



Case Study: Community

INDIAN POINT ENERGY CENTER

SITUATION:

ATI Systems of East Boston, MA was selected to provide a complete emergency warning system for the 10-mile Emergency Planning Zone (EPZ) surrounding the Indian Point Energy Center in Buchanan, NY. Operated by Entergy, Indian Point is a nuclear facility on the east bank of the Hudson River with unique safety requirements mandated by the Energy Policy Act of 2005 and the U.S. Nuclear Regulatory Commission. Indian Point needed a reliable system to alert the public in case of any emergency that could affect the surrounding communities. ATI Systems' extensive installation is one of the largest mass notification systems in the world covering four New York counties and a wide geographic area of 10 miles in radius. The ATI system will provide audible alert tones and intelligible voice commands in certain areas via its outdoor speaker system in case of any hazardous event requiring immediate action.

SOLUTION:

ATI Systems designed, manufactured and installed a unique, complete, CAP-compliant system using its proprietary acoustic model to ensure sound audibility throughout the entire EPZ surrounding Indian Point Energy Center. This is the first state-of-the-art siren system in the country to use redundant communication paths and redundant control points for system communication. It was approved by FEMA for use in August of 2008.

The System includes:

- 11 Control Stations (CS) for activating, (silent) testing and monitoring the alerting units with fully functional tone alert, and live and pre-recorded voice messaging capabilities. Two of the CS are located at the Indian Point Energy Center and are capable of controlling the entire system, including the simulcast communication system. Each county controls its own alerting units through two (or three in the case of Westchester County) strategically-placed CS. Each county can also monitor the status of neighboring counties' CS. In the case of any failure of one of the CS, authorized personnel from neighboring counties can activate the other alerting units
- A flexible, wireless radio frequency communication system, along with a redundant wireless Internet communication system to ensure the highest system robustness and reliability
- An advanced simulcast radio frequency communication system consisting of four tower locations with complete backup power to operate for more than 24 hours without ac power. The simulcast system communicates between its four towers using microwave communication and a backup T1 communication
- 172 High Power Speaker Stations with 3200 watts of continuous audio output power installed across four New York counties. 77 sirens are located in Westchester County; 56 sirens are in Rockland County; 23 are in Orange County and 16 are in Putnam County
- Integration with a third party vendor to send emails and pager messages, as well as pre-recorded voice messages, to pre-defined addresses to announce any system activation or failure
- A rechargeable 24-hour battery backup for all field equipment in case of AC power loss

ABOUT ATI SYSTEMS:

Acoustic Technology, Inc. (ATI Systems) designs, manufactures and installs reliable emergency warning and notification systems for the Campus, Community, Industrial and Military markets. Incorporated in Massachusetts in 1981, ATI Systems developed an innovative wireless system that provides audible and visual warnings via a simple and compact hardware design, user-friendly software and the latest advances in communication methods, including radio frequency, IP Ethernet and satellite technology. Through acoustic design and modeling, ATI Systems ensures proper sound coverage and superior voice intelligibility in both outdoor and indoor areas to ensure the safety of communities worldwide. To learn more about ATI Systems, visit <http://www.atisystem.com>.



ATI Systems Installation in the Emergency Planning Zone (EPZ)