

Leveraging Funding through Public/Private Partnerships

New England Railroad Club Expo 2006

Kerry-Jane King New York Power Authority



New York Power Authority

- State-owned non-profit public benefit corporation
- Largest state utility in the nation
- Provides power to government agencies and authorities, community-owned electric systems, private companies for economic development, and private utilities for resale
- Provides power for all public services in New York City and Westchester County, including ports and commuter railroads
 - Port Authority of New York and New Jersey and Metropolitan Transportation Authority are NYPA customers



Clean Transportation Program























Program Goals

- Promote clean transportation technologies that reduce fuel consumption and emissions, including electric-drive, anti-idling and emission control technologies
- Provide technical and financial support to customers in the demonstration of these technologies

Program Status

- NYPA has partnered with customers and stakeholders to place 800 electric-drive vehicles in service around the state
- Vehicles include trucks, buses, vans, passenger cars, neighborhood vehicles, and off-road vehicles and equipment
- NYPA has funded projects through grants and loans



NYPA Financing Grants

Budget

- About \$1 million annual budget for clean transportation projects
- Leverage NYPA funds with city, state, and federal grants and customer cost share
- Co-funding: NYCDOT, NYSDOT, NYSERDA, NESCAF, EPA, DOE, EPRI

Eligibility

NYPA customers

Funding Criteria

- Energy efficiency and emissions reductions
- Co-funding/cost share



NYPA Financing Loans

Budget

 Significant annual capital budget for energy efficiency projects, including transportation

Eligibility

NYPA customers

Funding Criteria

- Energy efficiency
- Loans recovered within life of equipment through energy/O&M savings – surcharge to electric bill
- Projects may be financed in full or in part
- Payback target: ten years



Railroad Project Opportunity









Howland Hook, Staten Island, New York

Project Objectives

- Lower emissions
- Reduction in fuel consumption
- Lower maintenance costs
- Reduction in noise pollution

Project Partners

New York Container Terminal
Port Authority of New York and New Jersey

Technology Options

- Hybrid-electric switch locomotive
- Locomotive idle reduction system diesel or electric
 - Automatic engine stop/start system
 - Auxiliary power unit
 - Shore power system

Project Status

- NYCT is currently exploring technology options
- NYPA has proposed to finance project



Other Projects Truck Stop Electrification



Hunts Point, Bronx, New York

Project Objective

 Eliminate engine idling through truck and refrigerated trailer electrification

Project Partners

- Hunts Point Cooperative Market
- NESCAF/Clean Air Communities
- Sustainable South Bronx

Technology

 IdleAire Technologies Corporation offboard truck electrification technology

Project Status

 Off-board electrification devices installed at 28 parking bays in 2002

Other Projects Hybrid-Electric Trucks





Queens, New York

Project Objective

Introduce hybrid-electric trucks into national delivery fleet

Project Partners

- Charmer-Sunbelt Group
- NYSERDA/NYCDOT (CMAQ)

Technology

- Azure Dynamics Corporation Super 7 hybrid-electric truck
 - Parallel hybrid system
 - Idle off/electric launch
 - DOCs

Project Status

Two trucks to be delivered August 2006



Other Projects Airport Ground Support Equipment Electrification



New York City, Albany

Program Objective

 Replace diesel and gasoline ground support equipment with electric equipment

LaGuardia Airport

- Project Partners
 - Delta
 - Queens Clean Air Project

Albany Airport

- Project Partners
 - Albany Airport
 - Delta
 - FAA (VALE Program)
 - NYSERDA

Technology

 Electric baggage tractors, belt loaders and aircraft tow tractors, and fast charge infrastructure

Status

Both projects to be completed in 2006



Contact Information

Kerry-Jane King New York Power Authority 123 Main Street White Plains, N.Y. 10601 (914) 390-8207 kerry-jane.king@nypa.gov

NYPA website: www.nypa.gov