Blue Ridge Environmental Defense League

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State Corporation Commission Hearing for Public Witnesses
Re: Petition of Virginia Electric and Power Company For Certain Initial Determinations with Regard to Virginia Code § 56-585 G, Cased No. PUE-2006-00075
Richmond, Virginia October 17, 2006
Testimony of Louis A. Zeller

Thank you for the opportunity to address the Commission today. My remarks are directed towards the petition by Dominion Virginia Power brought under the Virginia Electric Utility Restructuring Act amendments of 2004, Virginia Code § 56-585 G. Specifically, Dominion Virginia Power has asked the Commission to decide questions regarding construction of a coal-fired electric power generation facility in southwest Virginia. On behalf of the Blue Ridge Environmental Defense League, **I submit that a petition to approve a new coal-fired electric power plant in Wise County at this time is not in the public interest**. The relevant Virginia Code states:

> To ensure a reliable and adequate supply of electricity, and to promote economic development, an investor-owned distributor that has been designated a default service provider under this section may petition the Commission for approval to construct, or cause to be constructed, a coal-fueled generation facility that utilizes Virginia coal and is located in the coalfield region of the Commonwealth, as described in § 15.2-6002, to meet its native load and default service obligations, regardless of whether such facility is located within or without the distributor's service territory. The Commission shall consider any petition filed under this subsection in accordance with its competitive bidding rules promulgated pursuant to § 56-234.3, and in accordance with the provisions of this chapter. Notwithstanding the provisions of subdivision C 3 related to the price of default service, a distributor that constructs, or causes to be constructed, such facility shall have the right to recover the costs of the facility, including allowance for funds used during construction, life-cycle costs, and costs of infrastructure associated therewith, plus a fair rate of return, through its rates for default service. A distributor filing a petition for the construction of a facility under the provisions of this subsection shall file with its application a plan, or a revision to a plan previously filed, as described in subdivision C 3, that proposes default service rates to ensure such cost recovery and fair rate of return. The construction of such facility that utilizes energy resources located within the Commonwealth is in the public interest, and in determining whether to approve such facility, the Commission shall liberally construe the provisions of this title.
>
> [Virginia Code § 56-585 G]

As you know, in 2004 the Virginia General Assembly Session amended the electric deregulation bill to promote new coal-fired power plants in the coal field region of Virginia. Subsequently Dominion Virginia Power, Appalachian Electric Power, Old Dominion Electric Cooperative, Virginia Municipal Electric Association and the Blue Ridge Power Agency formed a consortium for the development of this proposal in Wise County. The five utilities want to build a 530 MWe power plant utilizing circulating fluidized bed (CFB) coal combustion. While coal would be the primary fuel source, the plant could also use biomass, waste wood and waste coal. Construction costs are estimated to be about $1 billion.

Large Amounts of Pollution From So-called Clean Coal Technology

On July 7, 2006, the Virginia Department of Environmental Quality received a PSD pre-construction air pollution permit application for the Dominion Southwest Virginia Power

Project slated for Virginia City in Wise County. The air permit application lists the total annual air pollutants which would be emitted from the CFB boiler and ancillary units

I have attached to these remarks several pages from Dominion's application to VADEQ. **The yearly pollution totals are overwhelming.** Over 12,400 tons of air pollution could be emitted annually including nearly 2,000 tons of nitrogen oxides and over 4,000 tons of sulfur dioxide. [a] Also, huge amounts of toxic pollutants would be emitted including 274,360 pounds of sulfuric acid, 362,500 pounds of hydrochloric acid, and 8.3 million pounds of carbon monoxide. Poisonous heavy metals would also be emitted including 121 pounds of arsenic, 812 pounds of chromium, 102 pounds of mercury, 4580 pounds of benzene, 8820 pounds of cyanide, and 0.86 pounds of dioxin. [b] **How can this be called "clean coal technology"?**

From the Shenandoah National Park to Mount Rogers we are already seeing the effects of acid deposition resulting in tree death. Massive coal extraction techniques destroy forests, surface and ground waters, and intensify flooding. Virginians suffer high rates of asthma and respiratory disease. **We must not burden the health of our citizens and the environment with yet another source of fossil fuel pollution.**

Financial Concerns

According to the Division of Consumer Counsel, [c] Dominion Virginia Power seeks Commission resolution of three issues:

- A methodology for calculating an allowance for funds used during construction (AFUDC), including a 12% return on equity ("ROE") component that would be fixed for the duration of the construction period;
- A 200 basis point (2.00%) ROE "risk premium" adder to be applied for the life of the plant; and
- A waiver of certain portions of the Commission's Rules Governing the Use of Bidding Programs to Purchase Electricity from Other Power Suppliers ("Bidding Rules").'

We agree with Commission staff who contend that a finding of public interest is required for petitions brought under the utility Restructuring Act:

> [T]he Commission is directed to consider any petitions filed in accordance with not only the Commission's Bidding Rules, but also all other provisions of the Virginia Electric Utility Restructuring Act ("Restructuring Act"), including the provisions of § 56-580 D. That Code section provides criteria for generation facilities proposed for construction following enactment of the Restructuring Act and requires a finding that generating facilities will have no material adverse effect upon reliability of electric service provided by any regulated public utility, and will not otherwise be contrary to the public interest. [d] (emphasis added)

Further, we have the following concerns regarding the financial aspects of this proposal:

- *Higher Electric bills* - There would be no financial risk to the utility companies because ratepayers—homeowners and businesses—will have to pay the costs. The consortium that constructs this new plant would be able to recover the construction and infrastructure costs while reaping the profits.
- *May use very little Virginia coal* - There is no percentage requirement for the amount of Virginia coal to be used. The market would determine where coal is purchased.
- *Power may be used outside of Virginia* - There is no guarantee that the power will be used in Virginia. This new power plant will not replace any of the old coal-fired power plants in Virginia.
- *The energy is not needed* – Projections show Virginia does not need the energy from more power plants, and we definitely do not need more coal or fossil fuel plants. There is no requirement that this plant has to be built.

Finally, unnecessary financial costs to society are incurred because of the failure to introduce renewable power sources sooner. A study done for the Commission of the European Communities by Olav Hohmeyer [e] analyzed the impacts of renewable energy compared with fossil fuel and nuclear power. The study monetarized, or quantified in financial terms, the total costs and benefits of four major sources of electric power: coal, nuclear, solar, and wind. Hohmeyer found that the total costs to society of fossil and nuclear power are much higher than the market price would indicate and that the costs of solar and wind energy are much lower. Moreover, this skewing of rates for conventional electricity below actual costs delays the introduction of cleaner forms of power. Hohmeyer devised a method to calculate the financial cost of this delay.

The Hohmeyer study of the social costs of renewable energy technologies found a net social *benefit* of 0.3 - 0.6 cents per kilowatt hour for wind energy and 0.9 - 3.3 cents per kilowatt hour for photovoltaic. The benefits come from employment gains and wage and tax benefits from the installation of wind and solar technologies. In contrast to the hidden benefits of renewables, conventional fossil fuel and nuclear power plants have net social *costs*. The net *costs* of fossil fuel are 2.4 - 5.5 cents per kilowatt hour and for nuclear energy 6.1 - 13.1 cents per kilowatt hour. The hidden cost of conventional electric power is about equal to the electric power rate. In other words, the typical monthly electric bill covers only half the true costs. These expenses are buried in medical bills, lost workdays, decreased agricultural productivity, etc.

Therefore, we support the Motion to Dismiss Dominion Virginia Power's petition.

Respectfully,

Louis A. Zeller
Blue Ridge Environmental Defense League

References

a. Dominion Southwest Virginia Power Project PSD Permit Application, July 5, 2006, Section 3.5, page 3-13.
b. Permit Appendix A—VADEQ Permit Application Form 7, Source-wide Toxic or Hazardous Air Pollutant (HAP) Emissions From the Proposed Facility, page 16, (*attached*)
c. Comments of the Division of Consumer Counsel, Office of the Attorney General, Case No. PUE-2006-00075, October 11, 2006
d. State Corporation Commission, Case No. PUE-2006-00075, Hearing Examiner's Ruling and Certification to Commission, September 15, 2006, page 2
e. *Social Costs of Energy Consumption*, Olav Hohmeyer et al, Document No. EUR 11519 Commission of the European Communities, □1988, ISBN 3-540-19350-2 Springer-Verlag, Berlin Heidelberg New York; ISBN 0-387-19350-2 Springer-Verlag, New York Berlin Heidelberg

Attachment A

3.5 Facility-Wide Emissions

The potential annual emissions from the entire plant and individual sources are summarized in Table 3-8. The potential annual emissions are based on each emission unit operating at the maximum capacity and hours of operation that will be allowed under the PSD permit. Based on the annual potential emissions, the Project will be classified as a major source subject to the PSD regulations and will have significant emissions as defined in the PSD regulations of PM_{10}, SO_2, CO, NO_x, VOC, HF, and H_2SO_4.

Table 3-8: Summary of Facility-Wide Emissions

Pollutant	Potential Emissions (tpy)[a]						
	CFB Boilers	Auxiliary Boiler	Diesel Generator	Diesel Fire Pump	Storage Tanks	Material Handling	Total
PM	1,371.82	12.16	0.17	0.42	0.00	187.60	1,572.16
PM_{10}	1,262.07	12.16	0.17	0.42	0.00	67.78	1,342.60
SO_2	4,115.45	115.16	0.09	0.11	0.00	0.00	4,230.81
NO_x	1,920.54	45.60	4.97	6.71	0.00	0.00	1,977.82
CO	4,115.45	30.40	4.69	1.78	0.00	0.00	4,152.32
VOC	137.18	6.08	0.55	0.19	0.02	0.00	144.02
Pb	0.03	0.00	0.00	0.00	0.00	0.00	0.03
HF	18.56	0.00	0.00	0.00	0.00	0.00	18.56
HCl	181.25	0.00	0.00	0.00	0.00	0.00	181.25
H_2SO_4	137.18	0.00	0.00	0.00	0.00	0.00	137.18

[a] Potential emissions based on the CFB boilers, auxiliary boiler, emergency diesel generator, and emergency diesel fire pump operating at maximum rated capacity for 8,760, 4,000, 500, and 500 hours per year, respectively.