



# The Sewerage & Water Board

## OF NEW ORLEANS

625 ST. JOSEPH STREET  
504.529.2837 OR 52.WATER

[www.swbno.org](http://www.swbno.org)

April 5, 2019

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and the Louisiana State Delegation:

This report is delivered in accordance with La. R.S. 33:4091(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.”*

A flood watch was issued by the National Weather Service for Orleans Parish at approximately 11:20 a.m. on Thursday, April 4, in anticipation of a significant weather event that ultimately resulted in 4-5” of rain across areas of the city.

The following is a report detailing the pumps, electrical power, and manpower of the Sewerage and Water Board’s (SWBNO) facilities on April 4.

### PUMPING

New Orleans’ drainage system had 115 out of its 120 drainage pumps available when the flood watch was issued. Five (5) pumps were out of service for maintenance or refurbishment:

Station	Location	Total Pumps	Designed Capacity (cfs)	Total Pumps Out	Station Operational Capacity
1	Broadmoor	11	6,825	1	99%
6	17 <sup>th</sup> Street Canal	15	9,580	2	98%
4	Gentilly	6	3,720	1	73%
20	N.O. East	2	500	1	50%

During Thursday’s rain event, five pumps were briefly compromised. Around 1:30 p.m., a pump at Drainage Pumping Station (DPS) 6 lost “prime” due to a mechanical issue – meaning it stopped pumping water, but retained power. It went back into full service at 3:00 p.m. Shortly before 2 p.m., an electrical feeder lost power, causing four pumps at four different stations – DPS 6, DPS 7 in Lakeview, DPS 3 near Florida Avenue and DPS 4 in Gentilly – to trip off line. Within about 35 minutes, SWBNO restored power to those pumps. By that point, however, the overall drainage system had caught up with the rainfall, rendering these pumps available but unnecessary to complete the draining of storm water. The feeder is now operational.

## POWER

The following chart describes the available self-generated power SWBNO can convert through its frequency changers and produce at its Carrollton Water Plant. To power the entire drainage system requires approximately 52 MW of 25 Hz power. The available self-generated power has redundant sources to aid the drainage effort in case of electrical outages.

UNIT	FREQUENCY	CAPACITY IN MEGAWATTS (MW)	AVAILABLE MW
Turbine 1	25 Hz	~6 MW*	6
Turbine 3	25 Hz	~7 MW*	7
Turbine 4	25 Hz	20 MW	20
Turbine 5	25 Hz	20 MW**	12
Turbine 6	60 Hz	15 MW***	15
Carrollton Freq. Changer (1&2)	Converts 60 to 25 Hz	8.5 MW	8.5
Station D Freq. Changer (3&4)	Converts 60 to 25 Hz	12 MW	12
Five EMDS	25 Hz	12.5 MW	12.5
<b>TOTAL AVAILABLE</b>	<b>25 Hz</b>	<b>86 MW</b>	<b>74 MW</b>
<b>TOTAL AVAILABLE</b>	<b>60 Hz</b>	<b>15 MW</b>	<b>15 MW</b>

\*Turbines 1 and 3 are antiquated steam-powered generators and do not operate at their original capacities.

\*\*Turbine 5 underwent repairs last month, and Thursday’s rain event was its first full-scale test of its capabilities. It was able to produce 12 MW of 25 Hz power. SWBNO is working with General Electric to determine what additional adjustments to make to restore its energy production to full capacity.

\*\*\* Turbine 6 generates 60 Hz electricity, which can be converted to 3.75 MW of 25 Hz electricity through a frequency changer.

**MANPOWER**

Of New Orleans' 24 drainage pumping stations, some are staffed, some run remotely and some are staffed as circumstances dictate. All manned pumping stations were staffed during Thursday's rain event. In an abundance of caution, additional station operators will be placed on duty ahead of the predicted rainfall on Sunday, April 7.

We will update this report with specific data as soon as our station operators have an opportunity to provide us with the detailed information.