

CASE STUDY

NJAW Canoe Brook WTP Solar PV System

SCOPE

New Jersey American Water contracted Edison Energy to conduct solar photovoltaic surveys on 16 of their New Jersey locations. Many of these locations were remote and forested, and contained large reservoirs as part of NJAW's water distribution system.

In Edison Energy's Demand Solutions team's efforts to complete the surveys in a comprehensive manner, the team conceptualized utilizing the vast surface area of the reservoir to host the photovoltaic system. NJAW agreed and initiated a pilot project to review the potential of a floating solar photovoltaic system.

This undertaking has been slated as the Northeast's first commercial floating photovoltaic system. Overall, the project was a complete design and development plan for an innovative approach to create a solar array that would float on an open body of water, with the rigor to endure the harsh conditions that are widely prevalent in the northeastern region of the United States.

PROJECT RESULTS & KEY METRICS:

Northeast's first commercial floating photovoltaic system

Estimated to produce approximately **136,000 kWh annually**

Unique design using special docking system

Engineering News Record Project of the Year
Honorable Mention, Innovation

CLIENT

New Jersey American Water

MARKET

Institutional

> Municipality

OFFERING

On-site Generation &
Renewables



CUSTOMER VALUE

The entire floating solar photovoltaic system is a 112 kW Direct Current system that is estimated to produce approximately 136,000 kWh annually. The design was especially unique, in that a specialized docking system that contained floats filled with polystyrene was used, allowing the docks to not only float, but withstand severe weather conditions during freeze/thaw cycles.

Edison Energy is an independent energy advisory and solutions integration company with the capabilities to develop and implement a broad portfolio of energy services for commercial, industrial and institutional organizations. We help customers reduce their energy costs, improve the environmental performance of their operations, ensure energy resiliency and manage exposure to energy price risk.

New Jersey American Water

is the largest water utility in the state of New Jersey, serving around two and a half million people in 183 communities in 17 counties throughout the state.

