

BAPG Symposium Presentation abstracts

WIND POWER IN NEW YORK

The presentation will provide a general overview of the market and regulatory conditions that has made wind power a feasible alternative for commercial power generation in NYS. The discussion will include a review of the regional energy market and fuels and how wind energy fits into the regional power supply. Additionally, the presentation will discuss the challenges in bringing a proposed wind power facility from proposal to construction including permitting issues, perceived and real environmental impacts and a statewide “grass roots” opposition to wind power.

Mark J. Colmerauer
Senior Project Manager/Geologist
American Consulting Professionals of New York, PLLC

NATURAL GAS DEVELOPMENT IN LAKE ERIE, THE CANADIAN EXPERIENCE

Natural gas exploration in the Canadian waters of Lake Erie started in the early 1900’s. The presentation will discuss the history of this development, the challenges involved, current technology and production, regulatory controls and the future of exploration and development.

Joseph Van Overberghe
Executive Director
Ontario Petroleum Institute

STATION REBIRTH NRG ENERGY HUNTLEY GENERATING

The presentation will cover NRG Energy’s \$1.5 billion program to upgrade it’s Tonawanda facility and increase generating capacity to 750 megawatts. This includes replacing current old technology with new clean coal Integrated Gasification Combined Cycle technology. This project will also help reduce New York’s energy dependence on natural gas. The full scope of this project will be discussed.

Ken Budreau
Vice-President of Development Northeast Region
NRG Energy, Inc.

Hydropower: The Construction And Operation Of The Niagara Power Project

In this topic will discuss not just an overview in general; but also some of the challenges faced in initial construction and present capacity upgrade work of the NYPA powerhouse(s) including the geologic forces that have been and continue to be structurally and mechanically compensated for to assure reliable operation.

Edward G. Szpala, P.E. - Biographical Information:

Construction Superintendent - New York Power Authority Project Management Niagara Power Project

Responsible for Robert Moses Upgrade Program

29 Years with NYPA holding various operation and engineering positions.

Licensed Professional Engineer State of NY

Graduate of SUNY College at Buffalo

Member of NY Society of Professional Engineers

Member of National Society of Professional Engineers Western NY

native Member in various Western NY Ethnic and Social organizations

OUR ENERGY FUTURE: BUSINESS AS USUAL WON'T WORK

This talk will provide basic facts about U.S. energy use and what our over-reliance on fossil fuels is doing to us and to our planet, with emphasis on the urgent problem of climate change. The good news is that there are obvious solutions. The bad news is that we aren't pursuing them fast enough. And the clock is ticking.

Walter Simpson - Biographical Information:

Walter Simpson is director of the UB Green Office of the University at Buffalo (SUNY Buffalo) and holds the position of University Energy Officer, one he has held since 1982.

He provides leadership for a campus energy program credited with over \$100 million in savings over 25 years.

He was project manager for UB's \$17 million comprehensive energy project with CES/Way International (now Sempra Energy Solutions) which was awarded "Energy Project of the Year" by the Association of Energy Engineers (AEE) in 1997.

In 2001, Walter was inducted in the AEE's Energy Manager's Hall of Fame.

He holds masters degrees in philosophy and environmental studies, and is a Certified Energy Manager (C.E.M.), Certified Lighting Efficiency Professional (C.L.E.P.), and a LEED Accredited Professional.

Walter is active in the community as an environmental advocate, educator, and community organizer whose current project involves working with others to organize a local climate action coalition to address the problem of global warming. Walter does a month commentary on WBFO FM 88.7 called "Reality Check." He and his family live in a super-insulated passive solar home in Amherst.

The Maple Ridge Wind Farm

The Maple Ridge Windmill Farm is located on the Tug Hill Plateau in the town of Lowville, New York. The Site consists of 120 windmills, and when fully constructed will produce approximately 200 MW of electricity – enough to power 59,400 homes. The Maple Ridge project (\$320 Million) is the largest windmill project east of the Mississippi River. Approximately 23 miles of access roads were required for the windmill project. This talk will focus more on the geotechnical aspects of constructing an energy project such as this, versus the energy generation once completed.

Martin P. Derby P.G, C.P.G
Malcolm Pirnie, Inc.

Reducing Energy Usage Through Low or No-Cost Energy Solutions

Energy conservation efforts at commercial, industrial, and academic buildings typically consist of installing high-efficiency motors and lighting. Occasionally there is mention of turning off the lights when leaving for the day. However, there are several non-traditional methods to reducing natural gas, electricity, and heating oil consumption that are often overlooked because of the savings achieved from any one effort is regarded as too small to be economical to implement. However, these efforts in fact consist mostly of low-cost and no-cost options. The cumulative effect of these efforts can usually lead to a substantial cost reduction, far surpassing the implementation capital costs. This presentation will explore some of the engineering-based analyses that can be conducted to further reduce energy consumption without reduction in the quality of a buildings indoor environment.

Jon Nickerson: Biographical Information
E&E Environmental

Mr. Nickerson is currently a sustainability project manager for Ecology & Environment, Inc. of Lancaster, New York. He has conducted energy reduction projects for an array of facility types, including academic, commercial, industrial, and business office buildings.

Making Moonshine: Ethanol Production of WNY

Ethanol has begun to emerge, on a nationwide scale, as a viable alternative for reducing our thirst for traditional fossil fuels, most notably from overseas sources. The impact of this emergence has been seen in Western New York, as plans for construction of several ethanol production facilities have been released. This presentation will cover a general description of plans for local ethanol production facilities, typical ethanol production processes, the various environmental concerns associated with siting and permitting of these facilities, and the future of ethanol production.

Joel Harden and Jerel Bogdan
Malcolm Pirnie, Inc.