in progress. RTS TBD.

No. 3 pump discharge piping repair in progress

DPS 17: Pumps A & D (25-hz) out of service due to the issues with electric motor. RTS TBD.

No major pump-related issues (mechanical or electrical) were encountered during the rain event.

## **Underpass Stations:**

All 27 underpass station pumps (UPS) were available and ready for use during the event. There were no reported issues with the underpass pumps. However, due to the volume of rainfall accumulation, the Carrollton Ave Underpass was submerged and unpassable for several hours until the underpass pumps were able to remove the accumulated water.

## **Power:**

Turbines 5 (25-hz), and 6 (60-hz), along with three frequency changers on the Eastbank, and one on the Westbank, as well as three EMDs were also available at the outset of this event. Due to the limited amount of redundancy in 25-hz power, plans were made in advance of the rain event to utilize frequency changers for the stations which serve primarily 25-hz pumps.

Unit*	Frequency	Capacity in MW	Available
T4	25 Hz	20 MW	0 (placed out of service on February 3, 2024)
T5**	25 Hz	20 MW	16 MW (revised capacity while Turbine 4 is out of service)
Carrollton Frequency Changers 1&2	Converts 60 to 25Hz	8.5 MW	8.5
Station D Frequency Changers 3&4	Converts 60 to 25Hz	12 MW	6 MW (FC #4 out of service)
West Bank Power Complex (Algiers Water Treatment Plant)	Converts 60 to 25Hz	2.5 MW	2.5
Five EMDs	25Hz	12.5 MW (total) 2.5 MW (each)	7.5 (repairs for EMD #1 and #2 in progress)
Plant Frequency Changer via T6	Converts 60 to 25Hz	3.75 MW	0 MW (RTS to be determined)
		Total 25 Hz:	40.5 MW
T6	60 Hz	22 MW	22 MW

<sup>\*</sup>T3 has been decommissioned as of May 2021, and T1 has been decommissioned as of June 2022. Both units have been removed from this table.

### **STAFFING**

Of New Orleans' 24 drainage pumping stations, some are staffed, some run remotely, and some are staffed as circumstances dictate. For this event, all stations were staffed appropriately.