

The Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET 504.529.2837 OR 52.WATER <u>www.swbno.org</u>

August 7, 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 Saturday, July 22, 2023 and Sunday, July 23, 2023 the National Weather Service issued a series of flood advisories associated with strong storm systems that moved through Orleans Parish throughout Saturday evening and into Sunday morning. The status of SWBNO's pumping and power equipment before and during the events is detailed below.

STORM IMPACTS

These storm systems produced high intensity, short duration rain and thunderstorm event across the City in the afternoon.

July 22

The maximum recorded accumulation was 6.91" at DPS 19 in the Upper 9th Ward, with amounts averaging 1.3" recorded at the other stations around the City. The average intensity of rainfall across the City was 2.13 inches/hour, with intensities

exceeding 4 inches/hour at DPS 03 in the 7th ward, DPS 04 in Gentilly, DPS 05 in the Lower 9th Ward, and DPS 17 in St. Roch.

July 23

Accumulations on this day were low, with a maximum of 1" recorded at DPS 06 in Lakeview, and an average of 0.48" in other parts of the City. Rainfall intensities between 3 and 4 inches/hour were recorded at DPS 02 and DPS 07.

The pumping and power equipment generally performed as expected, except as noted below. Localized flooding was observed across the most impacted areas of town, which receded within a few hours.

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:	I pump out of service; return to service Q3 2023
DPS 10:	No. 1 pump out of service; return to service December 2023
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 Q3 2023
DPS 17:	Pumps A and D out of service due to motor issues; return to service TBD

Around 7:45pm on July 22, E pump at DPS 3 tripped offline due to an electrical issue. The other pumps at the station were able to handle the volume of water being drained to the station during this time. E pump returned to service around 9:30pm.

No other issues 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.

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	0 MW (RTS to be determined)
		Total 25 Hz:	50.5 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.