



The Sewerage & Water Board

OF NEW ORLEANS

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May 12, 2023

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.”*

On Tuesday, May 9, 2023, the National Weather Service issued a series of severe thunderstorm warnings and flood advisories associated with a strong storm system that moved through Orleans Parish throughout the day. The status of SWBNO’s pumping and power equipment before and during the event is detailed below.

STORM IMPACTS

This storm system produced high intensity, short duration rain and thunderstorm event across the City in the afternoon. The maximum recorded accumulation was 4.28” at DPS 07 at City Park, with an average of 1.6” across the City. Amounts exceeding 2 inches of accumulation were recorded at SWBNO’s Central Control facility, DPS 3, DPS 4, DPS 6, DPS 10, DPS 12, and DPS 16. The average intensity of rainfall across the City was 3 inches/hour, with a maximum intensity of 5.9 inches/hour recorded at DPS 16 in New Orleans East. Intensities exceeding 5 inches/hour were also recorded at Central Control, DPS 3, and DPS 6.

Localized street flooding in New Orleans East, Gentilly, and Lakeview was widely reported. However, water levels receded within a few hours.

The pumping and power equipment generally performed as expected, with exceptions noted below.

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 93 of 99 drainage pumps were available at the outset of each event:

DPS 6: **1 pump out of service, awaiting shaft replacement; return to service Q2 2023**

DPS 10: **No. 1 pump out of service; repair evaluation in progress**

DPS 13: **No. 4 pump designated emergency use only; return to service TBD**

DPS 16: **No. 2 pump out of service; repairs underway by contractor; return to service date Q2 2023**

DPS 17: **Pumps A and D out of service due to motor issues; return to service TBD**

At DPS 12, the singular pump at that station (D pump) was offline for approximately an hour and a half, between 5pm and 6:30pm due to an electrical issue. However, the elevation of the canal leading to the station remained stable during this time (i.e. it did not rise), indicating that the cessation in pumping did not contribute to any additional flooding in the service area. Upon returning to service, the pump remained online for several hours to pump down the canal to typical levels.

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.

Power:

Turbine 4 was placed out of service on April 3, 2023, due to a mechanical issue. Contractors have been mobilized to assess and perform repairs of the turbine as needed.

As such, Turbines 5 and 6, and all four frequency changers were available for this event. Four of the five EMDs were available. The remainder of the power assets were utilized as needed and performed as expected during the rainfall event.

Unit*	Frequency	Capacity in MW	Available
T4	25 Hz	20 MW	0
T5**	25 Hz	20 MW	17.5
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	12 MW
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)	10 (troubleshooting for EMD #2 completed and repairs underway)
T6 (via Plant Frequency Changer)	Converts 60 to 25Hz	3.75 MW	3.75
		Total 25 Hz:	51.75 MW
T6	60 Hz	22 MW	22 MW

*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.

** T5 was tested up to 17.5MW during the pre-start and commissioning stage.

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.