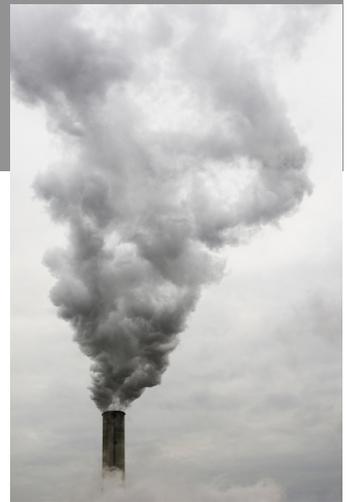


# SURRY COAL FIRED ELECTRIC PLANT A GOOD NEIGHBOR ?

**In December 2008, Old Dominion Electric Cooperative announced their plan to build a 1500 megawatt coal fired electric plant in the town of Dendron, Surry County, Virginia.** If built, the Surry Plant would be the largest coal fired plant in Virginia, and it would be located within an area anxious to maintain its small town, rural character and near a major population area of 1.7 million people who live downwind from the pollution.



## Why Should You Care ?

### our health

Due to emissions of deadly fine particle soot, ozone smog pollution, and toxic mercury, Virginia is in the ten top most dangerous states to live in for power plant pollution. Those living within a 30 mile radius of a plant, especially children, experience the most serious effects. The Surry Plant will add yearly:

**Fine particle pollution** - 1,842 tons - causes increased asthma attacks, hospitalizations and shortens lives of about 990 Virginians each year.

**Sulfur Dioxide** - 3,070 tons - affects breathing, and may aggravate existing respiratory and cardiovascular disease.

**Nitrogen Oxide** - 3,070 tons - causes eye, nose and throat irritation at low levels and serious damage to the tissues of the upper respiratory tract, fluid build-up in the lungs and death at high exposure levels.

**Ozone or smog pollution** at low levels can cause coughing, wheezing, shortness of breath and chest pain. At higher levels it can cause lung tissue damage, reduced lung capacity and premature death.

**Mercury** - 44 lbs. - causes mental retardation, brain damage in the fetal stage, learning disabilities in children, increases the risk of heart disease. Contaminates fish in the Chesapeake Bay watershed.

### our environment

The ODEC Surry Plant would release **11.6 million tons of carbon dioxide annually**, and at present no commercially viable technology exists to capture CO<sub>2</sub> emissions from the pulverized coal plant planned for Surry County.

**Rising Coastal Waters.** CO<sub>2</sub> is the leading cause of climate change which increases sea-level rise in coastal Virginia - the second most vulnerable area in the U.S. Scientists predict a 1 to 3 foot rise for the Tidewater area in this century.

**Water.** According to the EPA, power plants are responsible for 41 percent of the total mercury emitted by all known sources. Approximately 1,300 miles of Virginia rivers and nearly 40,000 acres of Virginia lakes are already contaminated by mercury. The Surry Plant would be in an area adjacent to wetlands and the Blackwater River, near the James River and the Chesapeake Bay - all within the 60 mile radius where airborne mercury causes serious contamination. Nitrogen from power plants already accounts for more than 90 million pounds of pollution in the bay each year.

**Coal Fly Ash.** Numerous studies have shown that fly ash can leach toxic substances that cause cancer, birth defects, and other health problems.

**Crops.** Nitrogen oxide causes forest and crop damage. NASA released a report in May 2009 on the harmful effects of rising ground-level ozone concentrations on soybeans.

# We need electricity and jobs. What are the alternatives ?

## Electricity Alternatives

### **Energy Efficiency and Conservation**

The 2007 Virginia Energy Plan concluded that energy efficiency and conservation measures can provide the quickest, most cost-effective ways to meet Virginia's future energy needs. With a combination of energy industry, state, and consumer investment, we can have the tax incentives and consumer education and to meet the established goal of reducing Virginia's energy consumption by 10 per cent by 2022. The American Council for an Energy Efficient Economy says that Virginia can meet 19 per cent of its electricity needs by moderate efficiency measures by 2025, allowing for growth. Energy efficiency and conservation can save rate payers billions of dollars.

**Wind Power.** According to studies by the Virginia Coastal Energy Research Consortium, the shallow waters 12 miles off our coast make Virginia one of the prime states for locating offshore wind capacity. Harnessing offshore wind could produce 20% of Virginia's electricity needs and create thousands of green jobs in Virginia. (vcerc.org)  
The Virginia Offshore Wind Coalition unites local governments and businesses in promoting clean,

sustainable wind energy at reliable and competitive costs. At present, several energy companies are requesting leases for wind farms in coastal Virginia and a utility company is exploring wind potential in southwest Virginia. (vowcoalition.org)

### **Biomass.**

Biomass is plant matter such as forest product waste, grasses, and biological material such as algae that can be used for the production of electric power, fuels, and heat. The 2007 Virginia Energy Plan estimates 750MW potential from biomass. One of the largest biomass electric plants in the U.S. is an 80MW facility outside of Danville, Virginia.

## Job Alternatives

According to a report issued by the Pew Charitable Trusts, Virginia in the past decade has realized nearly 17,000 clean energy economy jobs and attracted almost \$71 million in clean technology venture capital in the past three years. The green energy economy creates more and better jobs in more geographic areas of Virginia than does the coal fired electric power generation industry.

## What can you do ?

Citizens can make a difference in the decisions on what form of energy is utilized to produce our electricity. Coal has been a cheap choice, but it is not cheap if you remove the subsidies and add in the growing cost to human health and the environment.

- Educate your family, friends, community.
- Write your local newspaper, TV and radio.
- Contact your local officials.
- Write your state officials and legislators AND

Air Pollution Control Board - DEQ  
P.O. Box 1105, Richmond VA 23218

U.S. Army Corps of Engineers - Norfolk Div.  
803 Front Street, Norfolk VA 23510

## Sources

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