

The Sewerage & Water Board OF NEW ORLEANS

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www.swbno.org

January 30, 2024

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."

From January 24, 2024 through January 27, 2024, a series of storm systems moved through the Orleans Parish and southeastern Louisiana region. The National Weather Service predicted 3-4" of rainfall in the New Orleans area from Tuesday evening through Saturday evening. The status of SWBNO's pumping and power equipment before and during the events is detailed below.

STORM IMPACTS

A summary of rainfall data across the City is presented in the table below.

- On Wednesday, January 24 the majority of rainfall fell in the early morning hours between 1am and 3am.
- On Thursday, January 25 the majority of rainfall fell between 11am and 1pm
- On Friday, January 26, only a minor amount of rain fell across the City
- On Saturday, January 27, the majority of rainfall fell within the morning hours, from 4am to 7am

| Date | Total Rainfall (in) | Average Rainfall (in) | Rainfall Intensity (in/hr) |
|------------|---|---|---|
| January 24 | 1.31 inches at DPS 3 in Mid City; similar rates at DPS 2, 4, and 6 | 0.7 inches in the other parts of the City | 3 in/hr at DPS 2; 1.52 in/hr average across the City |
| January 25 | 1.36 inches at Central Control in Hollygrove | 0.91 inches in other parts of the City | 3.12 in/hr at Central Control;1.46 in/hr average across the City |
| January 26 | 0.12 inches at DPS 10 in New Orleans East | 0.09 inches in other parts of the City | 0.48 in/hr at DPS 10; 0.21 in/hr average across the City |
| January 27 | 1.38 in at DPS 12 in Lakeview | 1.14 inch in other parts of the City | 2.04 in/hr at DPS 13 in Algiers; 1.29 in/hr average across the City |

PUMPING AND POWER

Below is the status of SWBNO's pumping and power equipment at the outset of the event. The real-time pumping status dashboard was available to the public during this storm event.

Drainage Pumps:

A total of 93 of 99 drainage pumps were available at the outset of the event. On January 26, 2024, the number of available pumps was reduced to 92 available due the outage of #4 pump at DPS 6.

| DPS 3: | 25-hz pump out of service due to replacement of bearing housing unit. RTS end of January 2024. |
|---------|---|
| DPS 6: | #4 Vertical pump out of service due to electrical issue. RTS mid February 2024. |
| DPS 10: | No. 1 pump (60-hz) out of service. Vendor selected to refurbish pump. RTS Jan 2024. |
| DPS 13: | No. 4 pump (diesel pump) is for emergency use only. Additional drainage funding is needed to move forward with repairs. |
| DPS 15: | No. 1 pump gearbox repairs are in progress. RTS January 2024. |

DPS 17: Pumps A & D (25-hz) out of service due to the issues with electric motor. RTS TBD.

No major pump-related issues (mechanical or electrical) 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:

Turbines 5 (25-hz) and 6 (60-hz), along with two frequency changers on the Eastbank, and one on the Westbank, as well as three EMDs were also available at the outset of this event. Plans were made in advance of the rain event to utilize frequency changers in conjunction with the 25-hz turbine to diversify power sources for the stations which have primarily 25-hz pumps.

The frequency changers and Turbine 5 were utilized as planned during the event with no issues encountered.

| Unit* | Frequency | Capacity in MW | Available |
|---|---------------------|----------------------------------|--|
| T4 | 25 Hz | 20 MW | Out of service on December 2, 2023; return to service anticipated in February 2024 |
| T5** | 25 Hz | 20 MW | 17.5 |
| Carrollton Frequency Changers 1&2 | Converts 60 to 25Hz | 8.5 MW | 6 (CFC #2 out of service) |
| Station D Frequency Changers 3&4 | Converts 60 to 25Hz | 12 MW | 6 (FC#4 out of service) |
| 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) | 7.5 |

| Unit* | Frequency | Capacity in MW | Available |
|-------------------------|----------------|-------------------|------------------|
| | | | (repairs for EMD |
| | | | #1 and #2 in |
| | | | progress) |
| Plant Frequency Changer | Converts 60 to | 3.75 MW | 0 (RTS to be |
| via T6 | 25Hz | | determined) |
| | | Total 25 Hz: | 39.5 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.

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.