

*75 MW NET-ZERO
AI DATA CENTER*

TABLE 4 NET-ZERO



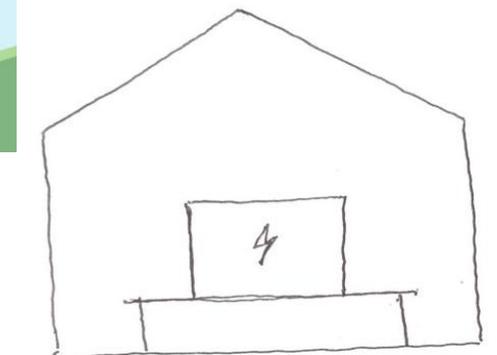
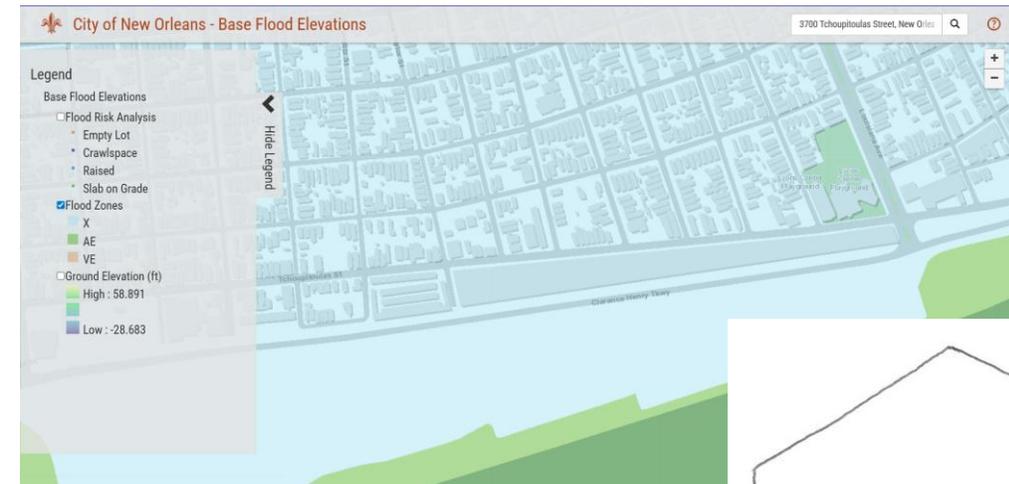
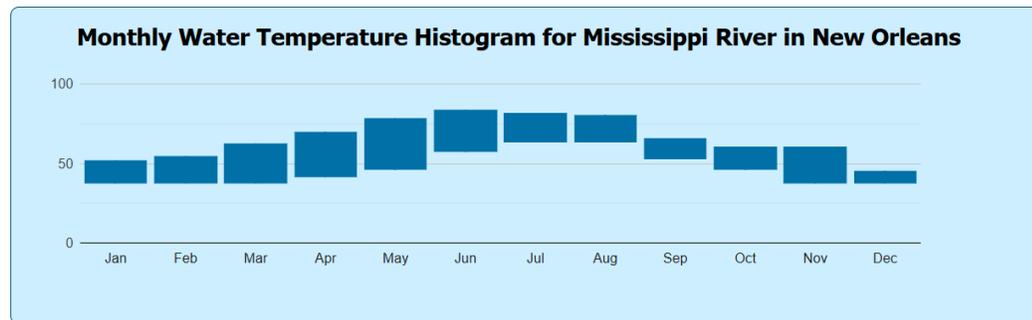
MISSISSIPPI CLIMATE CONSIDERATIONS

Summer: 83°Fahrenheit (28.3°Celsius)

Winter: 52°F (11.1°C)

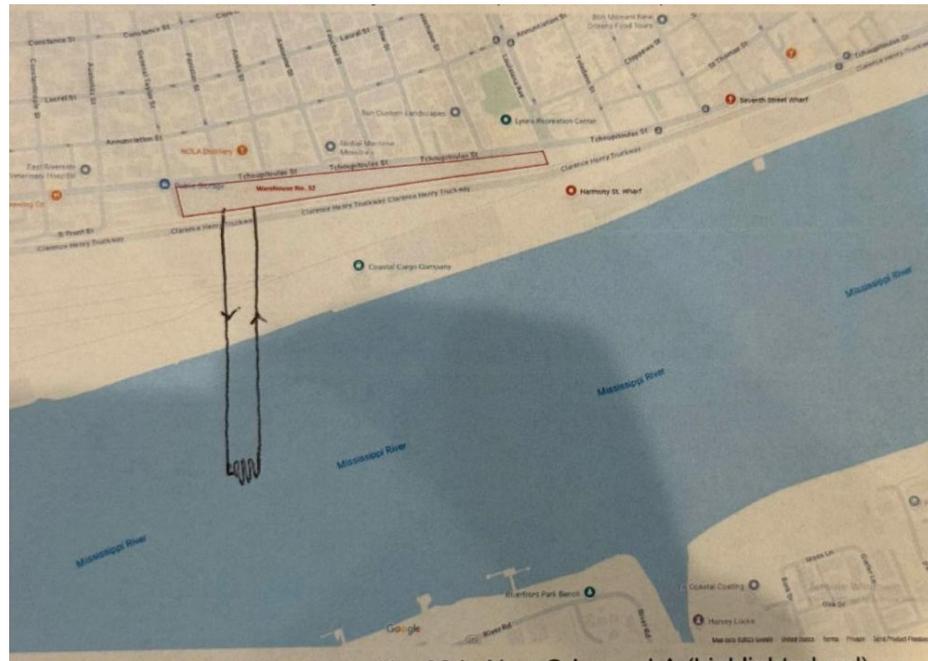
Above 100-Year Floor Plain – Zone X

Raise Data Hall and Equipment

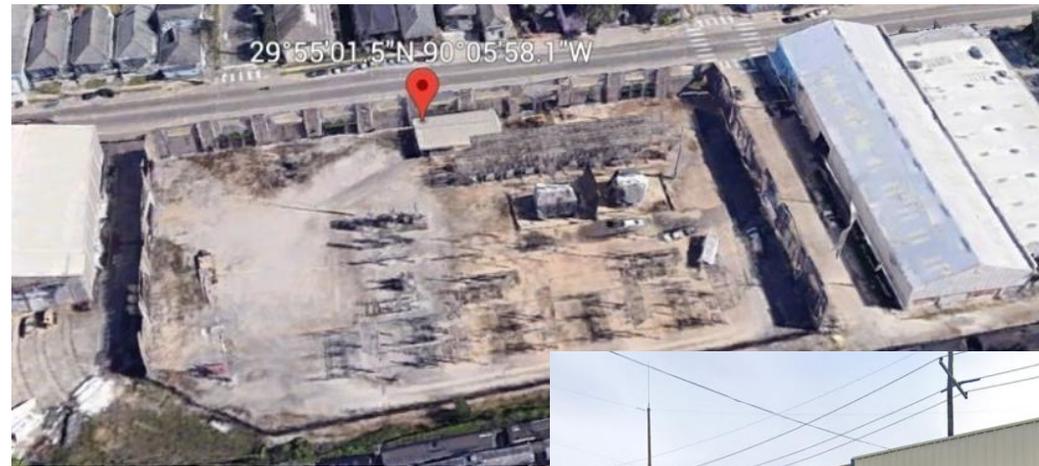


SITE CONSIDERATIONS

Adjacent River Available for Hydronic Heat Exchange



Adjacent Electrical Sub-Station and Storage Facility



ENERGY CONSUMPTIONS INCREASED BY 40%

75 MW Data Center with a PUE of 1.2 =
540,000 MWh

40% increase due to Operational Data Leak =
756,000 MWh consumption

Immersion Liquid Cooling =
1000 W/sf

Area for Data Hall =
75,000 sf

Generator area needs =
60,000 sf

Water-cooled chiller area needed =
25,000 sf

Energy Use Intensity =

2,520 kBtu/sf/yr

ENERGY CONSERVATION STRATEGIES

Liquid Cooling of IT Equipment

River Water Heat Rejection

Magnetic Bearing Chillers

Reduce Electrical Power Conversion Losses

Use AI Management of Server Power Loads – 6,000 FTE to 4,000 FTE

Economizers and Energy Recovery

Thermal and Battery Storage for Peak Shifting

PUE of 1.05

756,000 MWh annual energy consumption

After ECMs, annual energy consumption =
315,000 MWh

Rooftop PV offset with 60% coverage =
10% of annual energy

New On-Site Energy Use Intensity =
1,043 kBtu/sf/yr

Offsite PV area to get to net-zero=
1.6 million SF (350k available at adjacent warehouses)

BUDGET REDUCED BY 30%

\$1 Billion construction cost to \$1.3B

10% savings from existing building structure and enclosure

Rent extra save for data center or office leases – approximately 40%

Partner with local neighbors for rooftop PV installation – Power Purchase Agreement

Historic preservation incentive

Public funding tax break – certified by Louisiana Economic Development (LED)

Private Sector Investments for Data Center Access

Selection of VRFs and Chillers within the First Phase Project (SD)



THANK YOU

Justin SHULTZ

Ronnie HALDER

Roya CODY

Mack JIANG