Sewerage and Water Board of New Orleans

625 St. Joseph Street
New Orleans, LA 70165

June 5, 2024

(via electronic email)
Clerk of Council
City Hall, Room 1E09
1300 Perdido Street
New Orleans, LA 70112

Re: Legislative Storm Report – May 29, 30, and 31, and June 1, 2024

Dear Clerk of Council:

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."*

This report is being submitted for rainstorms that occurred on May 29, May 30, May 31, and June 1, 2024.

If you have any questions or concerns regarding this correspondence, please contact me at your convenience.

Sincerely,

Kaitlin Tymrak, P.E., Deputy General Superintendent

Enclosures

cc: Hon. Helena N. Moreno (via Electronic Mail)
Hon. Jean Paul "JP" Morrell (via Electronic Mail)
Hon. Joseph I. Giarrusso III (via Electronic Mail)

Hon. Lesli Harris (via Electronic Mail)
Hon. Freddie King III (via Electronic Mail)
Hon. Eugene J. Green (via Electronic Mail)
Hon. Oliver Thomas (via Electronic Mail)
Hon. Latoya Cantrell (via Electronic Mail)
Orleans Parish Legislative Delegation (via Electronic Mail)
Erin Spears, CURO (via Electronic Mail)

The Sewerage & Water Board
OF NEW ORLEANS

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

June 5, 2024

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and Orleans Parish Legislative 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.*"

This report is being submitted for rainstorms that occurred on May 29 (flood advisory issued), May 30 (>2inches of accumulation), May 31 (flood advisory issued), and June 1 (>2 inches of accumulation).

These storms were associated with a series of weather systems that formed during the daytime hours. The predictions from the National Weather Service indicated that the storms would bring high intensity rain to the area, with the potential for strong winds, hail, and tornadic activity. The status of SWBNO's pumping and power equipment before and during the events is detailed below.

STORM IMPACTS

- May 29
    - Storm impacts were experienced between 3pm and 10pm. Over 2 inches of rainfall accumulated at DPS-10 in New Orleans East, and at DPS-13 on the Westbank, which recorded rainfall intensity values around 4 inches/hour.

    - Other locations received less than half an inch over the event.
- May 30
    - Storm impacts were experienced between 10am and 3pm, with the majority of rainfall accumulation between 11am and 1pm.
    - A maximum accumulation of 2.04 inches was recorded at the Westbank Power Facility. Accumulations of over 1 inch in an hour were recorded at Central Control, DPS 1, DPS 2, DPS 5, and Westbank Power.
    - The average total accumulation of all stations monitored was 0.57 inches.
    - Rainfall intensities over 3 inches/hour were recorded at several areas, with intensity over 5 inches/hour recorded at Central Control and Westbank Power. An average of 1.8 inches/hour was recorded.
- May 31
    - Storm impacts were experienced in two distinct waves – one between 2am and 5am, and another between 1pm and 7pm.
    - Maximum accumulation of 2.51 inch was recorded at DPS 4, which accumulated over 1 inch in an hour in the afternoon. Average accumulation was 1 inches in other areas.
    - A maximum intensity of 4.2 inches/hour was recorded at Central Control, and over 3 inches/hour was recorded at several other areas.
- June 1
    - Storm impacts began around 2pm and ended around 5pm for most areas.
    - Over 1 inch accumulation in one hour was recorded at DPS 1, 2, 4, 7, 11, 12, and Westbank Power. DPS 2 accumulated over two inches in a 1-hour period, while Station A in Treme recorded the most rainfall of 2.5 inches, which occurred over several hours. An average of 1.18 inches was recorded at the other stations.
    - A maximum rainfall intensity of 6.36 inches/hour was recorded at DPS 2, with an average of 3.33 inches/hour over all monitoring stations.

The Real Time Crime Center (RTCC) reported water pooling at several locations on June 1, but the concerns were resolved 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 89 of 99 drainage pumps were reported in service at the outset of the event.

DPS 3: **25-hz pump out of service due to replacement of bearing housing unit. RTS June 2024.**

DPS 6: **I pump is out of service while inspection of pump is in progress to determine the extent of any repairs needed. RTS TBD.**

DPS 10: **No. 1 pump (60-hz) out of service. Vendor selected to refurbish pump. RTS August 2024.**

DPS 13: **No. 4 pump (diesel pump) is for emergency use only. Additional drainage funding is needed to move forward with repairs.**

DPS 14: **No. 3 and No. 4 pumps out of service due to mechanical issues. RTS pending contractor work required.**
Note that drainage from this area can also be addressed by DPS 10, DPS 16, and Dwyer DPS via the Morrison Canal.

DPS 15: **No. 1 pump gearbox repairs are in progress. RTS August 2024.**

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

DPS 18: **Pump No. 1 out of service as of May 2024. RTS pending further mechanical inspection.**
A portable pump was installed at this location as a temporary measure.

No pump-related issues were encountered during these events.

Underpass Stations:

All 27 underpass station pumps (UPS) were available and ready for use during the event, with no issues reported.

Power:

Turbines 5 (25-hz), and 6 (60-hz), along with four frequency changers on the Eastbank, and one on the Westbank, as well as four EMDs were also available at the outset of this event.

Due to the limited amount of redundancy in 25-hz power, plans were made in advance of the rain event to utilize frequency changers for the stations which serve primarily 25-hz pumps.

A combination of Frequency Changers, EMDs, and T5 were used for these rain events, with no major issues encountered.

Unit*	**Frequency**	**Capacity in MW**	**Available**
T4	25 Hz	20 MW	0 (placed out of service on February 3, 2024)
T5**	25 Hz	20 MW	16 MW (revised capacity while Turbine 4 is out of service)
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 (repairs for EMD #1 in progress)
Plant Frequency Changer via T6	Converts 60 to 25Hz	3.75 MW	0 MW (RTS to be determined)
		Total 25 Hz:	**49 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.