



The Sewerage & Water Board

OF NEW ORLEANS

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June 23, 2021

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 Monday, June 21, the National Weather Service issued a flash flood warning at 3:39 p.m. and a severe thunderstorm warning at 4:16 p.m. in response to heavy rain moving through the region. The following is a preliminary report detailing the manpower, pumping and electrical power of the Sewerage and Water Board’s (SWBNO) facilities during the tropical event.

RAINFALL

This event brought intense bursts of rain in many areas of the city, with a rainfall intensity reaching over 6 inches per hour in New Orleans East and over 5 inches per hour in the Hollygrove and Lakeview neighborhoods. The average rainfall intensity across the city was 3.59 inches per hour. Recorded rainfall over the course of the approximately 4-hour event averaged between 3 and 4 inches. Underpasses and several neighborhoods experienced street flooding due to the intensity of the storm and inability of the system to keep pace with the rainfall rates.

PUMPING AND POWER

Our power and pumping equipment experienced some minor issues during the event, as is often the case during significant rainfall that requires maximum performance from the drainage system. Although we try to anticipate issues ahead of a forecasted event, our staff typically responds to unexpected trips and outages caused by the fragility of almost every component of the system.

Drainage Pumps:

A total of 98 of 99 drainage pumps were available at the outset of the event. One drainage pump at DPS 14 remains out of service and is undergoing gearbox repairs.

DPS 14: #4 Pump out of service for gear box repairs in the near term

The pumping system generally operated as anticipated, with no major issues to report. Three pumps – “C” pump at DPS 3, “C” pump at DPS 4 and “C” pump at DPS 7 – tripped offline as a result of “Feeder” 180 tripping offline. “Feeder” 180 was cleared and all three pumps were restarted. An electrical breaker issue with D pump at DPS 7 was discovered on Tuesday, June 22, and it was repaired and is available for use. “I” pump at DPS 6 was not functioning properly during the rain event and SWBNO staff is working to diagnose the problem.

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; nevertheless, there was street flooding that prevented normal access at the Carrollton, Canal Blvd, Paris at Gentilly and Marconi underpasses due to the rain intensity.

Power

For this event, Turbine 1, Turbine 6, all 5 EMDs, and all frequency changers were available for use. Turbine 1, all 5 EMDs and frequency changers performed as expected during the rain event. After the event, frequency converter #4 at DPS 17 experienced electrical problems. It was repaired Tuesday morning and is once again available for use.

Turbines 4 and 5 are expected to be back online by mid-July. Progress on both machines was delayed slightly by supply chain issues for integral parts.

Unit	Frequency	Capacity in MW	Available
T1	25 Hz	Approx. 6 MW	6
T3*	25 Hz	Approx. 6 MW	0
T4	25 Hz	20 MW	0
T5	25 Hz	20 MW	0
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
West Bank Power Complex (Algiers Water Treatment Plant)	Converts 60 to 25Hz	2 MW	2
Five EMDs	25Hz	12.5 MW (total) 2.5 MW (each)	12.5
		Total 25 Hz:	41 MW
T6	60 Hz	15 MW	15 (60 Hz)

*T3 has been decommissioned as of May 2021.

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, and mechanics were onsite to help monitor and troubleshoot EMD performance as needed.