CUSTOMER ADVISORY COMMITTEE

December 18, 2020

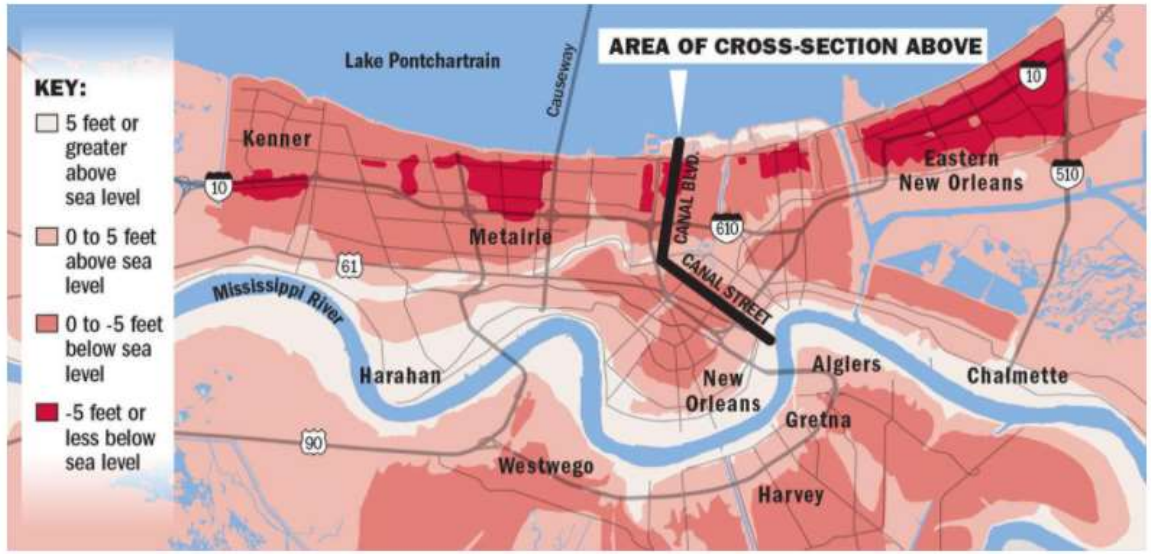
GROUND RULES

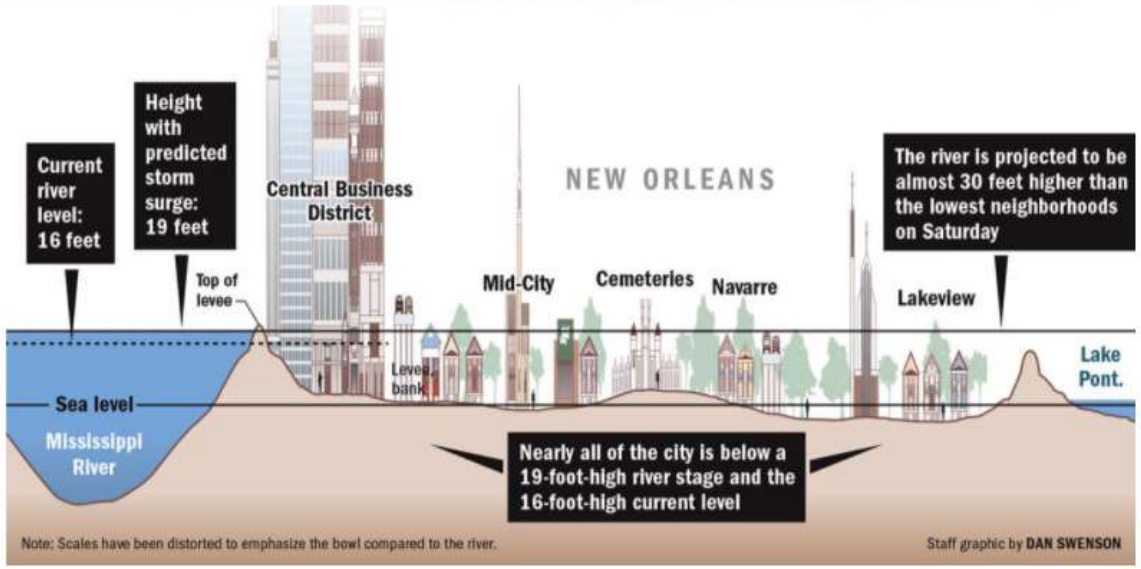
- Please keep your microphone muted unless you are speaking to reduce background noise
- Be sure to say your name before you speak so everyone knows who is speaking
- To be respectful of everyone’s time, please keep remarks brief and to the point so we can end on time
- Members of the public are able to submit comments via the Q&A feature

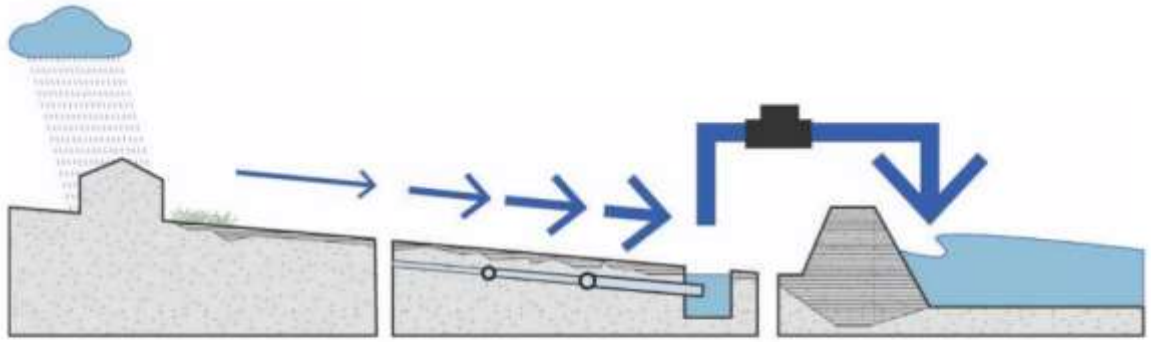
AGENDA

- Roll Call
- Power Overview
  - Existing System
  - Future Vision
- Next Steps

WHY PUMP?







Pave

Urban surfaces, including streets and parking lots, are paved with impervious materials that shed stormwater directly into storm drains and prevent that water from soaking into the ground.

Pipe

Underground pipes and culverts are often overwhelmed by stormwater, causing backed-up storm drains to overflow into streets. These pipes do not allow stormwater flowing through them to infiltrate into surrounding soils.

Pump

Fed by drainage pipes and canals, powerful pumps at the perimeter of each basin lift stormwater over the levees into Lake Pontchartrain, the Inner Harbor, and the Central Wetlands Unit.

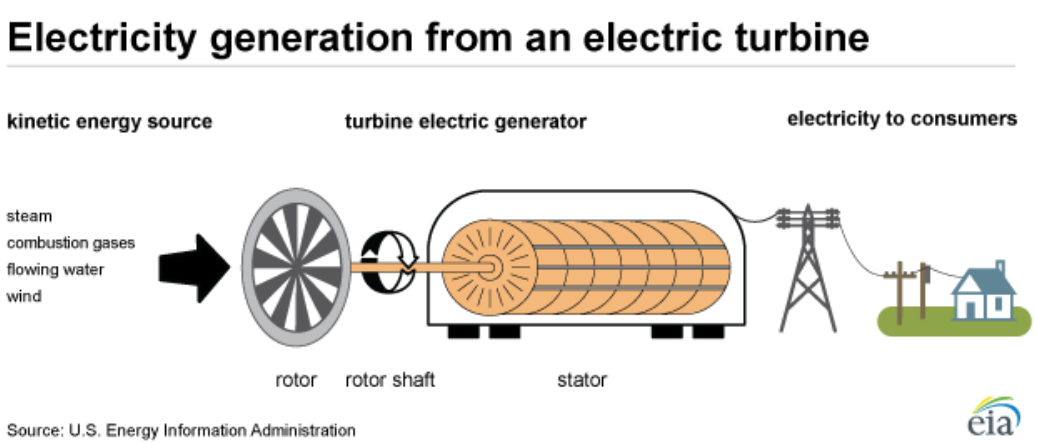
WHY SELF-GENERATE POWER?

- 2 Power Standards
- 25hz (old standard):
  - Many stormwater drainage pumps
  - Raw and drinking water (Eastbank)
  - Some sewer pumps
- 60hz (current standard)
  - Newer drainage pumps
  - Drinking Water (Westbank)
  - Most sewer pumps
- Entergy provides 60hz power, we self-generate 25hz and some 60hz

- Base power load daily approximately 4-6 megawatts
- During a drainage event, powering all pumps can require up to 52 megawatts
- Entergy is not set up to provide peak load currently

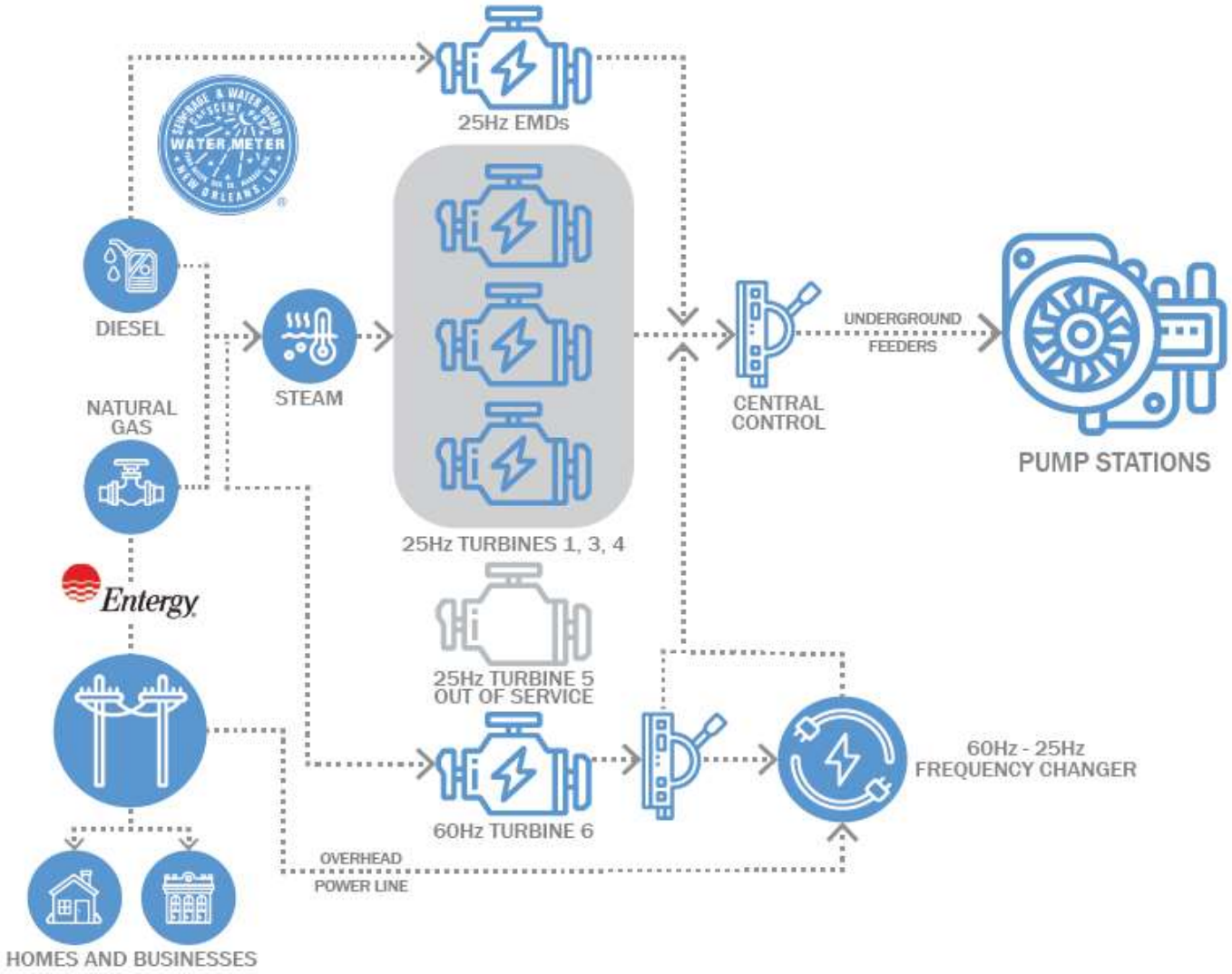
HOW IS POWER MADE?

- Generators/Turbines convert energy into electricity
- Can use many fuel sources that power the turbine and produces electricity



- SWBNO uses:
  - Steam for older Turbines (1,3,4)
    - Boiler powered by NG
  - Natural Gas for newer Turbines (5,6)
  - Diesel for EMDs

CURRENT SYSTEM



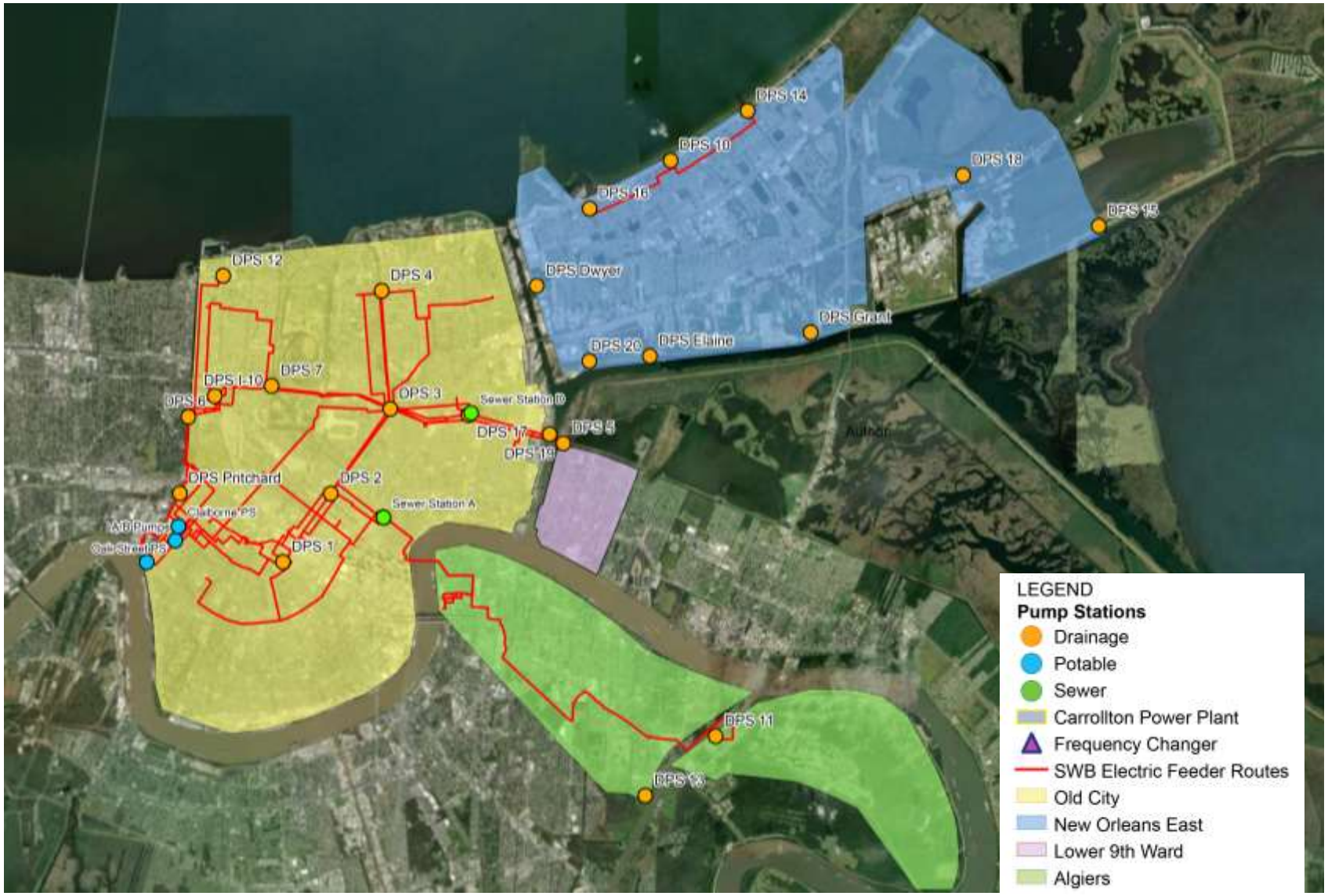
POWER VS PUMPING

- Turbines generate power
- Sent to Central Control for distribution

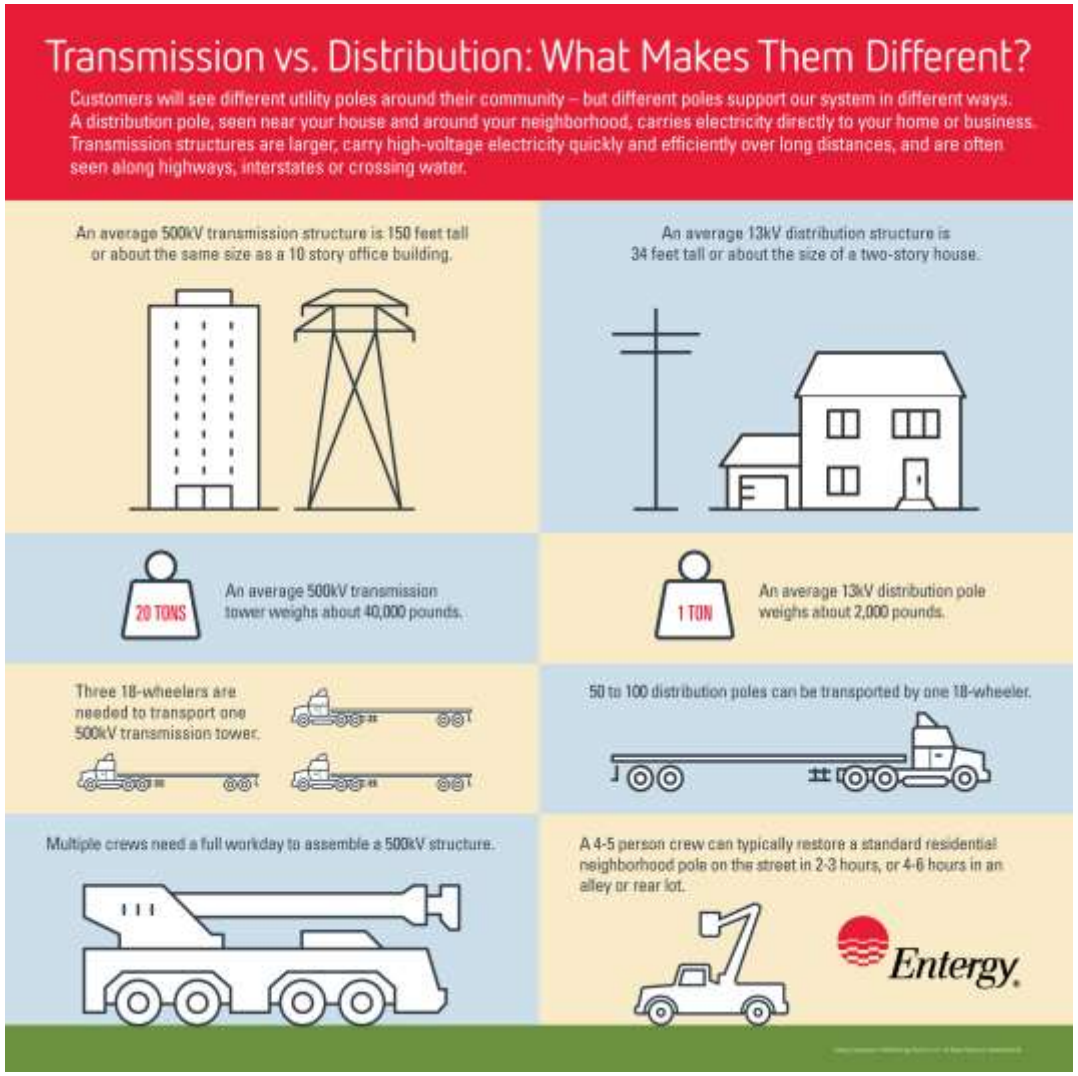
- Power arrives at pump stations via underground powerlines
- Used to power pumps


S&WB
POWER

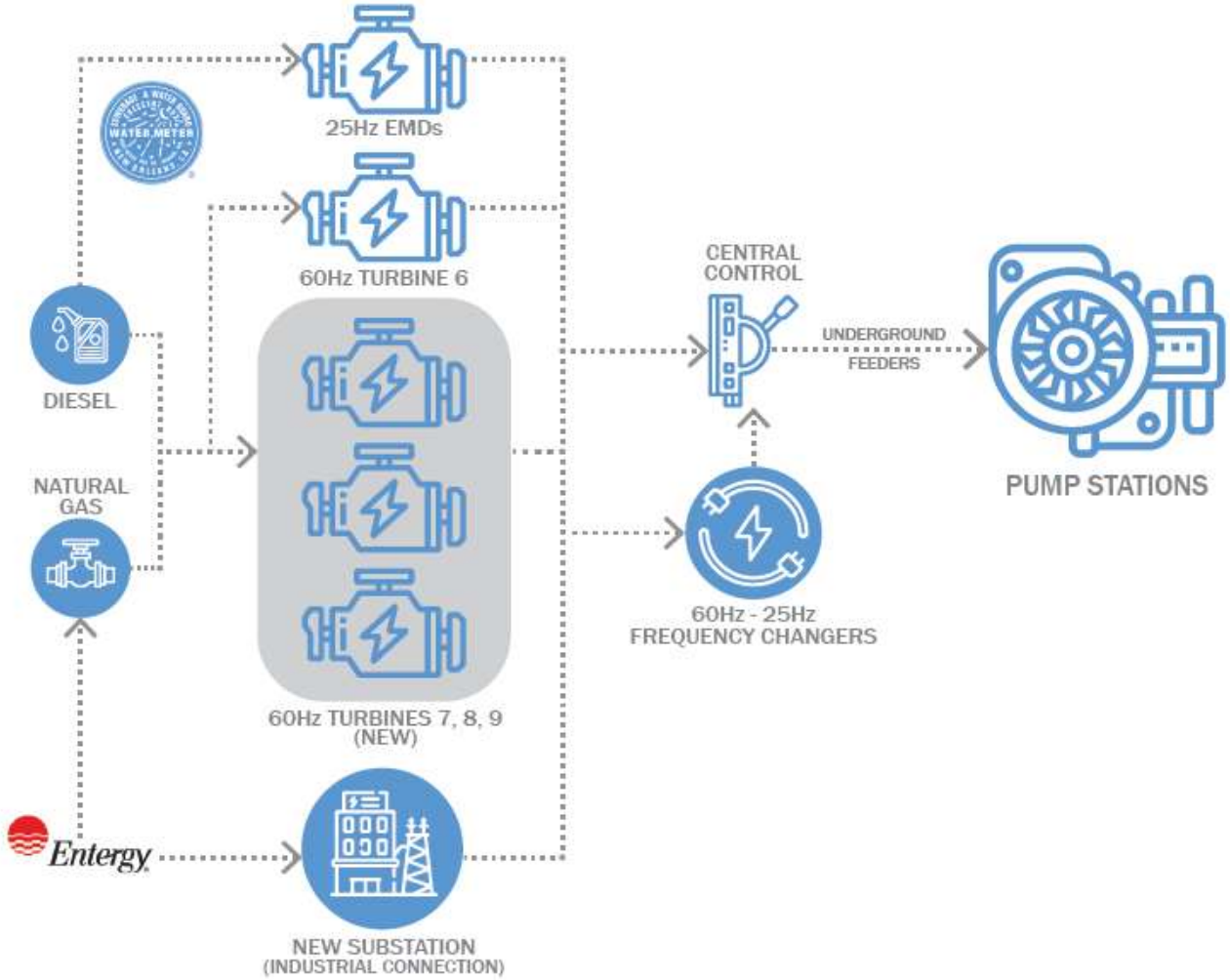
DISTRIBUTION SYSTEM



DISTRIBUTION TYPES



LOOKING AHEAD:
POWER MASTER PLAN



FUTURE: DEDICATED SUBSTATION

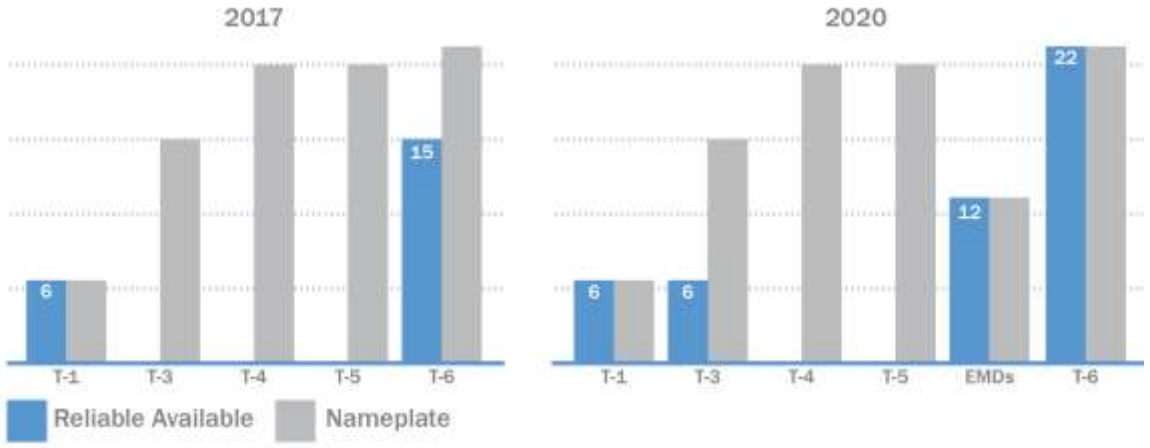
- Lower Cost of Operation
  - Purchased power vs self-generated power
- Reduced Run-time on Engines
  - Reduced Maintenance
  - Extended Useful Service Life
- Sustainability
  - Drastic Reduction in On-Site Air Emissions
  - Access to Off-Site Renewables
- Lifecycle Costs

FUTURE: NEW ASSETS

- Near Term – Phase 1
  - Utility Substation
  - New Modern Equipment
  - Frequency Changers
  - Retire Existing Plant
- Longer Term – Phase 2
  - 60 Hz Conversion of Older Drainage Pump Stations
  - Connect More Stations to Carrollton Plant

CURENT STATUS AND MILESTONES

- Repairing T4 and T5



- Weatherization of T6
- Substation site prep underway
- Designing and procuring T7
- Procuring 1 of 3 new frequency changers

NEXT STEPS

- Next Meeting will be January 15 at Noon
  - Happy New Year!
- Meeting Topics?
  - Drainage System Overview
  - Water System Overview
  - Sewer System Overview
    - Incl consent decree
  - SWB Organizational Structure
  - Review of recent planning efforts and outcomes
  - Boil Water Advisories
  - Flooding, how residents can mitigate?
  - Deeper dive on billing issues


SEWERAGE & WATER BOARD
CRESCENT BOX
WATER METER
FORD METER BOX CO. WABASH, IND.
NEW ORLEANS, LA.

THANK YOU