

WORKSHOP on

Electric Utilities and Water

Emerging Issues and R&D Needs

July 23-24, 2002

Pittsburgh Airport Hyatt Hotel

Pittsburgh, Pennsylvania



sponsored by

U.S. Department of Energy
Office of Fossil Energy
National Energy Technology Laboratory



Sandia
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WORKSHOP on ELECTRIC UTILITIES AND WATER

Workshop Needs and Objectives

Electricity production requires a reliable, abundant, and predictable source of water, a resource that is in limited supply in parts of the United States and much of the world. The electricity industry is second only to agriculture as the largest domestic user of water, accounting for 39% of all freshwater withdrawals in the nation, of which 71% is used in fossil-fuel-based electricity generation.

Coal, the most abundant fossil fuel, currently accounts for 52% of U.S. electricity generation, and each kWh generated from coal requires over 3 gallons of water to produce. That means that U.S. citizens may indirectly depend upon as much water turning on the lights and running appliances as they may directly use taking showers and watering lawns.

As a growing economy drives the need for more electricity, so will it increase pressure on the Nation's water resources. The demand for water by the electric-utility sector will compete with demands from other sectors of the economy. As such, the availability of adequate supplies of water to produce electricity and the impact of power plant operations on water quality are receiving increased attention.

The purpose of the workshop is to provide a forum for discussion of current and emerging water issues that could impact electricity generation in the United States. Your participation in the workshop will provide insight into the depth and breadth of these issues and identify key technical and scientific research needs and opportunities for government – industry partnerships.

Keynote Speaker

The U.S. Department of Energy, National Energy Technology Laboratory (NETL) is pleased to announce Mr. David E. Hess, Secretary of the Pennsylvania Department of Environmental Protection will provide a keynote address on Wednesday July 24, 2002.



David E. Hess

On May 21, 2001, Governor Ridge's nomination of David Hess to serve as the Secretary of the Pennsylvania Department of Environmental Protection was unanimously confirmed by the Senate of Pennsylvania. The former DEP Executive Deputy Secretary for Policy and Communications served briefly as Acting Secretary, pending his Senate confirmation.

Before becoming Executive Deputy Secretary, Hess served as Executive Director of the Senate Environmental Resources and Energy Committee for six years, serving both Senator Mike Fisher and Senator David J. Brightbill when they chaired the committee.

He also worked in a variety of positions with the former Department of Environmental Resources over a 12-year period, including in the Secretary's Office of Policy; as Deputy Director for Regulatory Analysis; and as Legislative Liaison for the agency.

He also served as Chairman of the Planning Commission in Penbrook, Dauphin County, for five years.

Hess has a master's degree in Urban and Regional Planning from the University of Illinois and a bachelor's degree in urban studies from Shippensburg University.

Hess lives in Swatara Township with his wife, Mary, and their three children.

Emerging Issues and R&D Needs

Agenda

Tuesday, July 23, 2002

8:15	Registration/Continental Breakfast
<i>Regency A Room</i>	General Session
9:00	Thomas J. Feeley, Product Manager for Environmental and Water Resources, NETL <i>Welcome/Introduction/Workshop Objectives</i>
9:15	Rita A. Bajura, Director, NETL, <i>"Emerging Issues and R&D Needs"</i>
9:45	John Veil, Manager, Water Policy Program, Argonne National Laboratory <i>"Current and Upcoming Water Issues Affecting the U.S. Power Industry"</i>
10:15	Break
10:30	William M. Smith, Manager, Market-Driven Demand Response, EPRI <i>"Water & Sustainability: the EPRI Research Plan"</i>
11:00	Gerald R. Hill, Senior Technical Advisor, Southern States Energy Board <i>"Southern States Perspective on the Water-Energy Interface"</i>
11:30	Daniel Macuga, Consultant, Energy & Sustainable Systems, Los Alamos National Laboratory <i>"Report on Water for Energy Stakeholder Workshop"</i>
Noon	Lunch (provided) <i>Allegheny Room</i>
1:30	Wayne C. Micheletti, President, Wayne C. Micheletti, Inc. <i>"Emerging Issues and Needs for Power Plant Cooling Systems"</i>
2:00	Breakout Sessions
<i>Linberg A Room</i>	Session A
<i>Linberg B Room</i>	Session B
3:00	Break (15 min.)
5:00	Adjourn

Wednesday, July 24, 2002

8:15	Continental Breakfast
<i>Regency A Room</i>	9:00 David E. Hess, Secretary, Pennsylvania Department of Environmental Protection <i>"Balancing Water Resources and Needs in Pennsylvania"</i>
	9:30 Terry E. Ackman, Team Leader, Clean Water Group, NETL <i>"National Watershed Science and Technology Research Program"</i>
10:00	Break
10:15	Reports by breakout group leaders
11:30	Thomas J. Feeley, Product Manager for Environmental and Water Resources, NETL <i>"NETL's Water-Energy Research Plans"</i>
Noon	Adjourn

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