

VIRGINIA NUCLEAR ENERGY AUTHORITY POSITION ON THE VIRGINIA ENERGY PLAN

DRAFT 0

Sama Bilbao y León – July 17, 2014

- Emphasize the importance of performing long term energy planning. The planning, design and implementation of the optimum infrastructure (electric grid, power plants, gas piping, etc) for an effective and efficient energy plan takes time.
- Importance of base load capacity for the reliability of the grid. Excessive reliance on intermittent energy sources (wind, solar) or on energy sources that depend on continuous delivery of fuel from offsite (natural gas) may result in instability and lack of availability of the electricity supply when it is most needed.
- Importance of long term price stability in the energy prices. It was not too long ago when electricity prices escalated out of control in many states due to the increase of natural gas prices. The recent discovery of large reservoirs of shale gas in the US has made us forget about this not so distant painful experience, but it is unlikely that the price of natural gas will remain this low in the long term, particularly in the face of increased pressure to export to other nations (Europe, Japan, Ukraine).
- While the use of increase energy efficiency (nega-watts) is certainly something that should be pursued and encouraged, the fact is that the demand for energy is only going to increase, particularly if we want the economy in Virginia to continue growing and we want our state to continue being an economically competitive state in the US and in the world. For example, we have seen a large increase in the number of data centers in Virginia and each of them are a large consumer of electricity. Also, the use of plug-in electric vehicles has been proposed as one of the approaches to reduce carbon emissions in the transportation sector. This will result in a net increase in the electricity demand. Furthermore, the carbon reduction effect will only be fully realized if this electricity is produced with non-emitting electricity sources, such as nuclear power.
- Recognize the current substantial and sustainable contribution of nuclear power to Virginia's energy mix, around 40% currently. This is non-carbon emitting, economic and reliable base load power that today is key to Virginia's economy. Virginia is one of the states with lowest electricity prices (need data here).
- Recognize the substantial economic value of VA nuclear science and technology stakeholders (Dominion, Newport News Shipbuilding, AREVA, B&W, etc)
- Recognize the value of nuclear power as a economic and effective way to comply with the new EPA greenhouse gas regulations.
- Request the support for Dominion's plan to add additional nuclear capacity at the North Anna site.
- Request the recognition of nuclear power's importance in the reduction of carbon emissions by including nuclear power as one of the potential technologies available to comply with renewable portfolio standards in VA.
- Request the support for the potential deployment of economically feasible small modular reactors, like the VA-born B&W mPower design, as a potential replacement for small old coal units that may

not be economically feasible to retrofit with the appropriate emission controls necessary to meet the new EPA greenhouse gas regulations.

- Request the support for additional cutting-edge research in the area of nuclear science and technology, so that VA can continue to be a leader in the US and in the world.
- Request the support for additional nuclear workforce development in VA, so we can continue creating high-paying jobs for Virginians, and so that we can sustain our very important nuclear industry in the long term.
- Encourage education programs in the area of energy use, energy efficiency, the various sources of energy available in VA, as well as the importance of the design and implementation of a balanced energy portfolio that makes appropriate use of all energy sources available.