



YOUR UTILITY RATE SPECIALISTS

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POWER NOTES - DOMINION RESOURCES EDITION

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VIRGINIA POWER TO CLOSE COAL ASH PONDS—CUSTOMERS TO PAY

Virginia Power has announced plans to close nine coal ash ponds at four coal-fired power plants in Virginia. The plants are located in Fluvanna County, Chesapeake, Chesterfield County and Prince William County.

Coal ash is a by-product of burning coal to generate electricity. For many decades, coal ash has received little or no regulatory oversight. It has been treated as a non-hazardous material and has been stored in unlined open pits/ponds near the power plants. Coal ash contains mercury, lead, arsenic and other hazardous materials. It has been found to contaminate the ground water and drinking wells in areas surrounding coal-fired power plants.

In February 2014, a coal ash pond at the Duke Energy power plant in Eden, NC had a major failure and spilled 78 million pounds of coal into the Dan River. This coated 70 miles of the river in NC and VA with black sludge. This spill resulted in criminal charges against Duke Energy and more than \$127 million in fines at the state and federal level.

Since that spill, the EPA and state regulators have come out with new regulations for managing coal ash. In response, Virginia Power will move their coal ash to large pits lined with an impermeable liner. Once the coal ash has been put in the new pits, they will be covered with a liner and then covered with 24 inches of soil and sod or grass.

We have been unable to find cost estimates for Virginia Power’s proposed coal ash pond work. However, Duke Energy has projected that it may cost up to \$10 billion to clean up their coal ash ponds at 14 power plant sites in North Carolina.

The cost to clean up Virginia Power’s coal ash ponds will ultimately be passed on to consumers through higher electric rates for many years to come. This project will have a material impact on electric rates.

PROPOSED 500 KILOVOLT TRANSMISSION LINE OVER THE JAMES RIVER

In April, the Virginia State Supreme Court issued a unanimous ruling approving the State Corporation Commission’s order to allow Virginia Power to build a 500 KV transmission line across the James River from Surry to James City County. This line is needed to provide a reliable source of power to the Peninsula area after the pending closure of two coal-fired power plants at the Yorktown Power Station.

NEW POWER PLANT PROPOSED FOR GREENSVILLE COUNTY

Virginia Power has announced plans to build a new 1,600 megawatt natural gas fired power plant in Greenville County. The plant is proposed to cost more than \$1 billion. It will create 45 permanent jobs and 1,000 temporary jobs during construction. The plant will serve 400,000 typical homes during peak periods. It is scheduled to come on line in 2019. The costs of building the plant will be reflected in higher electric rates for all Virginia Power customers.



Electric Bill Fundamentals

The electric bill for most commercial customers includes:

- Basic Customer Charge (BCC)
- Demand Charge
- Energy Charge

Understanding these can help you minimize your electric bills.

Basic Customer Charge (BCC)

The BCC is a fixed charge for the basic facilities and services for the average customer in that rate class. This includes the transformer, wires between the transformer and the customer, right of way clearing and maintenance for those wires, the meter, meter reading and printing/mailling bills.

Depending on the size of the customers on a particular rate, the BCC can range from less than \$10/month to more than \$1,000/month. For most customers, the BCC is insignificant.

Customers must pay the BCC on all active electric accounts whether or not they use electricity through the account. If you have accounts that are expected to not use electricity for an extended period, you should consider having the service disconnected on those accounts to avoid paying the BCC. Be advised that an electrical inspection and reconnection charge may be required to reestablish service at the facilities.

Demand Charge

The demand charge is based on the peak 15 minute or 30 minute (depending on your provider) average consumption of electricity. It is measured in kiloWatts (kW). Ten 100 Watt light bulbs running at the same time have a demand of 1,000 Watts, or 1 kW.

The demand charge reimburses the utility for the capital investments they make in their system plus a profit margin. Capital investments include the cost of power plants, transmission systems, distribution systems, right of way clearing and maintenance, vehicles, buildings and other fixed assets.

The demand charge can be up to 50% or more of a commercial customer's total bill. The demand charge can range from \$0/KW (for smaller customers) to \$18/KW or more.

Instead of running all equipment at the same time, stagger startup times to reduce peak demand which can ultimately lower the demand charge.

For example, if you have multiple air conditioning units, it is best to start some of them and allow the space to achieve the desired temperature. Afterwards, startup the remaining units. This will avoid having all air conditioning units running at full load for an entire 15 or 30 minute demand interval.

Energy Charge

The energy charge is based on the demand in KW multiplied by the running time for the equipment in hours. Energy is measured in kiloWatt hours (kWh). For example, a 1,000 Watt (1 kW) space heater running uninterrupted for 5 hours will consume 5 kWh.

The energy charge reimburses the utility for the fuel, operating and maintenance costs associated with service customers. This includes coal, labor, and many other routine expenses associated with running a business. The energy charge can range from less than \$.01/kWh to more than \$.15/kWh. Customers paying less than \$500/month often pay no demand charge but a very high energy charge.

The amount of energy consumed and the associated energy charge is a function of the amount of equipment a customer has and the number of hours the equipment is operated. Customers can reduce their energy costs by reducing the number of hours their equipment runs. For example, shutting off as many lights as possible before leaving for the day can reduce your energy consumption.

REMINDER: Replace your air filters!

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