



# Dominion: New Directions in Energy

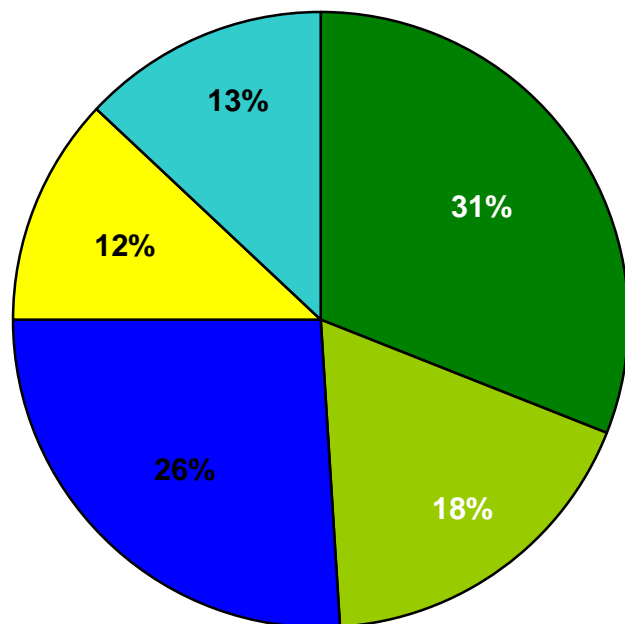


**Dominion**

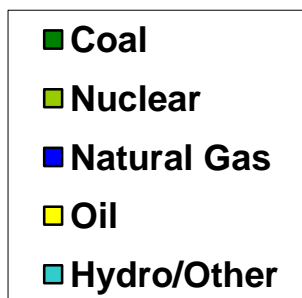
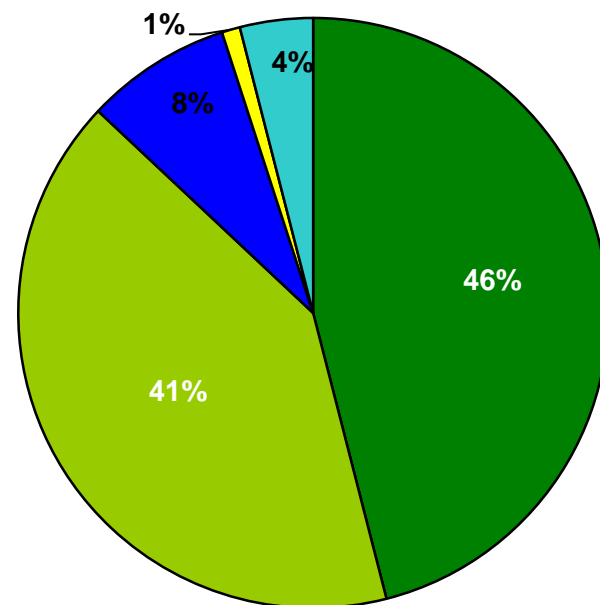
# About Dominion: Diverse Generation Mix

## Dominion Virginia Power

2008 Electric Capacity by Fuel

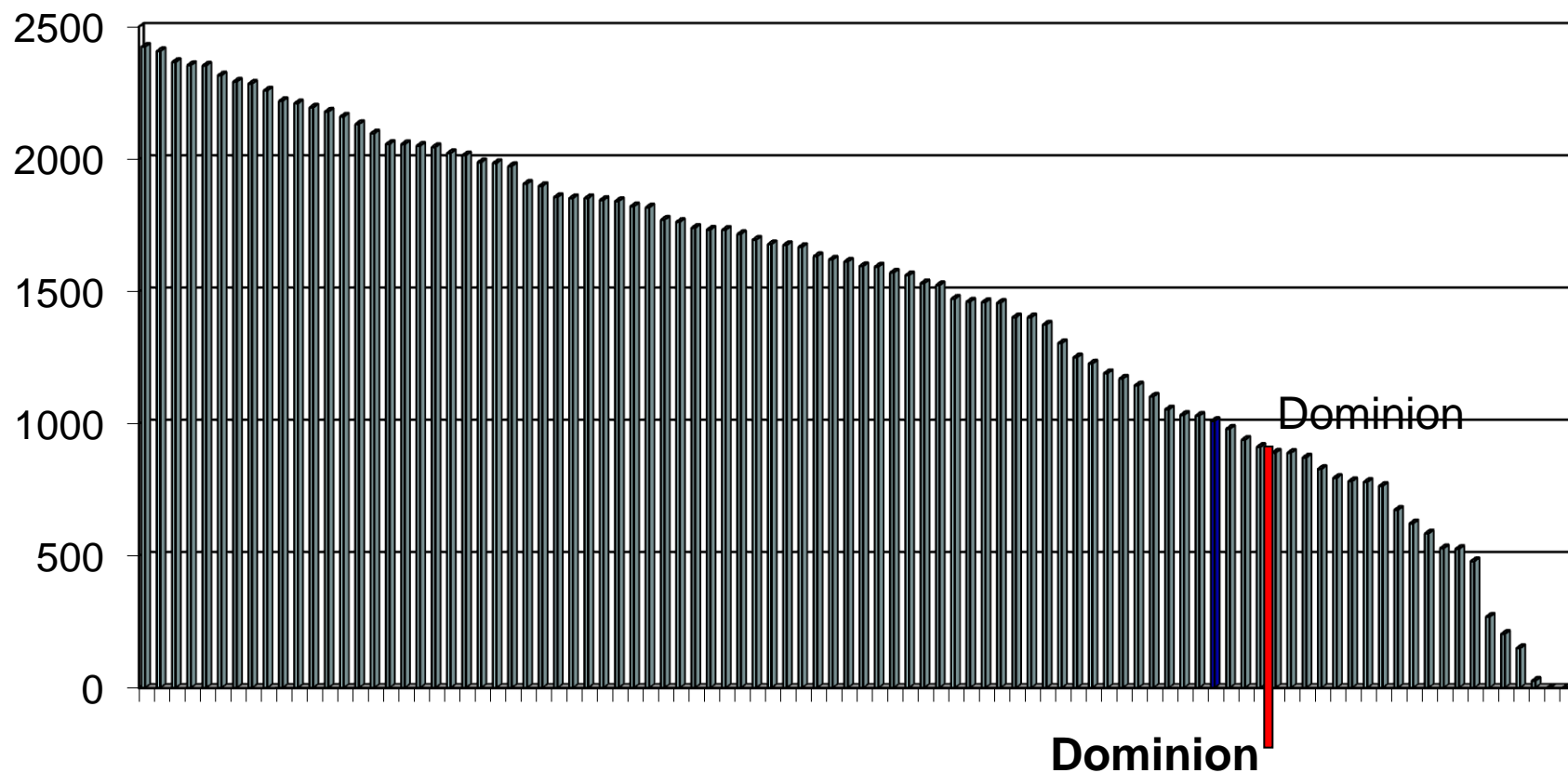


2008 Electric Production by Fuel



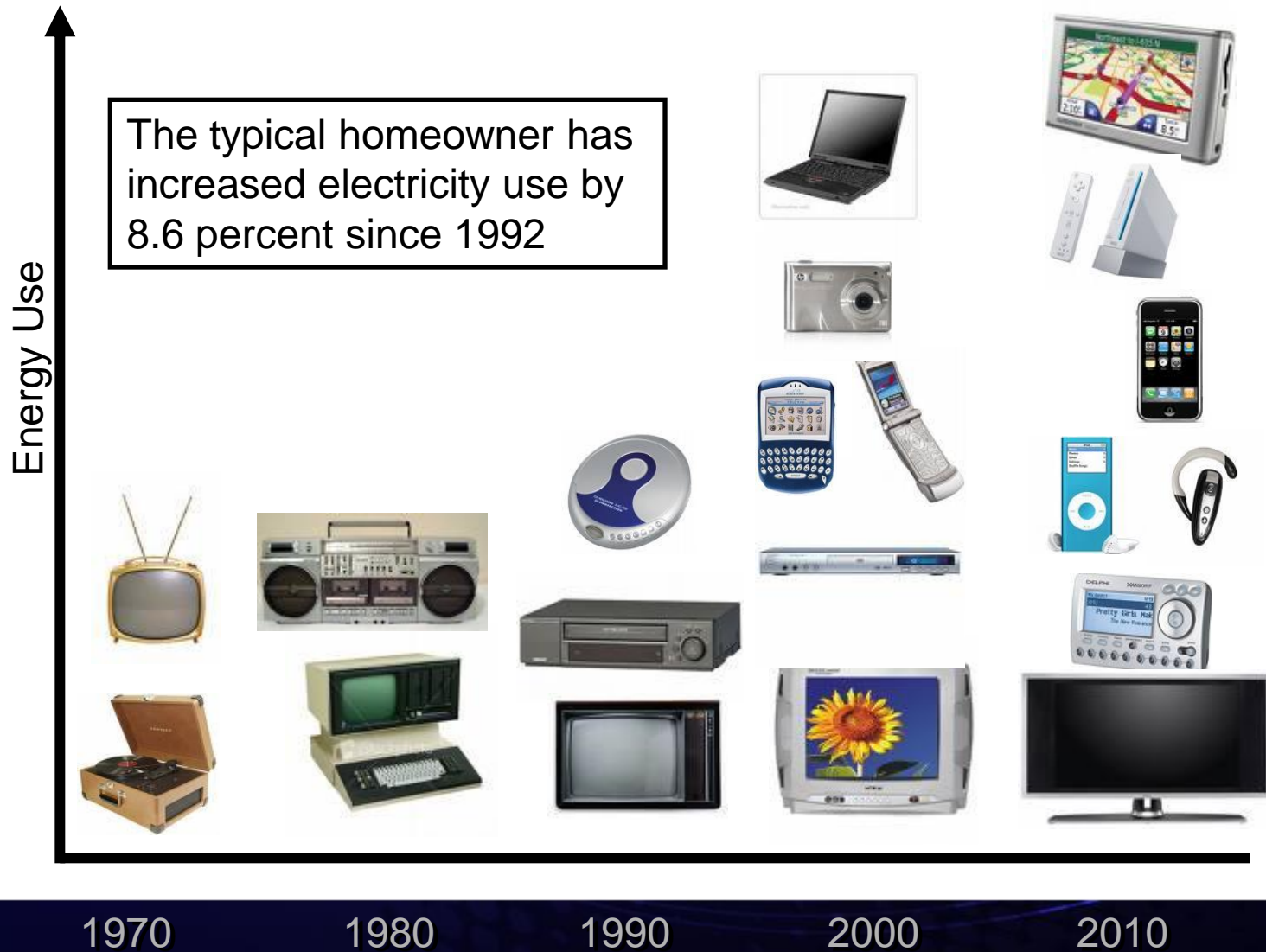
# About Dominion: Low Carbon Intensity

100 Largest U.S. Power Producers  
(Pounds CO<sub>2</sub> per MWh Output)



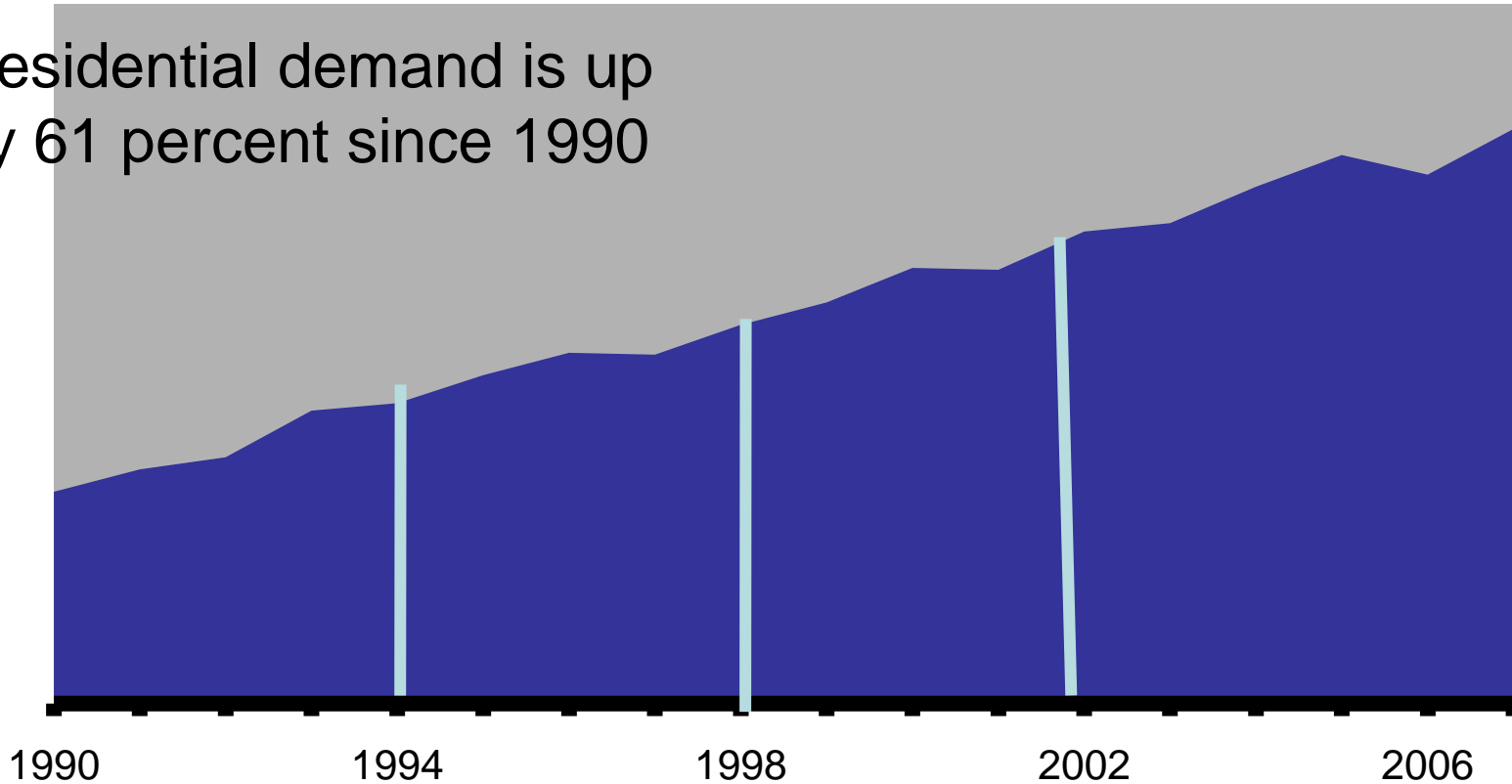
Source: Natural Resources Defense Council, 2008 Study

# Our list of must-haves grows



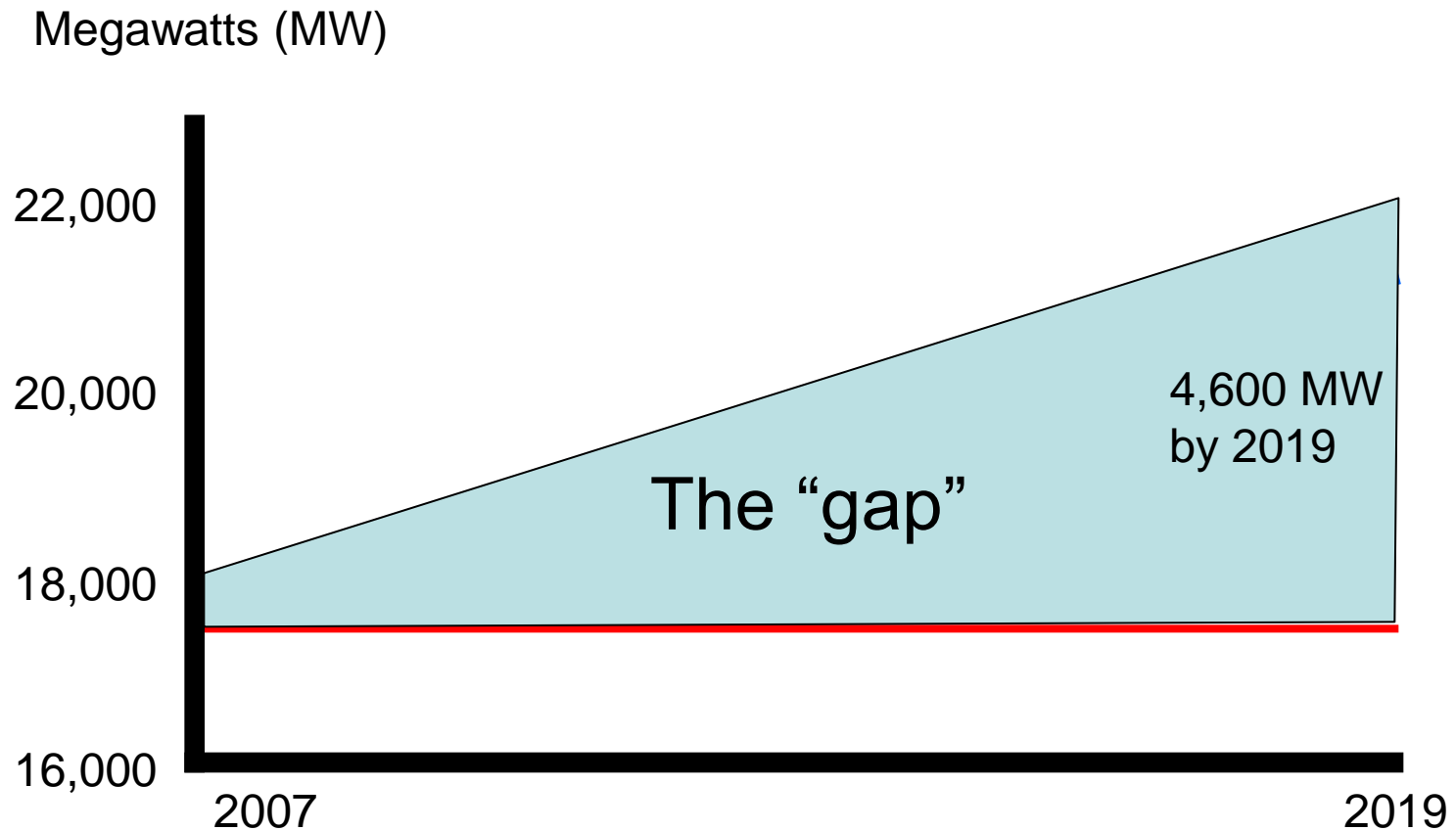
# Demand is up in Virginia

Residential demand is up by 61 percent since 1990



Source: Energy Information Administration, US Dept of Energy

# The upcoming gap



Source: PJM long-range forecast, January 2009

Existing generating capacity  
Expected peak demand

# Dominion's Integrated Strategy

- Integrated resource plan filing in September 2009
  - Based on AARP legislation from 2008
  - 15 year planning horizon
- Intensified conservation programs
- Environmentally friendly generation, including renewable, clean coal, natural gas, possible nuclear
- Transmission and delivery system improvements, “smart meters”



# Dominion's Response: Conservation

- Conservation a key to meeting Virginia's growing energy needs while protecting the environment.
- Distributed 3.4 million CFL light bulbs.
- Conservation Plan filed with SCC July 28
  - Projected to save customers \$1.2 billion over 15 years.
  - Smart meters key part of the plan.

## Homeowner incentives to:

- Tune up heat pumps
- Install energy-efficient heat pumps
- Turn in old refrigerators
- Cycle off air conditioners during peak periods



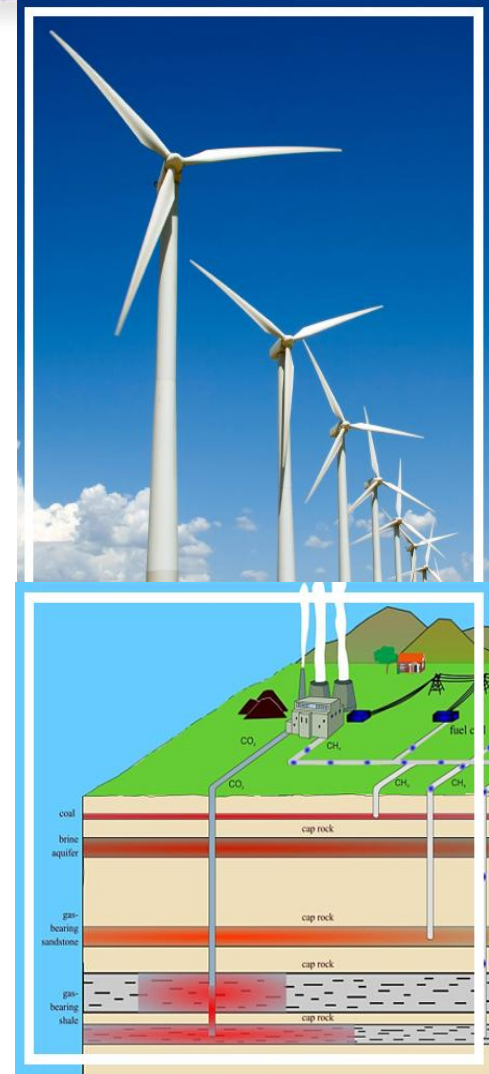
# Smart meters

- Two-way communications
- Voltage Conservation
- Improved outage reporting and repair



# Dominion's Response: Environmentally Friendly Generation

- Possible North Anna 3 nuclear unit
- New gas-powered generation
- Unit uprates
- Virginia City Hybrid Energy Center
- Wind projects in Virginia, West Virginia, Illinois, and Indiana



# Virginia City Hybrid Energy Center

*“What Dominion has proposed is the full up suite of controls. It is the best there is.”* Bruce Buckheit, State Air Pollution Control Board member - June 25, 2008.

- Project meets baseload energy needs and presents a strong environmental package.
- Complete environmental package:
  - Protects air quality
  - Uses waste coal and carbon neutral biomass
  - Minimizes water use



# Dominion's Operating and Proposed Wind Energy Projects



- NedPower in Mount Storm, WV:
  - 264 megawatts (partnered with Shell)
- Fowler Ridge in Benton County, IN:
  - 400 megawatts online (partnered with BP)
  - Could be expanded to total of 750 MW
- Prairie Fork in Christian & Montgomery Counties, IL:
  - 300 megawatts
- Virginia wind projects in Tazewell and Wise Counties
- Other projects in development in VA (not announced)

# Upgrading the Power Grid



- Thirteen projects planned or under way in Virginia and North Carolina
- Critical projects in Hampton Roads, Central and Northern Virginia

## **Transmission: Electricity's Highway System**

Power is useless unless you can get it where it's needed.



**Dominion<sup>®</sup>**  
It all starts here.<sup>®</sup>