

Establishing the Capability to Monitor Energy Prices & Supplies

Presentation to the Virginia Coal and Energy Commission

October 24, 2005

Department of Mines, Minerals and Energy



State Government Energy Monitoring

- **Asked to address creating an office to**
 - Monitor and analyze energy supply and cost
 - Anticipate energy crisis before they affect the Commonwealth
- **Will look at**
 - Current energy monitoring & analysis activities
 - Identify roles & costs for an energy monitoring function

State Government Energy Monitoring

- **State Corporation Commission**
 - Regulation of electric and natural gas utility services
 - Responsibilities changing with utility restructuring
 - Example: Commodity manager for electric and natural gas in the Virginia Emergency Operations Plan
 - Monitor electric capacity and demand at the state and system levels to forecast possible shortages – through PJM
 - Monitor natural gas supplies at national and local levels to be familiar with the state of energy preparedness of each distribution company and with overall projected gas supply situation in Virginia

State Government Energy Monitoring

- **Department of Social Services**
 - LIHEAP
- **Department of Housing and Community Development**
 - Weatherization Assistance Program
- **Virginia Tech Center for Coal and Energy Research**
 - Manages Virginia Energy Patterns & Trends under contract from DMME (<http://www.energy.vt.edu/vept/>)
 - Topical research and analysis under contract or grant
- **Other university research**
 - UVA, ODU, JMU, VA Tech, GMU

State Government Energy Monitoring

- **VDACS**
 - Fuel quality
 - Price gouging (with **Office of Attorney General**)
- **Department of General Services**
 - Purchase energy for state facilities
- **VDOT, Department of Rail and Public Transit**
 - Transportation energy issues
 - State fleet fuel purchases
- **Department of Emergency Management**
 - Radiological emergency response
- **Department of Motor Vehicles**
 - Gasoline and diesel fuel taxes
- **Department of Taxation**
 - Public utility taxation

State Government Energy Monitoring

- **Department of Mines, Minerals & Energy**
 - Address extraction of energy (& non-fuel) resources
 - Assess physical energy resources (coal, natural gas, uranium, geothermal) as part of geologic survey
 - As part of energy efficiency function, monitor energy issues and support energy conservation & development of alternate energy resources
 - Example: Commodity manager for petroleum (fuel oil, gasoline, diesel, propane) and solid fuels (coal) in Virginia Emergency Operations Plan

State Government Energy Monitoring

- **Commodity manager role**
 - Monitor supply situation
 - VEPT & US DOE Energy Information Administration data
 - Regular communication with trade groups
 - Virginia Petroleum, Convenience and Grocery Association
 - Virginia Petroleum Council
 - Virginia Propane Gas Association
 - Virginia Trucking Association
 - Virginia Coal Association, Virginia Mining Association
 - Virginia Oil and Gas Association
 - Virginia Independent Power Producers
 - US Department of Energy
 - Office of Electricity Delivery & Energy Reliability
 - Minerals Management Service
 - US Census Bureau



State Government Energy Monitoring

- **Commodity manager role**
 - Monitor supply situation
 - Local governments – through VDEM/Virginia EOC
 - Neighboring state energy offices
 - Metropolitan Washington Council of Governments
 - Homeland security monitoring
 - Trade association data
 - American Petroleum Institute
 - Association of Oil Pipe Lines
 - American Gas Association
 - Oil Pricing Information Service (OPIS)
 - Press reports

State Government Energy Monitoring

- **Petroleum commodity manager after hurricanes Katrina and Rita**
 - Assess disruptions in supply
 - Regular communication with industry
 - Availability of fuel oil, gasoline, diesel
 - Price spikes
 - Closure of gasoline stations
 - Consumer options for retail supply
 - Geographic extent of problem

State Government Energy Monitoring

- **Petroleum commodity manager**
 - Assess disruptions in supply
 - Availability of fuel in terminals
 - Shortages or allocations by oil companies
 - Contract verses spot supply availability
 - Product delivery schedules
 - Ozone season – special fuel needs
 - Pipeline operations
 - Supply availability
 - Product delivery schedules

State Government Energy Monitoring

- **Petroleum commodity manager**
 - Options – Help marketplace respond; minimize intervention
 - Waive driver hour limits for hauling petroleum
 - Raise weight limits for trucks hauling petroleum
 - Coordination through VDEM with State Police, DMV
 - EPA fuel waivers – Coordination with DEQ
 - RFG requirements in Northern Virginia, Richmond, Tidewater
 - Diesel sulfur content – use dyed diesel for on-road uses (fuel tax issues with DMV and IRS)

State Government Energy Monitoring

- **Petroleum Commodity Manager**
 - Options
 - Voluntary or mandatory conservation actions and public information
 - Respond to public service operational shortages – local EOCs, emergency responders, school busses, utility service vehicles
 - Coordinate with fuel marketers/jobbers to deliver supply if regular supplier cannot deliver
 - Open up state gasoline/diesel contract to localities
 - Set-aside program

State Government Energy Monitoring

- **New state energy monitoring function?**
 - Could be located at DMME
 - Use data from secondary sources, not primary data gathering
 - Data issues limit monitoring capability
 - Many energy markets national/international
 - Proprietary data
 - Limited Virginia-specific data
 - National, Mid-Atlantic, South, PAD I, PJM
 - Limited locality-specific data
 - Interstate energy flows
 - Limited terms of crisis vs. ongoing activity

State Government Energy Monitoring

- **New state energy monitoring function?**
 - Responsibilities
 - Track energy supply and demand and costs
 - Manage petroleum & solid fuel emergency response activities
 - Management support to state agencies & institutions electricity, natural gas, and fuel oil purchases
 - Assist use contract flexibility to hedge/control costs; fuel switching analysis; aggregate purchases; technical assistance on state utility contracts

State Government Energy Monitoring

- **New state energy monitoring function?**
 - Not currently funded at DMME
 - Priority given to coal mine, mineral mine, gas and oil worker / public safety and reclamation / environmental protection activities
 - State Energy Office funding from US DOE State Energy Program grants, oil overcharge funds, leveraging private funding
 - Only energy-related general fund appropriation for Southern States Energy Board (\$38,362/year)