



The Sewerage & Water Board

OF NEW ORLEANS

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April 21, 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 April 15, 2023, the National Weather Service issued a series of flash flood watches and thunderstorm advisories associated with a strong storm system that moved through Orleans Parish throughout the afternoon. Additional storm warnings were issued for a storm system that passed through the area in the early morning of April 16, 2023. The status of SWBNO’s pumping and power equipment before and during the event is detailed below.

STORM IMPACTS

This storm system produced both wind and rain across the city. On April 15, The maximum total rainfall was 1.99” at Central Control at the Carrollton Water Plant, with a maximum recorded intensity of 7.32 inches/hr. Accumulations over one inch of rainfall were recorded at the majority of the other locations across the city, with an average intensity of 4.2 inches/hour.

On April 16, the maximum recorded accumulation was 0.85” at DPS 11 in the Lower Coast of Algiers. The average intensity of rainfall across the City was 0.8 inches/hour.

The pumping and power equipment generally performed as expected. Entergy power surges were reported in the New Orleans metro area that briefly impacted one of SWBNO’s potable water pumps. This pump was returned to service within a few minutes, with no noticeable impact to water pressure output at the Carrollton Water Plant.

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

No issues with drainage pumping assets were reported during this 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 three of four frequency changers were used for this event. Four of the five EMDs were available; three were utilized for this event. 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	6 MW (FC#4 is out of service for preventative maintenance)
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:	45.75 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.