

Welcome

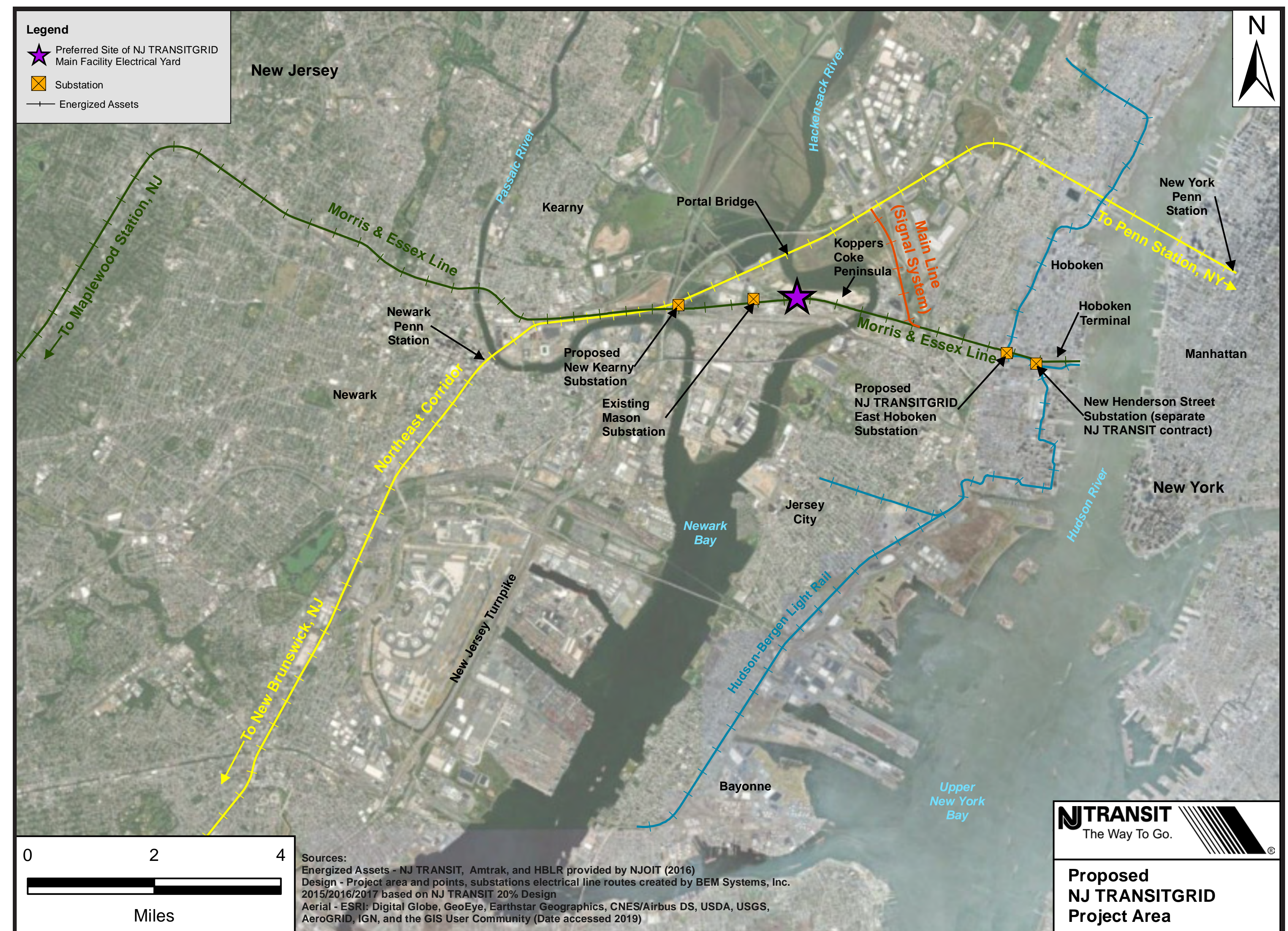
NJ TRANSITGRID TRACTION POWER SYSTEM

Draft Environmental Impact Statement (DEIS)
Public Hearing

AGENDA

- Get informed about the NJ TRANSITGRID TRACTION POWER SYSTEM and its benefits
- Project evaluated in Environmental Impact Statement (EIS) under National Environmental Policy Act (NEPA) of 1969
- Opportunity for public to provide comments on the Draft EIS

Thank you for attending!



AFTERMATH OF SUPERSTORM SANDY IN 2012

- 2.6 Million in New Jersey lost power
- PSE&G customers in the project area lost power for up to eight days
- NJ TRANSIT's rail service was severely affected for weeks leaving commuters stranded and facing hours of delays when relying on alternate forms of transportation

Limited Access to
Transportation Facilities



Stranded Commuters
at Penn Station, NY



Limited Rail Transport Under Emergency
Scenario - Restricted Access

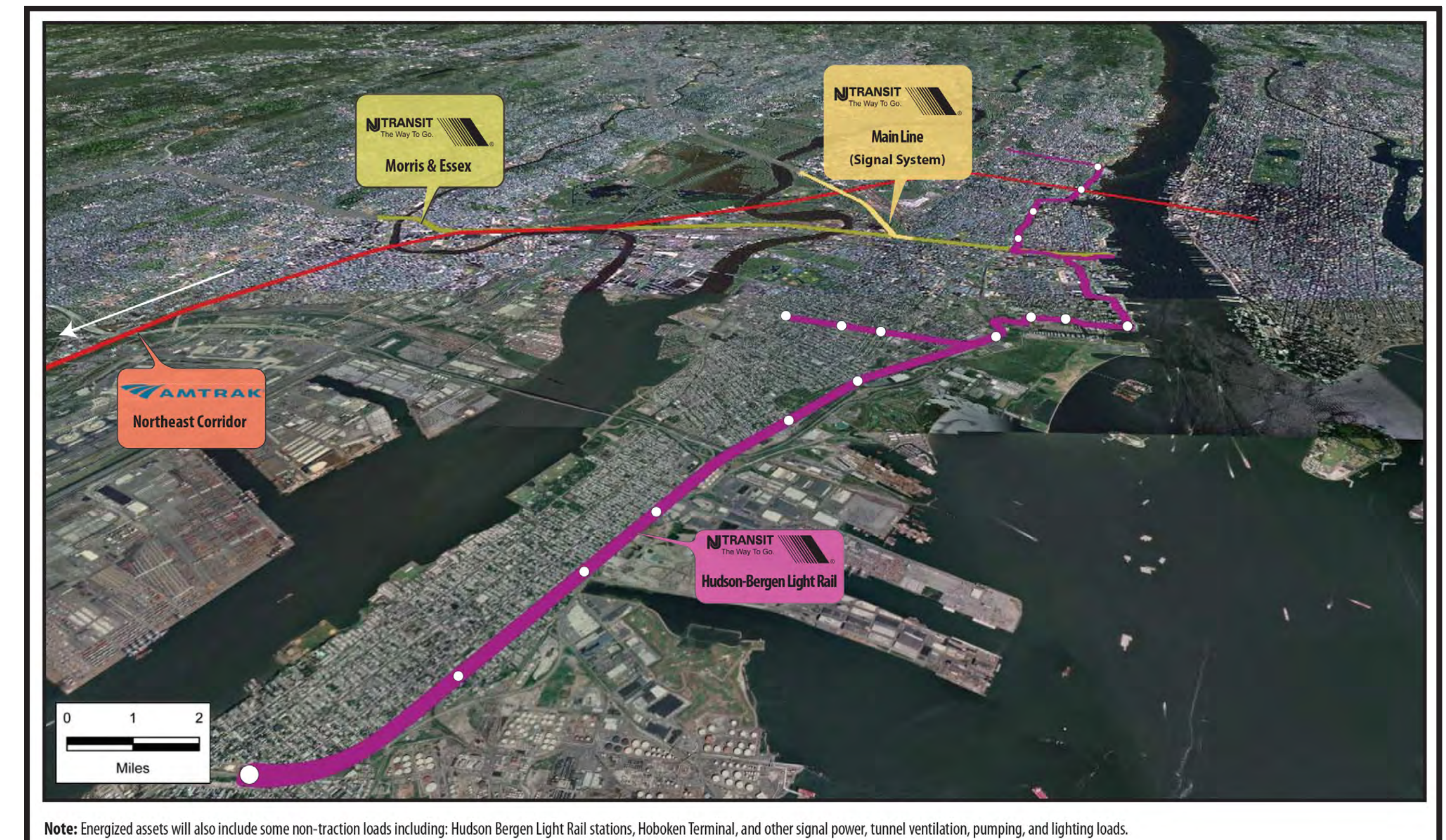


Ferries used as one of few
functioning transportation systems



PURPOSE & NEED

- Project will permit NJ TRANSIT to operate **emergency service** during power outages, on sections of:
 - Northeast Corridor
 - Morris & Essex Line
 - Main Line (Signal System)
 - Hudson-Bergen Light Rail System
- Project will maintain reliable **customer service** during emergencies
 - Over **143,000** commuters use the NJ TRANSIT rail system daily, including those who transfer to other regional public transportation systems
 - An average of **52,000** daily customers use NJ TRANSIT's Hudson-Bergen Light Rail



PURPOSE & NEED

- Project will **address** NJ TRANSIT's rail service **vulnerability** to power outages
 - NJ TRANSIT recorded 49 power outages from 2011 to 2013 (aside from Hurricane Irene and Superstorm Sandy)
 - Observed increase in intensity and frequency of **severe weather events** (April 2007 Nor'easter, Hurricane Irene 2011, Superstorm Sandy 2012, the Unnamed Thunderstorm 2015) impacting the commercial grid
 - North American Blackout of 2003 from computer glitch and compromised power lines

Satellite imagery from 2003 North American Blackout



© Photo by www.wect.com

PROJECT GOALS

- Project Goal 1** | Provide a highly reliable parallel power source to support the resilience of NJ TRANSIT's and a portion of Amtrak's public transportation services
- Project Goal 2** | Achieve economic feasibility and cost-effectiveness
- Project Goal 3** | Expedite project delivery
- Project Goal 4** | Minimize impacts to the natural and built environment

PROJECT BENEFITS

NJ TRANSITGRID project proposes to provide the path forward for NJ TRANSIT to advance Governor Murphy's Executive Order 28 for New Jersey's Clean Energy Economy

- **Net Zero Ready** - Design allows for the integration of carbon neutral power generation options like Renewable Natural Gas and hydrogen fuel cells as they become more commercially available
- **Resilient** - On-site power generation connected to the rail systems in times of emergency
- **Economic** - Reduces NJ TRANSIT's operating cost
- **Sustainable** - Solar offsets help decarbonize
- **Energy Efficient** - Highly efficient central power plant reducing generation from legacy coal-fired power plants
- **Air Quality** - Measurable and direct decreases in air pollutants (SO₂, NO_x and PM_{2.5}) and Greenhouse Gases (GhG) from high-emission generation facilities
- **Energy Independent** - Allows NJ TRANSIT to assert control over power supply and production decisions by prioritizing more efficient power generation

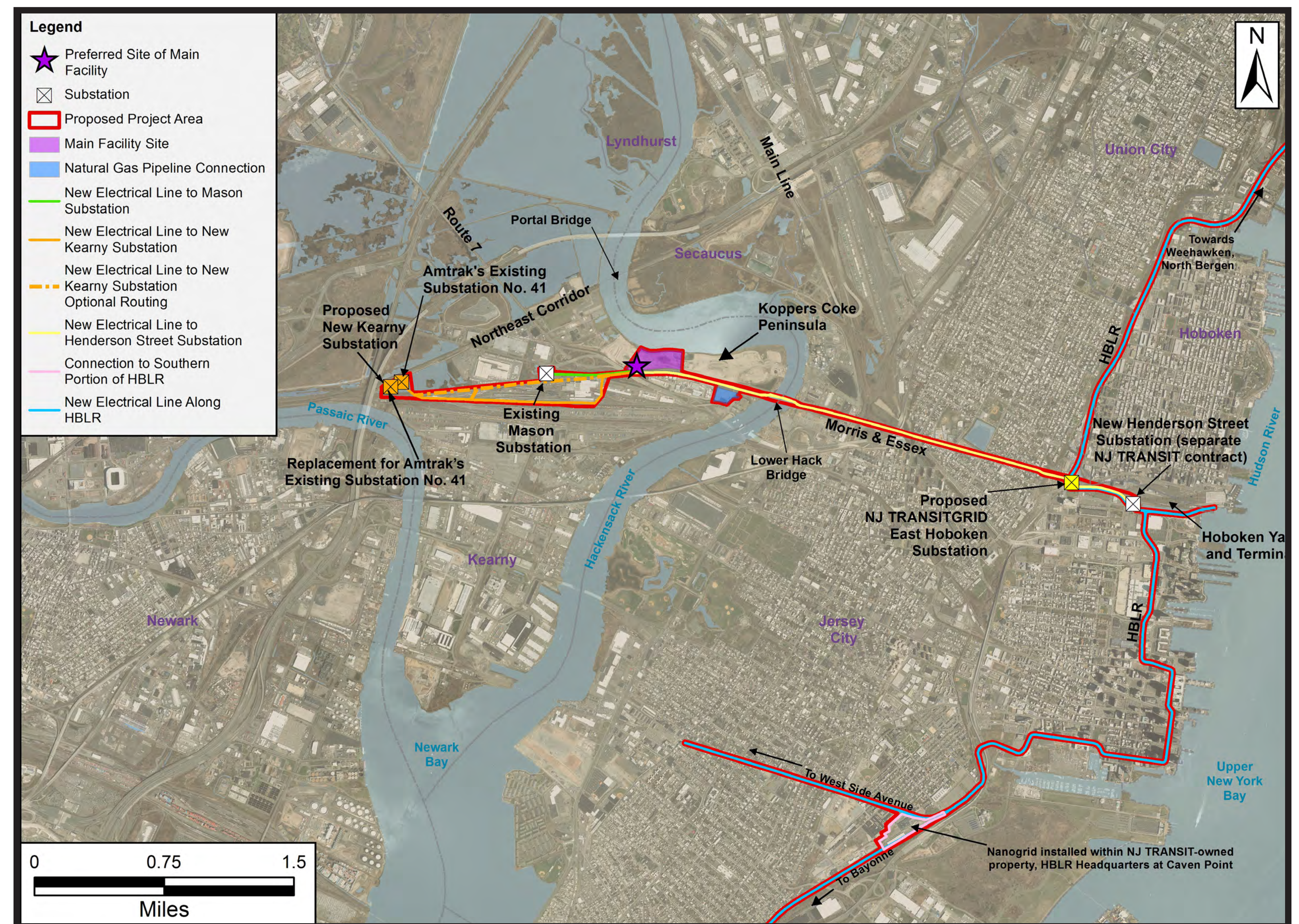
PROJECT DESCRIPTION

NJ TRANSITGRID TRACTION POWER SYSTEM

First-of-its-kind microgrid, generating up to 140 megawatts, for mass transit to provide highly reliable power support to NJ TRANSIT's core system

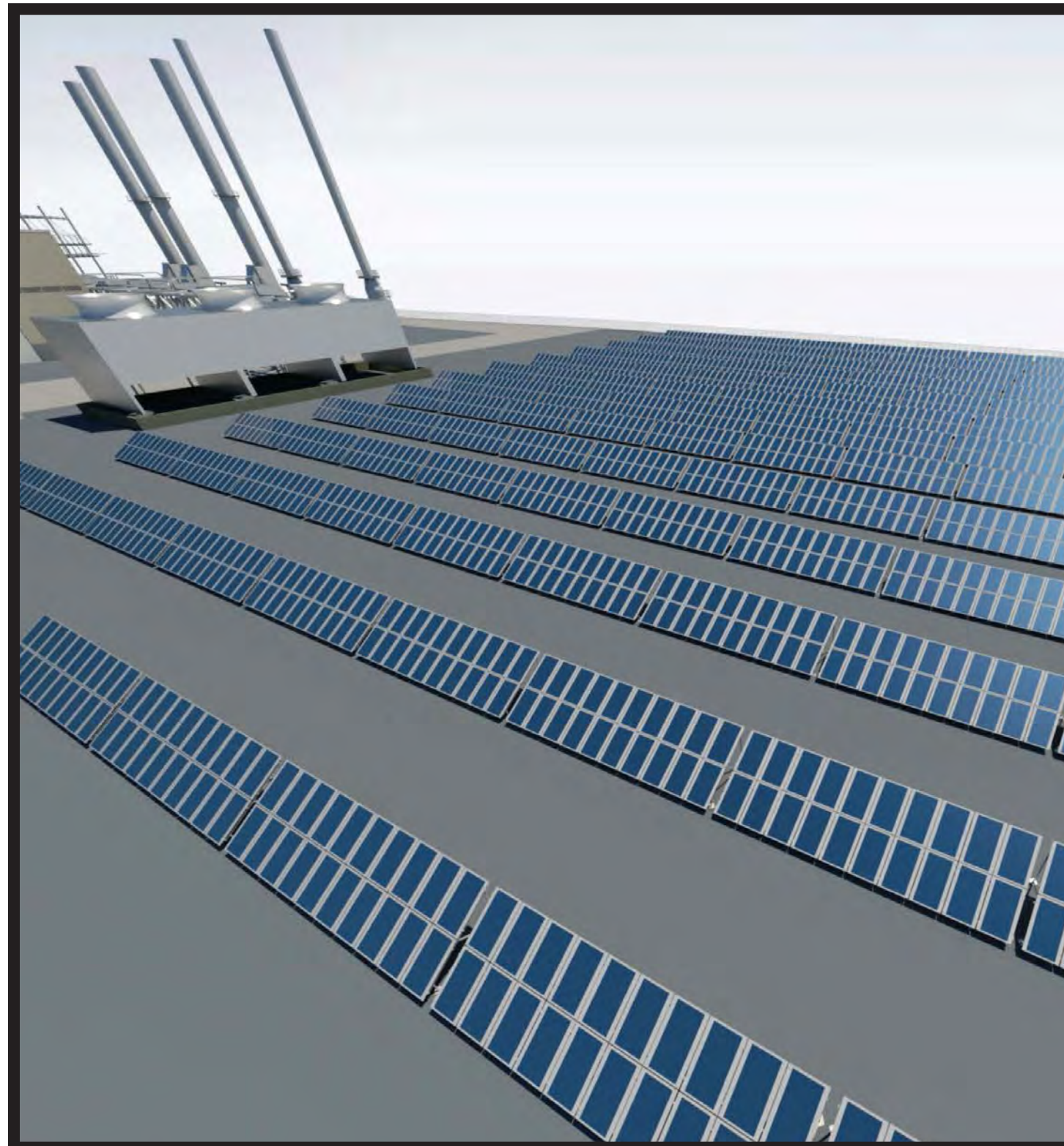
It includes:

- A natural gas-fired power generating plant – Kearny, NJ
- Transmission and distribution lines providing electricity to railroad substations in Kearny and Jersey City, NJ
- Electrical substations and other infrastructure supporting new facility

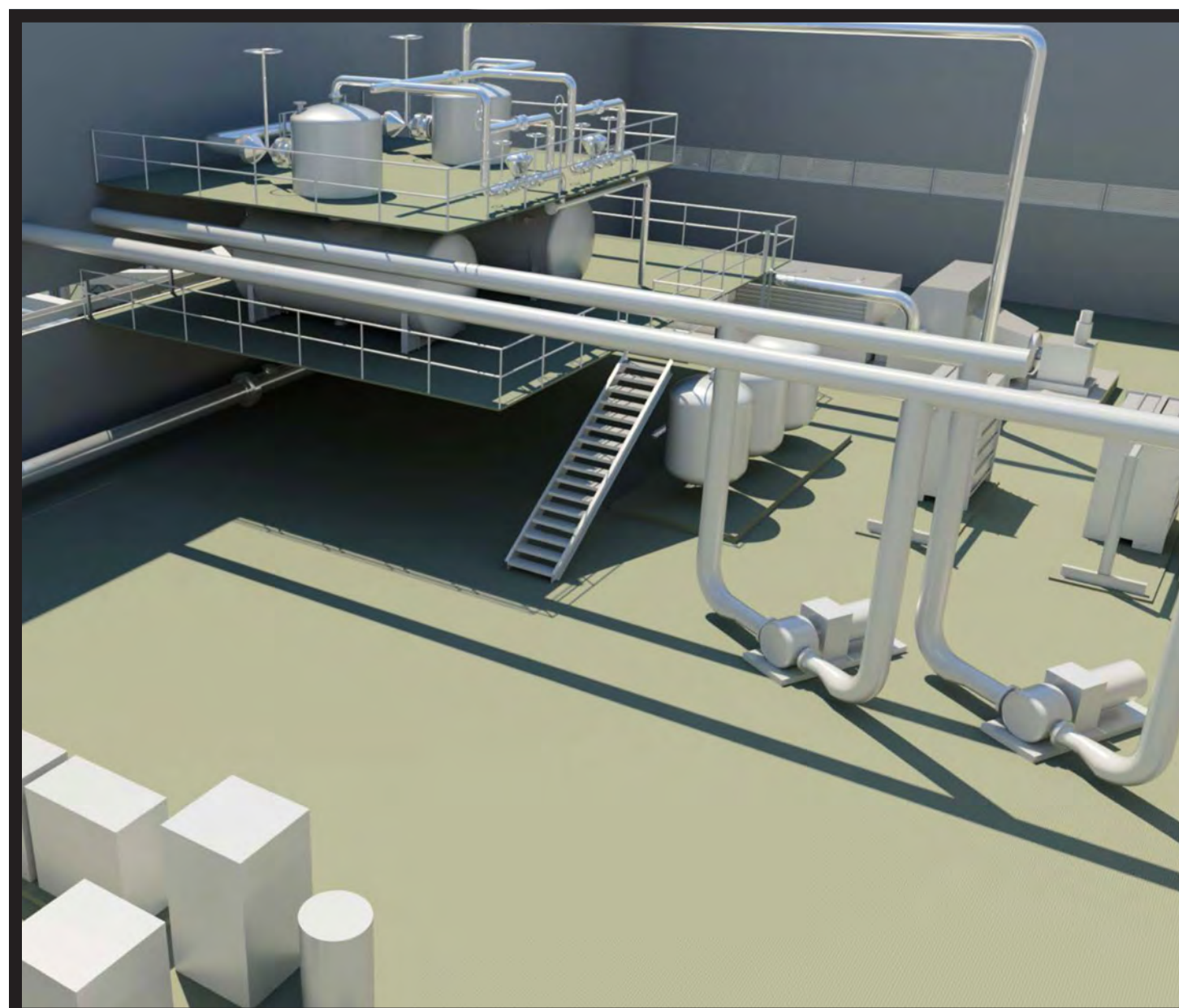
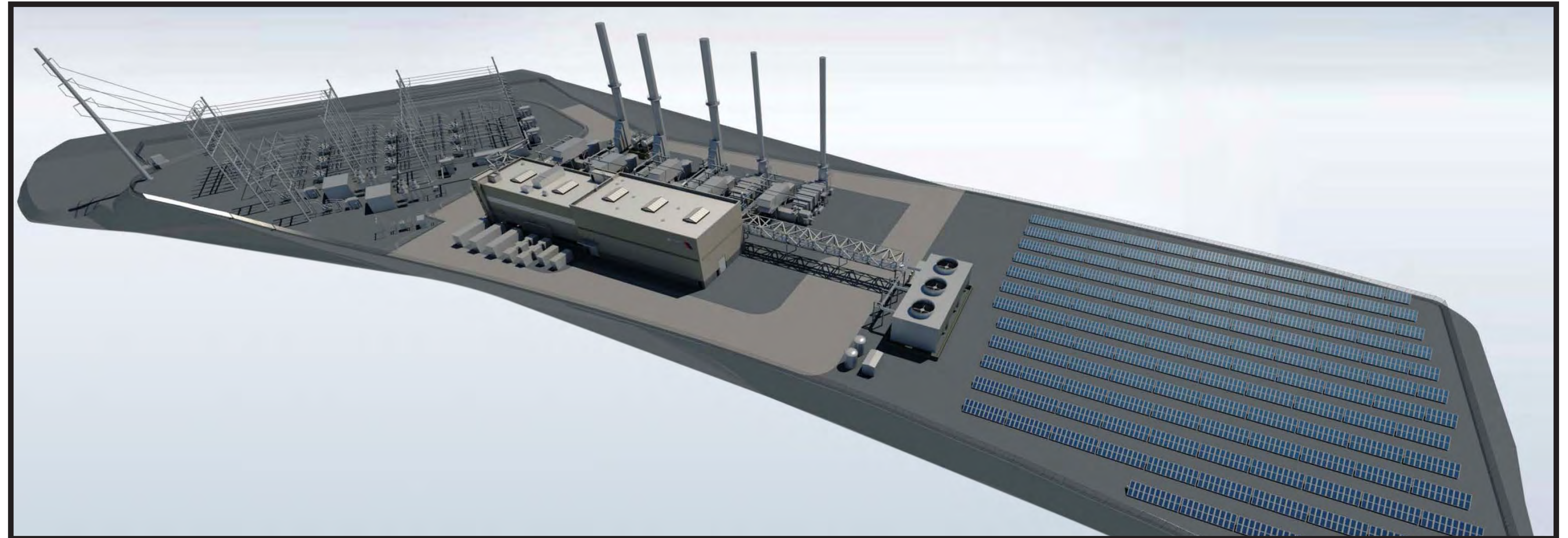


BUILD ALTERNATIVE

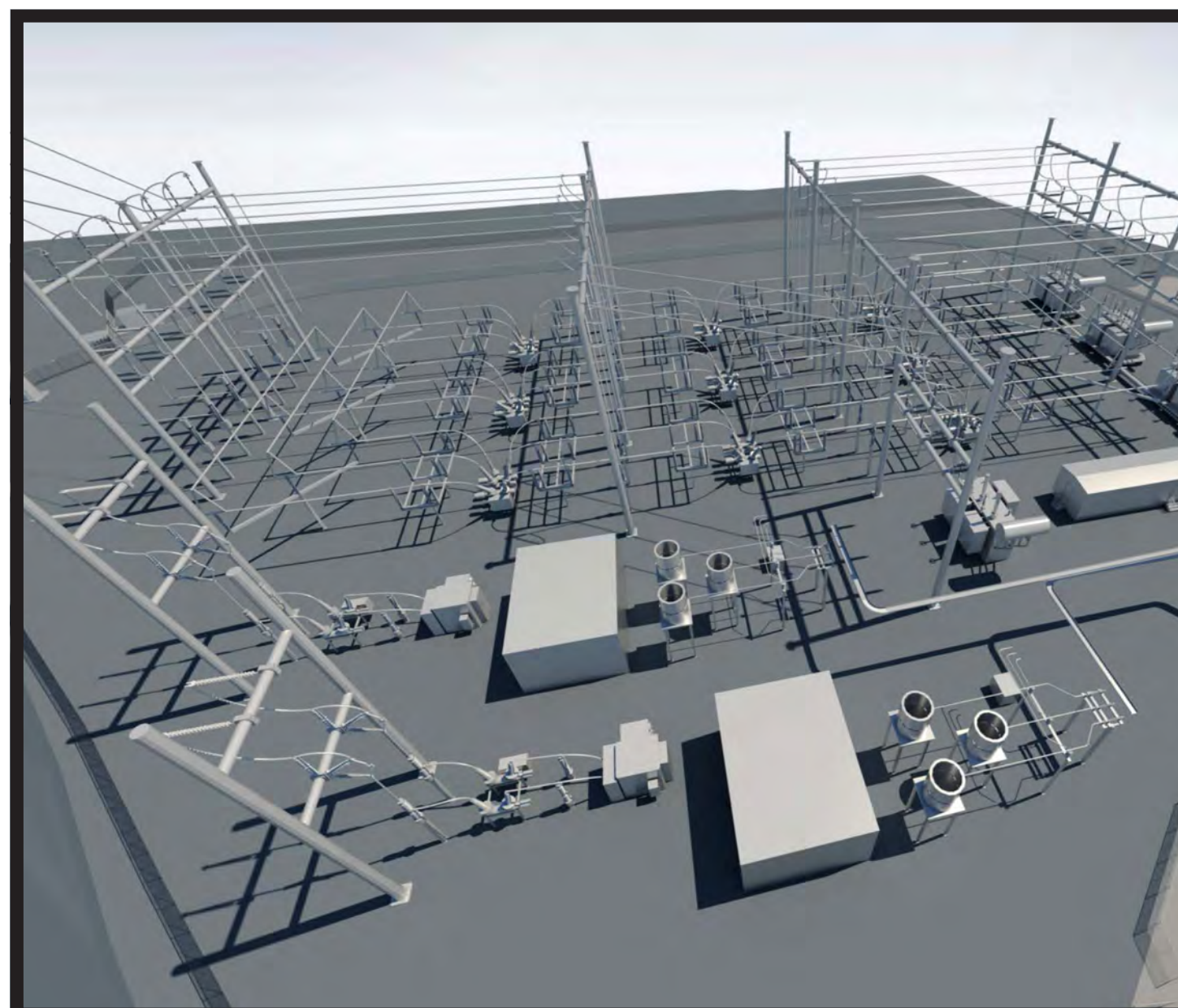
4-Acre Solar Facility



Central Power Plant (Main Facility)



Combined-Cycle Technology



Central Power Plant Substation



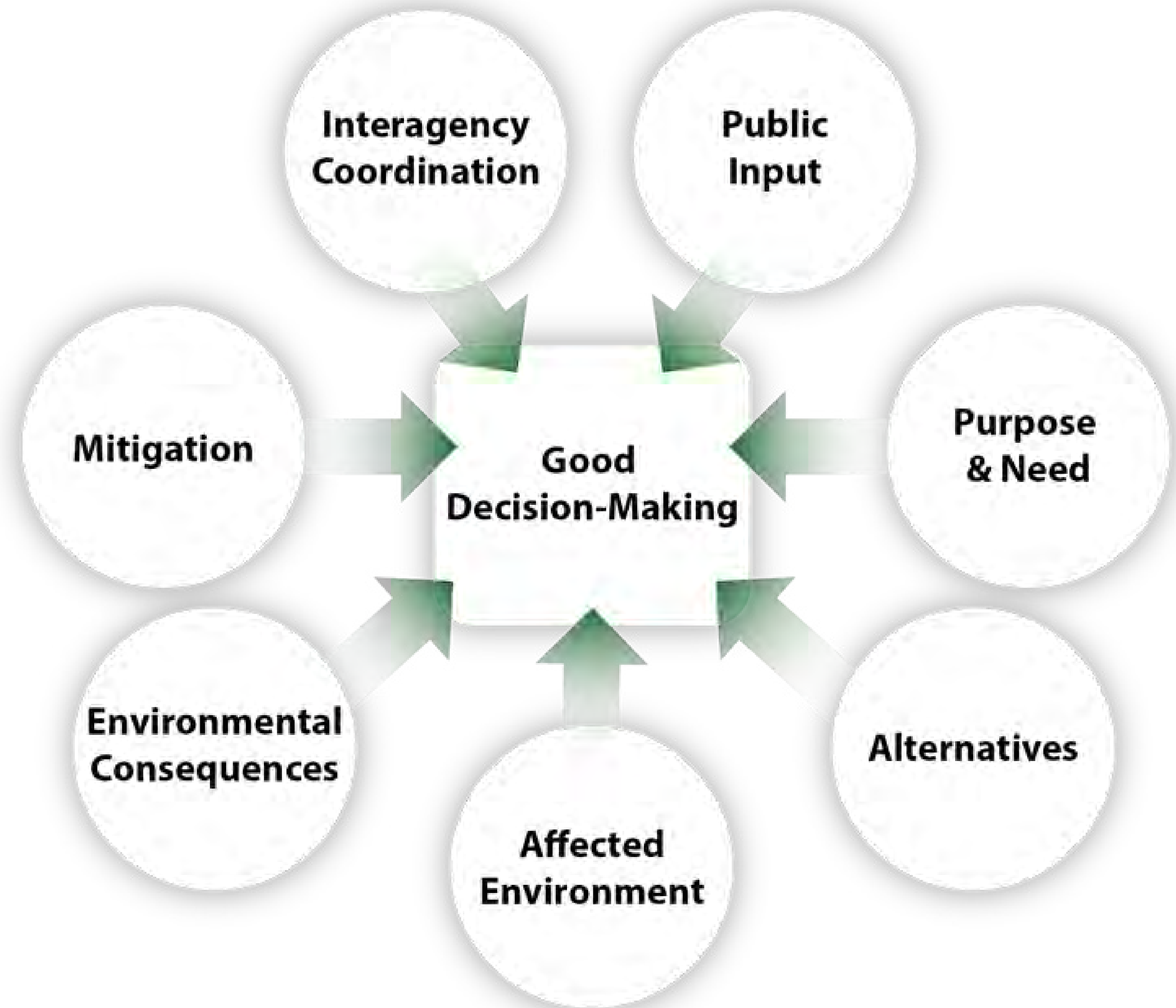
Monopoles

WHAT IS NEPA?

**NEPA = National
Environmental Policy Act**

NEPA Process

Helps decision-makers and public understand environmental affects of a project. Requires identification and analysis of potential environmental impacts for construction and operation of a proposed project.



RESOURCE AGENCIES

The following agencies have an active role in the environmental review process for the
NJ TRANSITGRID TRACTION POWER SYSTEM:

COOPERATING AGENCIES

- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency

PARTICIPATING AGENCIES

- Federal Emergency Management Agency
- Federal Railroad Administration
- U.S. Department of Energy
- U.S. Department of Housing and Urban Development
- Amtrak

- N.J. Board of Public Utilities
- N.J. Department of Environmental Protection
- N.J. Department of Transportation
- N.J. Office of Emergency Management
- N.J. Office of Homeland Security and Preparedness
- N.J. Sports and Exposition Authority
- Hudson County Improvement Authority
- Hudson County Planning
- Hudson County Soil Conservation District

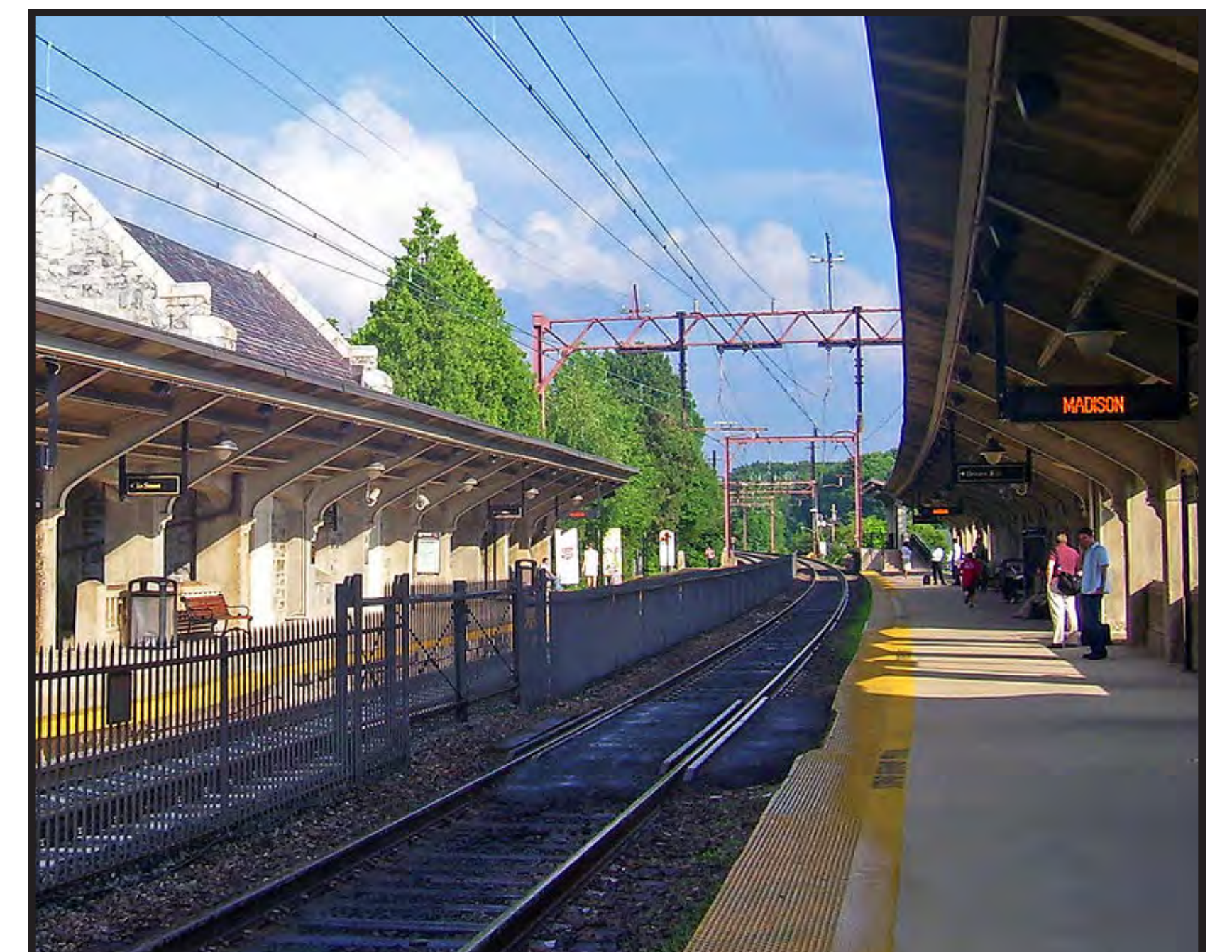
RESOURCES EVALUATED IN DRAFT EIS

- Land Use, Zoning, and Public Policy
- Community Facilities
- Socioeconomic Conditions
- Air Quality
- Greenhouse Gas Emissions
- Visual Quality
- Historic Resources
- Traffic and Public Transportation
- Noise and Vibration
- Natural Resources
- Soils and Geology
- Contaminated Materials
- Utilities
- Safety and Security
- Construction Effects
- Indirect and Cumulative Impacts
- Environmental Justice
- Section 4(f)*

* Note: Section 4(f) of U.S. Department of Transportation (USDOT) Act of 1966 prohibits USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use.

ENVIRONMENTAL BENEFITS AND IMPACTS

- **Natural Resources:** Approximately 2 acres of degraded wetlands would be impacted
 - Mitigation would contribute to restoring offsite wetlands within the Meadowlands and improve ecological function and value
 - Mitigation would support more than 285 bird species that migrate via the Atlantic Flyway and have been identified in the Meadowlands region, including more than 30 on the New Jersey T&E and species of special concern
- **Historic Resources:** Some project improvements are proposed within a historic district
 - Improvements are designed to be sensitive to the Historic District character
 - Mitigation: Affected historic elements would be recorded and displayed to educate commuters and general public



© Photo by Wikipedia*

ENVIRONMENTAL BENEFITS AND IMPACTS

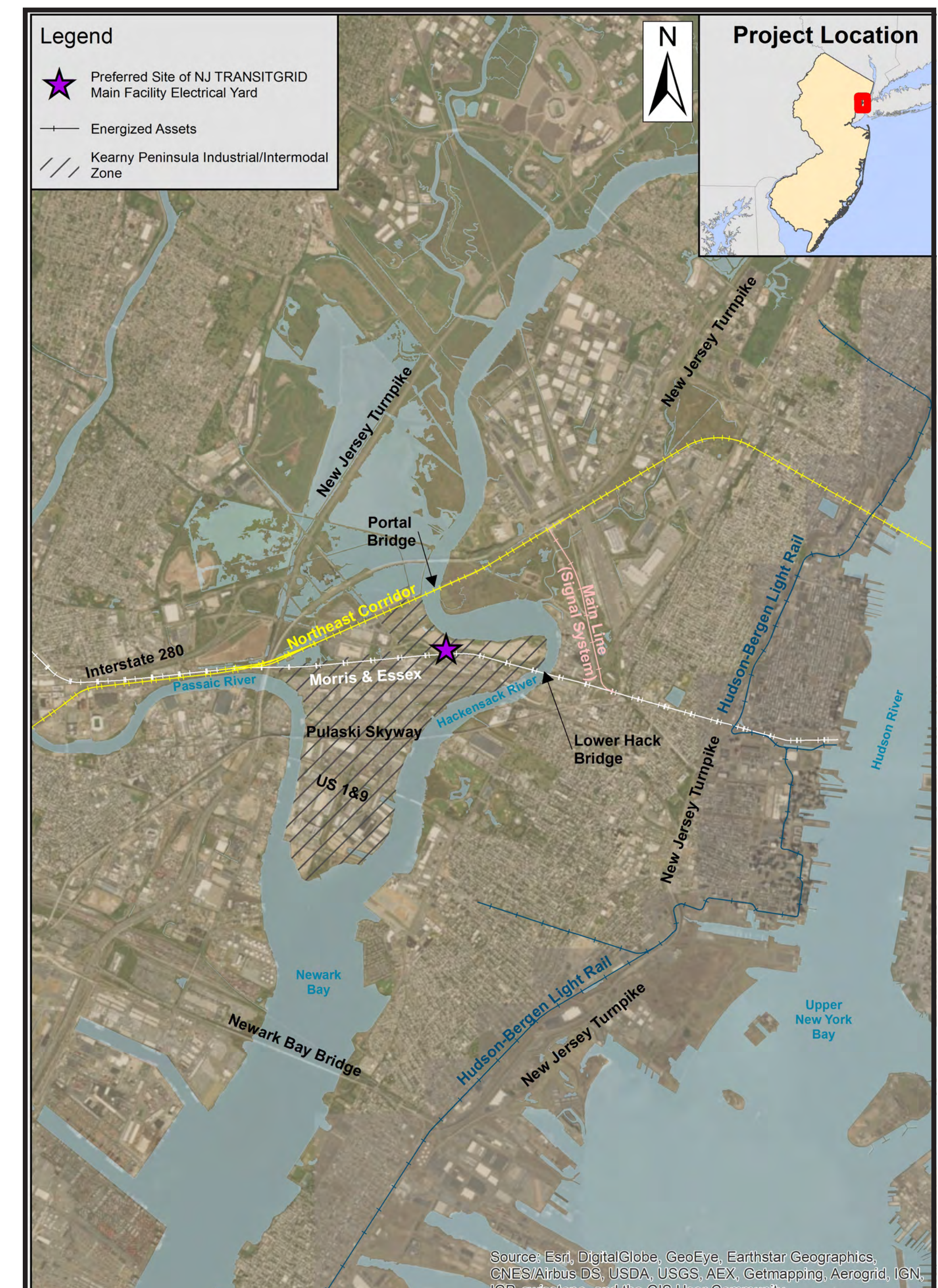
- **Air Quality:** State of the art emissions controls and resilient equipment would be used to maintain and monitor air quality:
 - The Generation Facility would utilize a variety of resilient technologies to generate and store power including combustion, flywheels and solar panels.
 - Emissions controls would meet or exceed industry standards. These controls include Selective Catalytic Reduction (SCR) and oxidation catalyst systems.
 - This modern facility would reduce our reliance on older less efficient power generation facilities that currently provide power to the regional electric grid.
- **Land Use:** Project would return a vacant brownfield site in Kearny peninsula to beneficial use.
- **Socio-Economic:** Project would create full-time employment opportunities in Main Facility operations, maintenance and ancillary services:
 - Project would provide a resilient transportation resource serving many environmental justice communities within the project area, allowing community members to travel locally to work, to school and to other resources that would otherwise be inaccessible during transportation grid outage.

HOW THIS PROJECT BENEFITS YOU

- Reliable electrical infrastructure to support immediate and long-term power needs for public transportation in the core service area:
 - Northeast Corridor from Penn Station, NY to New Brunswick, NJ
 - Morris & Essex Line from Hoboken Terminal, NJ to Maplewood, NJ
 - Hudson-Bergen Light Rail from North Bergen, NJ to Bayonne, NJ

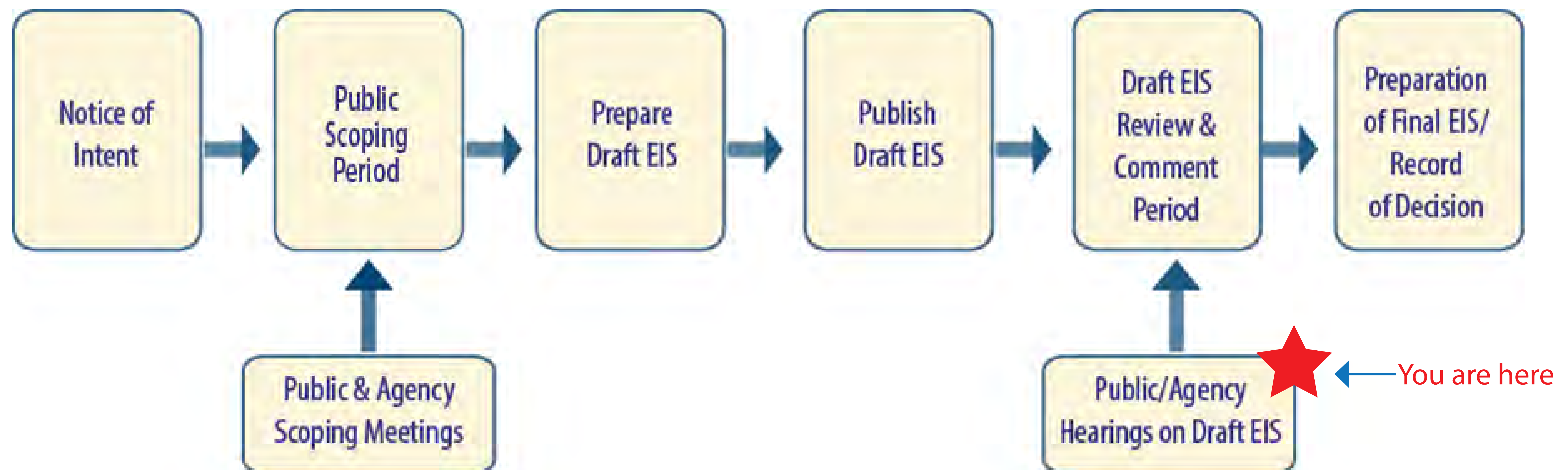


Rail Segments Energized Under Emergency Conditions



ENVIRONMENTAL IMPACT STATEMENT PUBLIC COMMENT PERIOD

YOUR OPINION MATTERS! The Draft EIS for the NJ TRANSITGRID TRACTION POWER SYSTEM is published and available for review and comment. Following the close of the public comment period on July 19, 2019, NJ TRANSIT will consider all substantive comments as we proceed to final design.



WE VALUE YOUR INPUT

How to submit your comments on the **NJ TRANSITGRID TRACTION POWER SYSTEM**

TO COMMENT THIS EVENING:

- Complete forms provided at the registration desk
- Register to speak on the record to the project team members
- Submit your comments to the stenographer

TO COMMENT OUTSIDE OF THIS PUBLIC MEETING:

- Visit Project website:
NJTRANSITResilienceProgram.com/contact-us
- Send written comments to:
NJ TRANSIT Resilience Program –
Capital Planning & Programs Department
One Penn Plaza East, 8th Floor, Newark, NJ 07105

Federal Transit Administration Region 2 Office
1 Bowling Green, Room 429, New York, NY 10004

DEIS Available for Review at:
NJTRANSITResilienceProgram.com/documents