Dominion:
Meeting the Carbon Challenge While Serving Our Customers

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Dominion
Dominion’s Generation Portfolio: More than 26,500 MW of Capacity

Generation Portfolio (Major Dominion Operations)

Existing Generation Stations
- Coal
- Hydro
- Natural Gas
- Nuclear
- Oil / Gas Capacity at Plant
- Wood
Dominion’s Diverse Generation Fleet: A Diverse Mix of Fuel Sources

- Diverse power generation fleet: a solid foundation for meeting growing energy needs - in environmentally responsible ways.

- Dominion in top 1/3rd of U.S. utilities in minimizing carbon intensity per megawatt-hour.

![Pie chart showing electric production capacity by fuel source.]:
- Coal: 34%
- Nuclear: 24%
- Gas: 22%
- Oil: 12%
- Hydro/Other: 8%
Dominion: Major Presence in West Virginia

- Major operations in West Virginia include
  - Dominion Exploration & Production – Jane Lew
  - Morgantown Energy Associates – Morgantown
  - North Branch Power Station – Grant County
  - Mt. Storm Power Station – Grant County
  - Dominion Transmission – Clarksburg
  - Dominion Hope – Clarksburg

- More than 1,400 employees in West Virginia
  - Payroll more than $100 million

- Taxes to state and local government more than $50 million annually

- Community focused through Foundation donations and volunteerism
  - Foundation giving of approximately $500,000 annually
  - 477 acres at Bear Rocks (Dolly Sods) donated to Nature Conservancy of WV $1.5 million
Dominion’s Environmental Commitment

• By 2015, Dominion will have spent $3.4 billion on environmental projects company wide.

• Improvements include:
  - Scrubbers on coal stations.
  - Systems to reduce smog and ozone pollution.
  - Converting some generating units from coal to cleaner-burning natural gas.
Cleaner Air in New England

Dominion begins Ownership of Dominion New England 1/1/05

- 22%
- 77%
- 84%
- 86%

MWh  SO₂  NOx  Mercury

Dramatic Improvements in Virginia Air Quality
Rising Demand Creates New Challenge

Dominion’s challenge:

• Providing reliable, affordable energy for our customers - while curtailing greenhouse gas emissions.

Dominion’s integrated strategy:

• Meeting the need with three major tools
  - Conservation and efficiency
  - Renewable generation
  - Traditional generation development (nuclear, gas, clean coal)
Conservation: Critical to Our Future

New programs include:

- **Energy efficient lighting promotion**
  - Discounts on 1.4 million CFLs
  - Will save customers up to $75 million
  - Energy savings equal to demand of 15,000 homes

- **Pilot programs, including**
  - Air conditioner control
  - Energy audits
  - Efficiency kits
  - Programmable thermostats
Renewable Green Energy – Wind, Biomass and Water

- West Virginia wind farms.
  - 132 megawatts

- Wood waste at two VA power stations.

- Existing hydroelectric in Virginia and North Carolina.
  - Uprate of the Bath County Pumped Storage facility, Dominion owns 10% of U.S. pumped storage, critical to making renewable energy available 24/7.

- Green power option for all Virginia customers in 2008.

- Dominion committed to meeting Virginia’s aggressive goal of 12% renewable power by 2022.
Advanced Emissions-Free Nuclear Power

- Considering 3\textsuperscript{rd} unit at North Anna.
- Advanced design.
- Could serve 375,000 homes.
- No air emissions, including carbon.
- NRC approval of early site permit and COL filed November 2007.
Clean Coal Technology: Virginia City Hybrid Energy Center

- Electricity to serve 146,000 homes.
- Will use advanced clean-coal technology to control emissions.
- Plans for biomass as fuel source.
- Low, stable fuel costs based on local supply.
- Carbon capture compatible
- Partnering with Virginia Tech on carbon storage technology.

*Artist's rendering*
Carbon Capture and Transport

- Dominion is actively pursuing carbon capture technology.

- Dominion provided test site for pilot research at its Brayton Point Power Station related to carbon capture.

- Dominion is one of the leading natural gas transport companies in the world.
Carbon Storage

- Dominion is a major sponsor ($500,000) of research at the Virginia Center for Coal and Energy Research at Virginia Tech focused on the viability of regional carbon sequestration in unmineable coal seams.

- Dominion’s support makes it possible for Virginia Tech to qualify for funding from the U.S. Department of Energy.

- The Virginia Center for Coal and Energy Research at Virginia Tech is planning a large-scale demonstration of carbon storage.

- Dominion is a member of Southeast Regional Carbon Sequestration Partnership and is also supporting the Midwest Carbon Sequestration Partnership.
Federal Climate Change Legislation

• Numerous proposals (more than 100 bills in Congress).
  – At last count, 75 House bills
  – 39 Senate bills

• Most bills establish some type of cap and trade system.
Dominion’s Position

• Dominion supports federal legislation that:
  – Regulates greenhouse gas emissions economy-wide
  – Establishes a system of tradable allowances
  – Slows the growth of GHG emissions in the near term and reduces GHG emissions in the long term
  – Sets a realistic baseline year and schedule of compliance
  – Promotes technology development
  – Includes a safety valve to protect customers from dramatic rate increases

• Dominion supports the Bingaman/Specter legislation as best embodying these principles
Bingaman/Specter Bill

- Economy wide cap-and-trade approach

- Emissions-based allowance allocations

- Targets
  - Beginning in 2012, reduce greenhouse gas emissions to 2006 levels by 2020
  - Reduce to 1990 levels by 2030
  - Reduce to 60% below 2006 levels by 2050

- Safety valve mechanism
  - Starting at $12/metric ton in 2012 and increasing thereafter

- Significant support from labor (AFL-CIO, IBEW, UAW); utility companies (Allegheny, Duke, Exelon, NGR); and wildlife/conservation groups (Trout Unlimited, Ducks Unlimited, Association of Fish and Wildlife Agencies)
Dominion
It all starts here.