

The Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET 504.529.2837 OR 52.WATER www.swbno.org

July 9, 2024

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and Orleans Parish Legislative 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."

Beginning at 6:00 PM on July 5th, 2024, a line of thunderstorms affected the New Orleans metropolitan area. A flood advisory was issued in the late afternoon, and the storm continued until just before midnight. Initial predictions from the National Weather Service called for storms lasting throughout the evening, with total rain accumulations between one and two inches. The status of SWBNO's pumping and power equipment before and during the events is detailed below.

STORM IMPACTS

The storm began around 6:00 PM on July 5th, 2024, and lasted until 12:00 AM on July 6th, 2024. The highest recorded accumulation was 3.31 inches at DPS 1 in Broadmoor. The average accumulation across SWBNO stations monitored was 1.38 inches. The highest rainfall intensity was observed at the St Joseph Street Building at 5.28 inches/hour, with an average rainfall intensity across the stations monitored of 2.59 inches/hour. Rainfall rates of over 1-inch per hour were observed at multiple stations across the city. Note that data was not available from DPS15, and only total

collection amounts were available for DPS 3, 17 and 19. There were reports of pooled water flooding from several locations across the city by the Real Time Crime Center, the majority of which were resolved by 10:30 PM.

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 90 of 99 drainage pumps were reported in service at the outset of the event.

DPS 6:	I pump is out of service while inspection of pump is in progress to determine the extent of any repairs needed. RTS TBD.		
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 14:	No. 3 and No. 4 pumps out of service due to mechanical issues. RTS pending contractor work required. Note that drainage from this area can also be addressed by DPS 10, DPS 16, and Dwyer DPS via the Morrison Canal.		
DPS 15:	No. 1 pump gearbox repairs are in progress. RTS Q2 2025.		
DPS 17:	Pumps A & D (25-hz) out of service due to the issues with electric motor. RTS TBD, pending funding availability.		
DPS 18:	Pump No. 1 out of service as of May 2024. RTS pending further mechanical inspecti A portable pump was installed at this location as a temporary measure.		

Underpass Stations:

All 27 underpass station pumps (UPS) were available and ready for use during the event, with no issues reported.

Power:

Turbines 5 (25-hz), and 6 (60-hz), along with four frequency changers on the Eastbank, and one on the Westbank, as well as four 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.

Frequency Changer #4 tripped on two occasions between 8pm and 9pm, when attempts were made to bring C pump online at DPS 7. This also impacted D pump at DPS 3, which was being powered by Frequency Changer #4. The other pumps at those stations were able to be used, and the time to pump down the water levels at these locations was similar to the other pump stations in the area. Water levels at DPS 7, which serves Mid City and a portion of Lakeview, did not rise above -9 NAVD88; water levels at DPS 3, which covers parts of the French Quarter, Treme, and the 7th ward, did not rise above -8 NAVD88. The electrical issues at the frequency changer were resolved on July 6.

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 (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	12
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

Unit*	Frequency	Capacity	Available
		in MW	
			(repairs for EMD
			#1 in progress)
Plant Frequency Changer	Converts 60 to	3.75 MW	0 MW (RTS to be
via T6	25Hz		determined)
		Total 25 Hz:	49 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.

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.