



Sewerage & Water Board of New Orleans

Power Generation and Drainage Systems FAQs

PUMPS:

How many pumps are in the S&WB system?

There are 120 pumps in the S&WB system, 100 drainage pumps and 20 constant duty pumps.

What is the difference between a constant duty pump and a drainage pump?

Drainage pumps: Primarily used during rain events.

Constant duty pumps: Run constantly and are primarily used to pump ground water.

How many stations are in the City?

There are 24 drainage pumping stations throughout the City as well as 12 underpass drainage pumping stations.

How many in impacted area?

12 drainage pumping stations are located in the impacted area of the East Bank west of the Industrial Canal.

What is the capacity of the individual pumps?

The individual capacity of pumps varies. The smallest can pump 3 cubic feet per second (CFS) and the largest can pump 1100 CFS. See SWB Drainage Pumping Station Operational Capacity Report for rated capacity.

What is the capacity of the drainage system?

When fully operational the capacity of the drainage system is 50,891 CFS.

How many pumps are not operational?

At this time there are 17 pumps that are not operational; 12 drainage pumps, two of which are low flow (less than 8 CFS), and five constant duty pumps.

How many pumps are in the impacted area?

There are 74 total pumps in the impacted area.

47 25hz pumps, 37 operational

Drainage: 30 total, 25 operational

Constant duty: 17 total, 12 operational

27 60hz pumps, 26 operational

Drainage: 26 total, 25 operational

Constant duty: One total, one operational

There are 63 total pumps in operation in impacted area

POWER:

How is the drainage system powered?

Four turbines located at the S&WB Carrollton Power Plant generate 25hz power through steam and one turbine generates 60hz power through natural gas. In addition, Entergy commercial power is used to power the S&WB's 60hz pumps, and is also used to power the 25hz pumps via the frequency charger the S&WB's two frequency changer stations. S&WB also has 31 generators pre-positioned across S&WB's network of 24 drainage pumping stations. S&WB's natural gas 60hz turbine can directly power two 60hz pumps at Drainage Pump Station #1 (2501 S. Broad in Broadmoor).

In the last few days the Mayor has procured an additional 26 generators to provide additional redundancies to the system.

How many turbines are there and what is their operational status?

Turbine 1 (6MW 25Hz): Operational

Turbine 3 (15MW 25Hz): Unplanned Maintenance – scheduled to return to service 9/2/17

Turbine 4 (20MW 25Hz): Scheduled Refurbishment – scheduled to return to service scheduled 9/5/17

Turbine 5 (20MW 25Hz): Unplanned Maintenance – timetable being determined

Turbine 6 (20MW 60Hz / 6MW 25Hz): Operational

Where will the 26 generators be installed and what will they power?

S&WB uses Frequency Changer stations to convert 60hz power to 25hz power which can be distributed throughout the system to provide power to 25hz pumps. S&WB is installing 18 generators at two Frequency Changer stations (six at Carrollton FC and 12 at Peoples FC). At this time, S&WB is determining where the additional eight generators will be installed.