



The Sewerage & Water Board

OF NEW ORLEANS

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

April 9, 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 3:42 a.m. on Thursday, April 8, the National Weather Service issued a flash flood warning for Orleans Parish. The following is a preliminary report detailing the manpower, pumping and electrical power of the Sewerage and Water Board’s (SWBNO) facilities throughout the event.

RAINFALL

Rainfall totals for this three-hour event reached over 2.5 inches in many areas around the city, with a rainfall intensity of over 6 inches per hour in some locations. The amount and high intensity of rainfall over a short period of time caused temporary street and underpass flooding around the metro area.

PUMPING AND POWER

Below is the status of SWBNO's pumping and power equipment at the outset of the rain event.

Drainage Pumps:

In sum, 97 of 99 drainage pumps were available. The two pumps out of service are undergoing electrical repairs and should return to service in the near future. Two smaller constant duty pumps, typically used during dry weather, were offline for repairs.

DPS 7:	#1 Constant Duty Pump out of service for motor repairs
DPS 5:	#1 Constant Duty Pump out of service for pump repairs
DPS 14:	#4 Pump out of service for gear box repairs
DPS 6:	1 Pump out of service pending electrical repairs

The pumping system operated as anticipated, with no major pump issues to report.

Underpass Stations:

All 27 underpass station pumps (UPS) were available and ready for use during the event.

Power:

For this unexpectedly intense rain event, Turbine 6, all 5 EMDs, and all frequency changers were available for use. Turbine 1 was offline for planned maintenance repairs critical for its continued use until Turbines 4 and 5 are back online. It will be returned to service on Saturday, April 10.

Turbine 4 is still on schedule to return to service the first week of May. Turbine 5 is expected to be back online by early June. The addition of those turbines prior to hurricane season will add significant redundancy to the system.

The EMDs and all frequency changers were tested and available at the start of the event. During the event, lightning struck the auxiliary generator that powers the EMDs, and they tripped offline at approximately 4:54 a.m. Staff worked to identify the cause of the trip and were able to bring the EMDs back online to help drain the

city around 6:30 a.m. Turbine 6 and all frequency changers remained online and performed as expected for the duration of the event.

Unit	Frequency	Capacity in MW	Available
T1	25 Hz	Approx. 6 MW	0
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:	35 MW
T6	60 Hz	15 MW	15 (60 Hz)

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.