

The Cost of "Business As Usual": Falling Behind on Renewable Energy and Efficiency

"A large part of the State's resource portfolio is subject to potentially substantial risk," due to the potential liability from carbon dioxide emissions and nuclear waste disposal.

– La Capra Report, Commissioned by NCUCⁱ

Being a Loser. North Carolina lags in the bottom five states for investing in sustainable energy programs.ⁱⁱ We invest 91% less on energy efficiency programs than the national average, or forty-four cents per person.ⁱⁱⁱ

Losing business. Utility-related pollution hampers economic development.

- Tesla picked New Mexico over North Carolina for a \$35 million, 400 employee, 150,000 sq. ft. plant "to be in a state that is [] committed....to developing clean energy and addressing global climate change."^{iv}
- Toyota picked Mississippi over North Carolina for a \$1.3 billion, 2,000 employee plant, citing air pollution as the reason.^v

Paying for non-renewable energy and facilities. Coal, natural gas, and uranium are expensive, and as pollution regulation increases, the costs associated with coal and nuclear plants will sky-rocket.^{vi}

- Customers pay \$1.6 billion, mostly to out of state businesses, for non-renewable fuel for electricity.^{vii}
- Initial estimates for new nuclear plants are \$4 to \$6 billion,^{viii} excluding nuclear waste storage.^{ix}
- Progress Energy's Shearon Harris caused a 16 % rate increase and required a 60-yr payment plan.^x

Paying for nuclear and coal by-products. Customers risk billion dollar debts for nuke and coal liability.

- Duke Energy's carbon dioxide emissions could cost between \$50 million and \$1.25 billion dollars per year, depending upon the cost of carbon dioxide once a cap is in place.^{xi}
- Duke Energy allocates \$1.2 billion for "exposures" in health and environmental actions, and litigation.^{xii}
- Independent experts assign nuclear energy the worst rating for adverse environmental impact due to water usage, land usage, fuel extraction, and waste disposal.^{xiii}
- Progress Energy helped make 15 N.C. census tracts among the 5% most polluted nationwide.^{xiv}
- Millions of dollars were required to clean up thousands of tons of soil near RDU and downtown Raleigh that had been polluted in part by Progress Energy.^{xv}

Paying for crisis. All energy providers agree and explain to their stockholders^{xvi} that nuclear energy carries with it significant potential liability for environmental damage, health costs, and accidents, including terrorism.

- "A radiation release akin to the 1986 accident in Chernobyl in the former Soviet Union would render areas of the Triangle uninhabitable for 10,000 years."^{xvii}
- One one-year-old spent nuclear pellet, which Progress Energy stores on site, "produces a lethal dose [of radiation] in 6 to 9 seconds." A 50 year-old pellet "emits a lethal dose in about 3 to 4 minutes."^{xviii}
- Duke and Progress experienced unplanned mechanical malfunctions that forced the automatic shutdowns' of their nuclear plants on at least fourteen occasions in the last six years.^{xix}
- The Nuclear Regulatory Commission found that 6,500 feet of electrical cable insulation at Shearon Harris performed inconsistently under intense heat in laboratory tests.^{xx} It would cost millions to fix.^{xxi} The guards hired as a compensatory measure^{xxii} were caught cheating on their certification tests.^{xxiii}

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- ⁱ La Capra Associates, Inc., et. al., "Analysis of Renewable Portfolio Standard for the State of North Carolina: Technical Report, Prepared for North Carolina Utilities Commission," December 2006, at 84.
- ⁱⁱ Christopher Kirkpatrick, "Duke plan: Boost rates, save energy," *The Charlotte Observer*, May 8, 2007.
- ⁱⁱⁱ See, Environmental Defense, et al, "The Power to Choose," 2007, at 12.
- ^{iv} Quote by Elon Musk, CEO, Tesla, "Tesla picks New Mexico over N.C. for plant," *Triangle Business Journal*, February 20, 2007.
- ^v Richard Barron, "Pollution plays a role in choice by Toyota," *News Record*, Greensboro, NC, April 10, 2007.
- ^{vi} See, e.g., *supra*, endnote i at 78-9.
- ^{vii} See *supra* endnote iii at 8; see also, Energy Information Administration, Table 6 at www.eia.doe.gov/emeu/states/sep_prices/eu/pr_eu_nc.html. (last visited May 16, 2007).
- ^{viii} John Downey, "Duke pushes plans for coal, nuclear," *Charlotte Business Journal*, May 10, 2007.
- ^{ix} *Ibid*.
- ^x John Murawski, "Putting a price on nuclear power," *News & Observer*, Raleigh, February 19, 2006.
- ^{xi} According to CEO Rogers, Duke emits about 50 million tons of carbon dioxide, per year. See Christopher Kirkpatrick, "Duke to pursue single coal plant," *The Charlotte Observer*, May 11, 2007. Carbon costs drawn from La Capra Associates, Inc., et. al., "Analysis of Renewable Portfolio Standard for the State of North Carolina: Technical Report, Prepared for North Carolina Utilities Commission," December 2006, at 80-1.
- ^{xii} Duke Energy Carolinas, LLC, Form 10-K, 12/31/06, available at <http://www.sec.gov/edgar.shtml>.
- ^{xiii} *Supra* endnote i at 77;
- ^{xiv} Gary Robertson, "N.C. Blacks breathe worse air," *News & Observer*, Raleigh, December 18, 2005.
- ^{xv} Wade Rawlins, "PCB Cleanup plans revealed," *News & Observer*, Raleigh, April 18, 2007; Josh Shaffer, "Raleigh waste cleanup set," *News & Observer*, Raleigh, June 29, 2005.
- ^{xvi} "Duke Energy Carolinas may incur substantial costs and liabilities due to Duke Energy Carolinas' ownership and operation of nuclear generating facilities." Duke Energy Carolinas, LLC, Form 10-K, 12/31/06, available at <http://www.sec.gov/edgar.shtml>; Dominion explains, "We operate nuclear facilities that are subject to risks, including the threat of terrorist attack and ability to dispose of spent nuclear fuel." Dominion Resources, Inc., Form 10-K, filed February 28, 2007, at 14 available at http://www.dom.com/investors/pdf/dri10k_dec2006.pdf; Progress Energy says, "There are inherent potential risks in the operation of nuclear facilities, including environmental, health, regulatory, terrorism, and financial risks, that could result in fines or the shutdown of our nuclear units, which may present potential exposures in excess of our insurance coverage." Progress Energy, Inc., Form 10-K, filed 3/1/07, available at <http://www.sec.gov/edgar.shtml>.
- ^{xvii} Wade Rawlins, "Surge in nuclear power likely," *News & Observer*, Raleigh, January 29, 2006.
- ^{xviii} John Murawski, "Nuclear foes see danger in waste," *News & Observer*, Raleigh, April 15, 2007.
- ^{xix} John Murawski, "Bad time for nuke shutdown," *News & Observer*, Raleigh, September 22, 2006.
- ^{xx} John Murawski, "Shearon Harris dispute ramps up," *News & Observer*, Raleigh, May 15, 2007.
- ^{xxi} *Ibid*.
- ^{xxii} John Murawski, "Price seeks Harris plant safety review," *News & Observer*, Raleigh, May 14, 2007.
- ^{xxiii} Raliegh, AP, "Officials: Progress Energy guards at nuke plant cheated," *News Record*, Greensboro, NC, May 15, 2007.