



## NEW YORK'S STRICT NOISE REGULATIONS A PERFECT FIT FOR ABB TRANSFORMERS

An ABB ultra-low-noise transformer en route to ConEd for use in New York City. These technologically-advanced transformers do not need Sound Enclosures or Sound Panels, and satisfy New York's stringent noise regulations.



TAW®, founded in 1921 has grown to become one of the largest rotating equipment repair houses and Kohler generator distributors in the country. We have 13 locations in FL & GA. We are currently looking for candidates for the following positions:

- o **Switchgear Technicians- Lakeland, FL**
- o **Switchgear Estimator- Tampa, FL**
- o **Industrial Switchgear Product Specialist- Tampa, FL**
- o **Equipment Sales Specialist - Tampa, FL**

TAW® offers a great salary and benefits. Qualified candidates may apply on our website: [www.tawinc.com](http://www.tawinc.com); e-mail a resume and salary history to [ellen.donegan@tawinc.com](mailto:ellen.donegan@tawinc.com) AA/EOE. DFWP

ABB has developed the technology for ultra-low-noise power transformers to help Consolidated Edison (ConEd) meet the newly enforced noise regulations of New York City, considered by many to be the toughest in the world.

The transformers are the successful result of an intensive research and development effort over a number of years by a team of ABB engineers and scientists in the United States, Sweden, and Germany. Included in the team were experts in the fields of vibrations as well as sound generation, transmission, and radiation.

The project also involved the development of appropriate measuring methods of ultra-low-noise levels at discrete frequency components, as well as appropriate trans-

**Continued on Page 48**

# Waterpower XVI

**New Roles for Hydro  
in a Changing World**

July 27–30, 2009

**Spokane  
Convention Center**

**Spokane,  
Washington USA**

**[www.hcipub.com](http://www.hcipub.com)**

“Every great advance in science has issued from a new audacity of imagination.”

— J. Dewey

## Mark Your Calendar.

With a foundation of carefully reviewed technical papers, Waterpower XVI provides a unique learning opportunity for hydropower professionals of every level.

Individuals new to hydro can receive the training needed to further their professional development. Hydropower veterans can expand their knowledge on specific areas of interest. All attendees will benefit from sharing proven strategies and lessons learned.

For complete program details, visit

**[www.hcipub.com/wp](http://www.hcipub.com/wp)**

## “Near Nature. Near Perfect.”

This slogan speaks directly to the outdoor amenities of Spokane, Washington. Here are just a few suggestions for making the most of your trip to the area.

### Washington Wine Country

Two of the most well-known wine areas of eastern Washington—Yakima and Walla Walla—are within easy driving distance. Both feature a range of dining and lodging options.

### National Parks

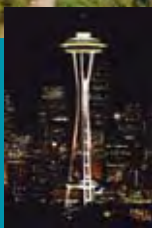
Four of America’s most spectacular national parks are within a day’s drive: Mount Rainier, Olympic, Yellowstone, and Glacier.

### Seattle, Washington

Visit the world-famous Space Needle...experience Pike Place Market and the Seattle Waterfront...take a ferry to one of the nearby islands ...and more!

### Vancouver, British Columbia

Already recognized as one of the world’s most spectacular cities, Vancouver is now polishing itself even further in preparation for the 2010 Winter Olympics.



## Noise Regulations

Continued from Page 46

former mounting. The newly developed technology has set new industry benchmarks for transformer noise emissions.

Dr. Ramsis Girgis, the leader of the development effort with ABB, said, "This achievement is a testimony that true technology advancements can only be achieved through vision, hard work, persistence and physics."

The noise requirements of these ConEd transformers are not only 20-25 decibels lower than is typical for this size of transformers, but limits were also set on the noise level of each frequency tone when the transformers are operating at full load and over-excitation.

In addition to meeting ConEd's stringent standards for noise, ABB had to ensure that the transformers meet tight limits on weight, width, and height to permit transportation in Manhattan and other areas of New York City. The transformers must also comply with technical requirements like significant

overload and extremely tight limits on the range of transformer impedance.

ABB delivered the first ultra-low-noise transformer to ConEd in 2005. This transformer had to be provided with a sound enclosure. As the ABB team developed the technology further, subsequent transformers delivered to ConEd did not need a sound enclosure and, in fact, were much smaller in both size and weight. Several of these transformers have been delivered to ConEd and a number of them are already in operation. Additional transformers of even lower noise levels are scheduled for delivery late 2008, early 2009.

The ultra-low-noise transformer technology resulting from this intensive development effort is now being used to produce optimum designs for low and ultra-low-noise transformers for other noise-sensitive metropolitan areas around the world.

These accomplishments would not have been possible without the support that the ABB technical team received from many in the ABB St. Louis facility and globally. The challenge and cooperation received from the ConEd technical team, headed by Donald Chu and Harold Moore, provided exceptional commitments throughout the technology development process that were pivotal.

Dr. Ramsis Girgis, the leader of the development effort with ABB, said, "This achievement is a testimony that true technology advancements can only be achieved through vision, hard work, persistence and physics."

## platts 4th Ontario Power Forum

March 25–26, 2009 • Metropolitan Hotel Toronto • Toronto, Ontario

Register by February 18, 2009 and SAVE \$300

Ontario's strategy for power market stability and how procurement process evolves. How do large and small developers and financiers pursue and try to help Ontario's supply debacle? Platts 4th Ontario Power Forum is for the power developer and investor, providing innovative case studies and interactive sessions with senior executive-level decision makers.

- **Planning, conservation, generation development** — OPA's ambitious programs
- Conservation initiatives; aggressive **demand response** and **IPSP 2010 targets**
- **Supply and market-based pricing** — Securing the generation mix/supply
- Will Standard Offer be expanded to cover **small cogeneration**? How much **wind** can Ontario cost-effectively integrate?
- **Coal retirements** — Deadlines for shutting down coal plants
- **Financing new infrastructure projects** — Investment in transmission/distributions systems
- **Reliability and new system demands** — New transit systems, condo towers, and public awareness

### 3rd Annual Ontario Power Forum attendees include:

Ministry of Energy • IESO • Bruce Power • Sithe Global • Kruger Energy Inc. • Invenergy LLC • OPG OPA • Brookfield Power • Minnesota Power & Light • UBS SA • Ontario Teachers' Pension Plan • TransAlta Enbridge Gas Distribution • National Grid • Pristine Power • Competitive Power Ventures • IESO • New York ISO • Midwest ISO • Toromont Energy Ltd. • Stikeman Elliot LLP • BP Canada • Natexis Banques Populaires TD Securities • Fortis Capital Corp.

For a complete agenda or to register and SAVE \$300, please visit us online at [www.events.platts.com](http://www.events.platts.com) or call us at 866-355-2930 (toll-free in the US) or 781-430-2100 (direct).

For more information and speaking opportunities, contact:  
Stacie Johnson, Tel: 781-430-2115  
[stacie-johnson@platts.com](mailto:stacie-johnson@platts.com)

For sponsorship opportunities, contact:  
Josh Vernon, Tel: 781-430-2113  
[joshua.vernon@platts.com](mailto:joshua.vernon@platts.com)

For media inquiries, contact:  
Gina Herlihy, Tel: 781-430-2109  
[gina\\_herlihy@platts.com](mailto:gina_herlihy@platts.com)

Registration Code: PC913ET

The McGraw-Hill Companies