

Not on our Fault Line: No New Nuclear Reactor at North Anna

TO: Governor Terry McAuliffe
Members of the Virginia General Assembly
Nuclear Regulatory Commissioners
Virginia State Corporation Commissioners
Thomas F. Farrell, II, CEO, Dominion Resources
Robert Blue, President, Dominion Virginia Power

Dear Governor McAuliffe, Virginia General Assembly Members, Members of the Nuclear Regulatory Commission, Members of the State Corporation Commission, Thomas Farrell, CEO Dominion Resources, and Robert Blue, CEO Dominion Virginia Power,

On behalf of our members and supporters, we are writing to express our opposition to a third nuclear reactor at the North Anna Power Station in Louisa County, Virginia. The \$10 to \$20 billion required to build North Anna 3 would result in major electricity cost increases for residential and business customers when our future electricity needs can be met more effectively through less costly investments in efficiency programs and renewable energy such as solar and wind. Investments in efficiency and renewable energy would create more Virginia jobs and result in a more diverse and resilient electricity generation mix and in lower utility bills than development of North Anna 3. Furthermore, the construction and operation of this new reactor on an active earthquake fault line would jeopardize the reliability of our electricity service, threaten water resources, endanger public health, and create security risks for the people living in Central Virginia and beyond.

North Anna 3 – Far Too Expensive

While Dominion has declined to provide a cost estimate for the North Anna 3 reactor, Detroit Edison which is proposing to build the same reactor design is estimating more than \$10 billion to complete the project. The Nuclear Regulatory Commission only recently approved this reactor design (the GE-Hitachi ESBWR) which has never been built, so billion dollar cost overruns and multi-year construction delays, common in the nuclear reactor industry, are highly likely. These economic factors put both customers and shareholders at risk.

At a cost of \$10 billion, development of North Anna 3 would be the equivalent of more than \$2,900 per unit for each of the 3.4 million housing units in all of Virginia, not just Dominion's service territory. Most of the jobs associated with development of the North Anna 3 Reactor would be temporary, only during the construction phase, and would be concentrated in just one region of the state. **Equivalent, or significantly smaller investments in efficiency, solar and wind would save and/or generate more electricity with longer term jobs and greater economic benefits spread across the entire state.**

Risks to Grid Security and Resiliency

The August 2011, 5.8 magnitude earthquake near the North Anna Power Station took the two existing reactors (1,800 MWs of capacity) offline for more than three months. Recent maintenance problems at the two reactors (damaged fuel rods, leaks) suggest that the two reactors are still experiencing problems related to the quake. A more serious earthquake, after construction of a third reaction, could take more than 3,300 MWs of power off the grid immediately and indefinitely impact the security and resiliency of our electricity supply. Alternatively, investment in efficiency and renewable energy provide for distributed generation, not vulnerable to any single natural event like an earthquake or severe storms. Distributed generation is also far less vulnerable to terrorist attacks or sabotage.

Environmental and Safety Concerns

Building a new reactor on a known active earthquake fault line is a foolhardy, risky decision not only from the standpoint of ensuring a reliable and resilient electricity supply, but from a safety perspective as well. The 2011 Fukushima accident may represent a worst case scenario, however, any significant reactor accident disrupts the regional economy and risks people's health and safety for years, even decades. There are also serious questions regarding the ability of Lake Anna to provide an adequate water supply and cooling capacity for three reactors. The current dam containing Lake Anna needs modernization, and Lake Anna regularly exceeds acceptable temperature limits.

Nuclear waste disposal continues to be a serious problem for the nuclear industry and our nation. Currently, all high level nuclear waste is stored on site at both the North Anna and Surry Nuclear Power Stations. There are inherent risks associated with onsite waste storage as was demonstrated with the Fukushima accident. Additionally, the full cost of perpetual maintenance of high level nuclear waste is borne by taxpayers.

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We urge Dominion Virginia Power and the state of Virginia to pursue a clean energy plan which excludes the expansion of nuclear power at North Anna. The cost of a third reactor at North Anna will likely exceed \$10 billion, money that can be invested more wisely in energy efficiency and renewable energy.

Sincerely,

Not on Our Fault Line

350 Central Virginia

350 Loudoun

Alliance for Progressive Values

Beyond Nuclear

Charlottesville Center for Peace and Justice

Climate Action Alliance of the Valley

eNRG - Energizing Renewable Growth

Friends of the Earth USA

Friends of Nelson

Mothers United Against Uranium Mining

Peoples' Alliance for Clean Energy (PACE)

Sierra Club-Virginia Chapter

Virginia Organizing

Wild Virginia