



**STATE OF NORTH CAROLINA  
ENERGY POLICY COUNCIL  
APPROVED POLICY RECOMMENDATION**

**May 20, 2015**

In accordance with General Statute §113B-5, the Energy Policy Council makes the following policy recommendation:

**North Carolina should maintain nuclear energy generation in its current and future energy portfolio to provide reliable, clean and emissions-free baseload energy.**

- Nuclear energy provides 32% of total electricity generated in North Carolina
- Nuclear energy is one of the only reliable sources of zero-emission, always-on, base-load electricity.
- Nuclear energy has proved to be very safe during its 50+ year history in U.S.
- Nuclear power generation has the lowest land use intensity of any power source at 2.4 km<sup>2</sup>/TWh/yr.<sup>1</sup>
- The U.S. Energy Information Administration estimates that the cost of new nuclear plants on a levelized basis is competitive with several other new sources of electricity generation, projected at \$96.1/MWh in 2019.<sup>2</sup>
- Reliability, distinguishes nuclear reactors from other energy resources. Nuclear plants operate at 90% capacity factor on an annual basis.
- Nuclear power plants are a significant provider of jobs and tax receipts, with a 1000 MW facility employing hundreds of permanent employees with salaries generally at least a third more than local average and contributing millions of dollars in state and local taxes.
- Future new nuclear generation is needed to maintain North Carolina's competitiveness and assure that residents and businesses in North Carolina have reasonably priced and reliable energy in the years to come.
- Early action is needed to effectively plan and deploy new reactors. The two reactors at the Brunswick plant are at-risk of closing in 2034 and 2036 respectively.

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<sup>1</sup> The Nature Conservancy determined solar photovoltaic power generation requires 36.9 km<sup>2</sup>/TWh/yr, wind generation 72.1 km<sup>2</sup>/TWh/yr, and biomass generation 543.4 km<sup>2</sup>/TWh/yr.

<sup>2</sup> The levelized basis for cost calculation purposes is the "per-megawatt-hour cost (in real dollars) of building and operating a generating plant over an assumed financial life and duty cycle." See U.S. Energy Info. Admin., Levelized Cost and Levelized Avoided Cost of New Generation Resources in the Annual Energy Outlook 2014 1 (2014), at [http://www.eia.gov/forecasts/aeo/pdf/0383\(2014\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2014).pdf)