

## ENERGY SYMPOSIUM

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### HYDROPOWER: THE SENECA PUMPED STORAGE PROJECT

Ron Kovach, First Energy Corporation

**ABSTRACT:** The Seneca Pumped Storage Plant provides 451 MW of electrical energy at the Kinzua Dam, Warren PA. A brief history of this project will be presented, including some rarely seen construction photos. Major pieces of equipment are described individually and also how they work together. Finally some unique aspects of operation and maintenance are explored.

**ABOUT THE AUTHOR:** Mr. Kovach received his B. S. in Mechanical Engineering from The Ohio State University. He holds a M. S. in Mechanical Engineering from Cleveland State University. He has been with FirstEnergy and a predecessor company since 1982. For the last 10 years he has supported the Seneca Pumped Storage facility as a technical expert, project manager and outage coordinator. He has published articles in *Power* magazine, ASME Journal, and the International Journal of Energy.