

# METROPOLITAN SECTION

| Newsletter |

## Visit our Webpage

The section is working on creating a job opportunities page on our website. We will be providing future announcements regarding its development and improvements in the coming weeks. Visit our site and feel free to provide suggestions. We appreciate feedback as we strive to improve our ability to serve the engineering community of the Metropolitan Section.

<http://www.asmemetsection.org/>

## Volunteer

Help us continue the Metropolitan Sections tradition of being a vital resource to our members. The ASME Metropolitan Section is looking for energetic volunteers to support the efforts to deliver valuable support to our nearly 1000 members with technical meetings and other activities. It is a great way to meet people and further develop communication and organizational skills.

## ASME Metropolitan Section Technical Dinner Meeting Renewable Thermal Energy

ASME's Metropolitan Section hosted a Technical Dinner Meeting on Thursday, March 30<sup>th</sup>, 2017 at National Grid's Headquarters, One MetroTech Center in Brooklyn, NY. The subject of the evening's presentation was "Renewable Thermal Energy" and reviewed the current potential and technologies for renewable pipeline gas, solar, geothermal and other energy programs.

The meeting's speaker was Mr. Chong (John) Lin, the Program Manager for National Grid's New Energy Solutions Division, where he coordinates projects for energy development in New York State featuring renewable heating and cooling technologies along with distribution of these energy resources. John is a graduate of Clark University with a Master of Science Degree in Environmental Science and Policy and has extensive industrial experience in N.Y. City and State in programs to increase energy efficiency and resiliency in a diverse group of organizations. He also worked on the Smart Grid Project in Worcester, Massachusetts.

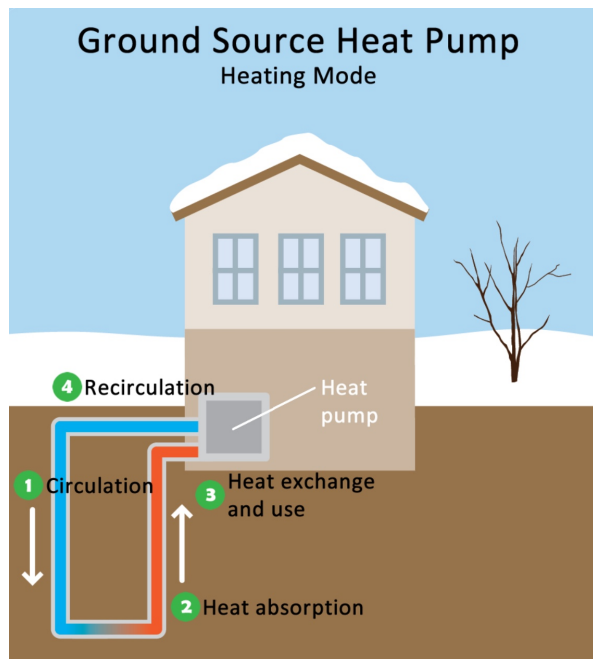
John Lin was introduced by the Met Section's Program Director Edward Ecock, P.E., who reported that 37 members and guests had registered to attend this section dinner meeting.

Mr. Lin began his presentation by welcoming all guests to National Grid's headquarters and reviewing the organization's programs, which serve 8 million customers in New York and the Northeast, and, as part of an International Energy Company, serves 11 million customers in Great Britain. In these areas the energy market is rapidly evolving into a customer driven format primarily due to competition from other organizations. In this situation it is helpful to review National Grid's response to the widespread damage and flooding resulting from Hurricane Sandy a few years ago, where its efforts were successful in maintaining quality service with resiliency, low-cost customer billing with competitive pricing, environmentally sound performance throughout the service area, all of which is typical of an organization providing valuable corporate stewardship, which National Grid provides.

Currently National Grid is concentrating on promoting its Smart Grid program for sustainable gas networks in its New York areas including the following demonstration projects:

- The Buffalo Niagara Medical Company Connection
- The Clifton Park Installation in the Albany area
- The Potsdam, N.Y. microgrid connection with Clarkson University
- Several geothermal projects on Long Island
- Newtown Creek Renewable Gas Project in partnership with the N.Y. City Department of Environmental Protection
- The proposed upstate Niagara Mohawk remote energy delivery system for 732,000 buildings located 1000 ft from existing gas mains.

Among the most advanced technologies employed by National Grid are the geothermal systems which use heat pumps to exchange energy with the essentially constant temperature of the deep underground earth. These closed loop systems provide both heating and cooling in one unit, typically with 70% of energy used for heating and 30% used for cooling, with one-fifth of the overall energy used for waste control with long life expectancy consistent with future developments and environmental requirements. These geothermal systems provide benefits to both the gas utility and electrical utility connections with high efficiency. Although primarily located in Suffolk County, Long Island, National Grid has also expanded its application to foreign installations such as The Enbridge System in Toronto, Canada.



The Question and Answer Period was equally informative. Several attendees contrasted National Grid's programs with proposed systems by Consolidated Edison and pointed out that propane usage is common in upstate New York communities.

ASME's Metropolitan Section thanks Mr. Lin for his informative presentation.