Voluntary Renewable Energy Portfolio Standard Program

- The RPS program is available to investor-owned incumbent utilities.
- Participating utilities receive:
  - cost recovery for all incremental costs incurred to participate in the program
  - performance incentive in form of an increased rate of return
- Calculations are derived from the “base year.”
Voluntary Renewable Energy Portfolio Standard Program

- Renewable energies include solar, wind, falling water, biomass, energy from waste, municipal solid waste, wave motion, tides, and geothermal power.
  - **RPS Goal I:** 4% of base year sales in 2010
  - **RPS Goal II:** Average of 4% of base year sales in 2011 through 2015, and 7% of base year sales in 2016
  - **RPS Goal III:** Average of 7% of base year sales in 2017 through 2021, and 12% of base year sales in 2022
  - **RPS Goal IV:** Average of 12% of base year sales in 2023 and 2024, and 15% of base year sales in 2025
- Onshore wind and solar power receive a double credit toward RPS goals.
- Offshore wind receives triple credit.
HB 1994; Bulova (2009)
HB 1022; Hugo (2010)

- HB 1994 added Goal IV, to have 15 percent of sales be from renewable energy sources in 2025.
- HB 1022 provided that energy derived from offshore wind is eligible for triple credit.
The total rated generating capacity owned and operated by customer-generators is capped at 1% of the company's peak-load forecast for the previous year.

Monthly net excess generation (NEG) is carried forward each month for 12 months. At that time, the customer may carry forward excess NEG up to the amount of energy purchased during that period or sell the NEG to the utility pursuant to a power purchase agreement entered into with the supplier prior to the initiation of net metering.
Net Energy Metering Rules
20 VAC 5-315-10 *et seq.*

A customer is eligible to participate in the net energy program if the electrical generating facility:
- Uses renewable energy as a fuel source;
- Is served by an investor-owned utility or an electric cooperative;
- Has a rated capacity of up to 10 kW for residential customers, or a rated capacity of up to 500 kW for nonresidential customers. The utility may offer net metering to non-residential systems with a capacity of greater than 500 kW;
- Complies with recognized engineering standards;
- Is located on the premises of the customer; and
- Is connected to the customer’s wiring on his side of the interconnection with the distributor.
HB 2155; Toscano (2009)

The measure:

- Authorized utilities to elect a capacity limit for participation by nonresidential customers that exceeds the existing limit of 500 kW;
- Permitted customers who are served on time-of-use tariffs to participate as customer-generators;
- Clarified that customer-generators own renewable energy certificate and have a one-time option to sell the certificates to the supplier.
SB 1350; Wagner (2009)

- The Virginia Marine Resources Commission (VMRC) was directed to examine whether “sufficient and appropriate” subaqueous lands exist in state waters to support a commercial offshore wind farm and, if such land exists, offer it for development in a lease auction.
- All royalties collected from such leases will be appropriated to the Virginia Coastal Energy Research Consortium (VCERC).
It is unlikely there will be large areas with suitable wind resources for large industrial scale projects in state waters.

The best opportunities for large scale wind projects are most likely available in the Atlantic beyond the three nautical mile state jurisdiction.

However, opportunities in state waters for smaller, community scale projects and possible research activities for turbine and tower design may exist.
The recent measure created the Virginia Offshore Wind Development Authority to facilitate and support the development of the offshore wind beyond the state’s 3-mile jurisdictional limit.

The Authority is composed of 11 citizen members appointed by the Governor and staffed by the Department of Mines, Minerals and Energy (DMME).
In cooperation with NOAA, the Authority will upgrade wind resource and other metocean assessment equipment at Chesapeake Light Tower and other structures.

The incumbent utility for the onshore service area will initiate a transmission study to allow the Authority to recommend actions needed to facilitate transmission from offshore wind energy projects.
The Authority may apply for federal loan guarantees and establish public-private partnerships with a developer to:

- Install and operate wind resource and other metocean equipment, including light detection and ranging equipment, meteorological measurement towers, and data collection platforms;
- Collect avian and marine environmental data; and
- Upgrade port facilities and other logistical equipment and sites to accommodate the manufacturing and assembly of offshore wind energy project components and vessels.
The legislature also established the Mid-Atlantic Offshore Wind Energy Infrastructure Development Compact and invited Delaware, Maryland, New Jersey, and New York to pass similar legislation.

The compact aims to:

- Study, develop, and promote coordinated research and planning of the design, construction, utility interconnection, financing, and operation of offshore wind energy infrastructure and operations;
- Coordinate federal, state, and local government efforts; and
- Seek funding for development efforts.

- Virginia recently joined a MOU between the U.S. Department of the Interior (DOI) and nine other states.
- The Governor stated his intent to use the Consortium to encourage the development of the wind resources of the Outer Continental Shelf.
- It was also announced that the DOI will locate a new regional renewable energy office in Virginia.
SB 659; Wagner (2010)

- Requires the Air Pollution Control Board to adopt regulations to implement § 328 of the Clean Air Act relating to air pollution from Outer Continental Shelf sources.
- DEQ shall also request for delegation to implement and enforce § 328 of the Clean Air Act.
DEQ developing permits by rule for the construction and operation of renewable energy projects.

Applicable to projects with a maximum capacity of 100 megawatts if they generate electricity from sunlight, wind, or falling water, wave motion, tides, or geothermal power, or 20 megawatts if they generate electricity from biomass, energy from waste, or municipal solid waste.

Under the permit, a small renewable energy project will be exempt from requirements that the State Corporation Commission (SCC) permit its construction and operation.
Small Wind Projects Permit by Rule 9 VAC 15-40-10 *et seq.*

- Projects with a rated capacity equal to or less than 500 kW are exempt from permitting requirements.
- Projects with a rated capacity between 500 kW and 5 MW must submit a certification from the locality showing that the project complies with all applicable land use ordinances and local government requirements.
Small Wind Projects Permit by Rule 9 VAC 15-40-10 *et seq.*

For projects with a rated capacity between 5MW and 100 MW, the applicant must provide DEQ with the following:

- A notice of intent;
- Certification by the locality that the project complies with applicable land use ordinances;
- Copies of all interconnection studies;
- Copies of the final interconnection agreement;
- Certification by a professional engineer that the project’s maximum capacity does not exceed 100MW;
- Analysis of environmental impacts on the attainment of national ambient air quality standards;
Small Wind Projects Permit by Rule 9 VAC 15-40-10 *et seq.*

- Analysis of the beneficial and adverse impacts of the project on natural resources, including wildlife and historic resources;
- Mitigation plan that details reasonable actions to minimize adverse impacts to wildlife if so indicated in the above analysis;
- Detailed site plan;
- Certification that all associated environmental permits have been applied for and obtained;
- Report on the issues arising from a mandatory 30-day public comment period and meeting in the affected area; and
- Payment of permit fee.
By ordinance, localities may offer contracts to provide loans for the initial acquisition and installation of clean energy improvements.

The locality may place a lien on the property.

A locality aiming to establish such a program must:

- Hold a public hearing;
- Specify which "clean energy improvements" would be covered;
- Determine funding sources;
- Establish interest rates and loan terms; and
- Determine the method for collecting the loan repayment, either via water or sewer bills, real property tax assessments, or other billing method.
HB 803; Poindexter (2010)

- Created a $500 income tax credit for the creation of a "green" job paying an annual salary in excess of $50,000
- Defined as jobs in the manufacturing and operation of renewable or alternative energy products and associated technologies
- Eligible alternative energy sources are include hydrogen and fuel cell technology, landfill gas, geothermal heating systems, solar heating systems, hydropower systems, wind systems, and biomass and biofuel systems.
Other Legislative Activity

- **Commission on Energy and Environment**
  - Potential for offshore wind energy projects
  - Hurdles of project financing
  - Benefits of a mandatory RPS
  - Net metering constraints
  - Model wind energy ordinance for residential and agricultural zoning

- **Manufacturing Development Commission**
  - Estimated the total capital investment to produce 2,000 MW of installed offshore wind capacity over a 10-year build out period at $6.2B
  - Valued local fabrication and installation contracts to install offshore wind capacity over this same 10-year period at $200M and local offshore service contracts after the build out has been completed at $155M/year
  - Drafted a proposed Offshore Wind Project Development Commission to facilitate and coordinate the development of wind power projects
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