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Abstract

This article focuses on North Carolina’s renewable energy and energy efficiency portfolio standard (REPS) statute. The REPS statute stands out as the first enacted by a Southeastern state. Moreover, the implementation of the REPS statute in North Carolina presents an opportunity for understanding energy policy in a state that grew by 18.5% from 2000-2010 to become the 10th most populous in the nation. This article examines the development and implementation of the REPS as the first important compliance deadline approaches in 2012.

First, the article provides a case study of the legislative process to inform state and federal policy-makers of the issues raised by REPS statutes. Second, the article reviews significant regulatory rulings and filings as a prelude to the 2012 compliance deadlines. Third, the article brings current the energy policy debate in North Carolina by reviewing legislation introduced in the 2011 session of the General Assembly. The article concludes that major amendments to the REPS statute are premature prior to the first significant compliance deadline.

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Introduction

North Carolina’s energy policy is created by the legislature and implemented by the North Carolina Utilities Commission (“NCUC” or “the Commission”). The Public Utilities Act sets out the declaration of policy related to public utilities. The declared policy reflects a fundamental notion of utility regulation: “the rates, services and operations of public utilities…are affected with the public interest and that the availability of an adequate and reliable supply of electric power and natural gas to the people, economy and government…is a matter of public policy.”2 The enumerated list following this broad declaration touches on nearly every aspect of the energy, economic, environmental, and technological considerations involved in North Carolina’s energy policy.3 In 2007, when the General Assembly enacted the renewable energy and energy efficiency portfolio standard (REPS), it added the additional policy of promoting the development of renewable energy and energy efficiency through the implementation of a REPS that will do all of the following: diversify the resources used to reliably meet the energy needs of consumers in the State, provide greater energy security through the use of indigenous energy resources available within the State, encourage private investment in renewable energy and energy efficiency, and provide improved air quality and other benefits to energy consumers and citizens of the State.4 This new policy creates tension with the historical policy of a “least cost mix of generation,”5 because almost all renewable energy sources for electricity generation are more expensive than conventional generation sources.6

This tension is evident in the legislative process that produced the REPS and the rulings by the Commission interpreting the legislation. This article explores this dynamic by providing a

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case study of the legislative process relying on the record developed and the authors’ observations during participation in the process. Next the article will review significant regulatory rulings and filings at the Commission to highlight the complexity of the REPS. Finally, the article discusses recent activity at the General Assembly and concludes that changes to the REPS are premature before the 2012 compliance deadline.

Prior to embarking, some additional observations about North Carolina’s electric industry and energy policy debate will be useful to the reader. North Carolina’s electricity consumers are served by three types of electric power providers: 1) investor-owned utilities: Progress Energy Carolinas, Inc. (“Progress Energy”); Duke Energy Carolinas, LLC (“Duke Energy”); and Dominion North Carolina Power (“Dominion”), 2) rural electric cooperatives, and 3) publicly owned power providers (including municipal and state university owned power systems). The disparate treatment of the different electric power providers under the REPS will be discussed, although a complete exploration of the many differences between them is well beyond the scope of this article.

North Carolina has a well-organized and active environmental advocacy network that is connected with citizens and businesses across the state and nation. The two groups, electric power providers and the environmental advocates, are each fairly cohesive in their policy preferences and often oppose each other’s policy goals both at the Commission and in the legislative arena. In addition to these players, the NCUC Public Staff has a significant impact on Commission proceedings and legislation in its role as an independent state agency representing the using and consuming public.  

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7 See e.g. North Carolina Chapter of the Sierra Club, http://nc.sierraclub.org/about/about.html (Stating that as of 2009, the Chapter had 17,000 members and 13 local groups across the state).
The Governor is also a key actor in North Carolina’s energy policy. The Governor holds appointment authority for the seven member Commission (subject to confirmation by the General Assembly),\(^9\) has veto power of legislation enacted by the General Assembly,\(^10\) and can use the ability to gather media attention to garner support for priority issues. The Governor is chief executive of cabinet agencies that directly regulate or indirectly impact the operation of the electric utility industry, including the North Carolina Department of Environment and Natural Resources (NC DENR) which regulates air and water quality and is the administrative home to the Environmental Management Commission\(^11\) and the North Carolina Department of Commerce which houses the N.C. Energy Division (formerly, the State Energy Office)\(^12\) and the Energy Policy Council.\(^13\)

The Energy Policy Council has re-emerged recently as an important venue for energy policy debate. Of the sixteen members of the Council, the Governor appoints twelve members and designates one of the members as Chair.\(^14\) The Council’s membership is made up of a cross section of business, industry, legislators, and environmental advocates.\(^15\) The Council’s work from late 2009 through January 2011 culminated in a final report dated March 15, 2011 in which the Council unanimously affirmed support for the REPS “as key to building the state’s energy economy.”\(^16\)

Finally, there is the Environmental Review Commission (E.R.C.), which the General Assembly established to undertake detailed review of studies and reports related to the

\(^10\) N.C. Const. Art II, §22(1).
\(^12\) See N.C. Sess. Law 2009-446, § 1(a); see also NC Energy Department of Commerce, “Energy.” http://www.nccommerce.com/energy.
\(^13\) N.C. Gen. Stat. § 113B-3(a).
\(^14\) Id.
\(^15\) Id.
environment and, by implication, utilities. The work of the E.R.C., and its staff attorneys in 2005 and 2006 was a key step to enactment of the REPS in 2007. Thus, our case study of the legislative process begins with the E.R.C.

**Case Study of Legislative Process**

**The La Capra Study**

At a January 24, 2006 meeting, the E.R.C. adopted a motion to conduct a study of renewable energy portfolio standards, as outlined in a presentation by NCUC Commissioner James Y. Kerr, II. Commissioner Kerr’s presentation to the E.R.C. that day outlined a study process that involved the hiring of a consultant to produce a “factual, analytical reference point” rather than policy recommendations. A group of stakeholders including load serving entities, regulated utilities, the NC Sustainable Energy Association, legislative staff and representatives from NC Green Power would have input on the design of the study, provide data to inform the study, and review a draft of the report. NCUC would then undertake a comment period and produce a final report, which would be presented to the E.R.C. and the General Assembly before the beginning of the 2007 legislative session.

The study became informally known as the “La Capra Study,” so called for the name of the consulting firm La Capra Associates, Inc. (“La Capra”) that produced it. In December 2006, La Capra presented the results to the E.R.C., and delivered to the NCUC technical reports authored by Sustainable Energy Advantage, LLC and La Capra, and a report on energy

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17 See N.C. Gen. Stat. §§ 120-70.41—70.47.
19 Id. at 3.
20 Id. at 3–4.
21 Id.
efficiency by the engineering and consulting firm GDS Associates, Inc.\textsuperscript{25} The La Capra study issued three key findings:

[1] North Carolina should have sufficient renewable resources within the State to meet a 5\% RPS requirement for new renewable generation. A 5\% RPS would increase average retail electricity rates by less than 1\% and would be accompanied by net job creation and property tax benefits.

[2] The State would have difficulty meeting a more aggressive 10\% RPS with only new renewable resources located within North Carolina. A 10\% RPS focused solely on generation supply would only be achievable by the inclusion of larger hydroelectric generation and the development of wind in both the western part of the State and in off-shore locations. A 10\% RPS met only with new renewable generation would increase average retail electricity rates by at most 3.6\% in the tenth year.

[3] Inclusion of energy efficiency as an eligible RPS resource in addition to larger hydroelectric generation and wind in the western part of the State would enable the State to achieve a 10\% RPS and could dramatically reduce the cost of an RPS. For example, if energy efficiency was permitted to comprise 25\% of an expanded resources RPS portfolio, both a 5\% RPS and a 10\% RPS could reasonably be expected to produce total electric cost savings for consumers of about half a billion dollars over 20 years.\textsuperscript{26}

The study went on to examine the practical and technical potential of various types of renewable resources that could be used to produce electric power in North Carolina, the impact on rates, the effect on economic development, environmental impacts, and portfolio diversification benefits.\textsuperscript{27}

The study closes with identification of a number of issues left to be addressed in the legislative process, including: whether electric cooperatives and municipally owned power providers should be included in the REPS requirement; the stability of the targets and how fast the targets increase; designing a cost effective compliance program; and determining compatibility with other state policies.\textsuperscript{28} Aside from these “major issues,” the study also identified a “host of other details to be considered,” that were beyond the scope of the report.\textsuperscript{29}
On December 13, 2006, with a presentation to the E.R.C., development of the REPS began in earnest. On December 15, 2006, the NCUC published a notice soliciting written comments on the La Capra Study. Comments would be gathered and delivered to the E.R.C. in time for consideration during the General Assembly’s 2007 session. By February 5, 2007, the Commission had received comments from 19 parties, including environmental advocates, utilities, individuals, and others. The substance of the parties’ comments reflects the starting point for the debate that was already underway at the General Assembly.

The Starting Positions

On January 24, 2007, State Senator Charlie Albertson introduced Senate Bill 3, the legislation that would enact the REPS. As introduced, the legislation would have applied to public utilities, electric cooperatives and municipalities, (collectively “electric power suppliers”) and required that 1% of the total electric kilowatt hours sold during the previous year be sold from a “new renewable energy facility” or saved due to implementation of energy efficiency measures. The percentage requirement would have increased each calendar year until 2018, when the amount would equal 10%. Electric power suppliers could meet the target renewable energy goals by generating power at a new renewable facility, through savings due to energy efficiency measures, by purchasing power from a new renewable energy facility, or any

30 See La Capra Associates, Presentation to the Environmental Review Commission, supra.
33 Id.
34 See NCUC-Miscellaneous Folder, Documents for RPS (Renewable Portfolio Standard) for North Carolina, at http://ncuc.commerce.state.nc.us/cgi-bin/miscfldrdocs.ndm?INPUT?flddesc=RPS+RENEWABLE+PORTFOLIO+STANDARD+FOR+NORTH+CAROLINA&numret=100&Search=Search.
36 Id. (defining “new renewable facility” as a “facility that generates electric power that is placed into service on or after 1 January 2007 and that delivers electric power generated by the use of a renewable energy resources to an electric power supplier”).
37 Id.
combination of these three options. Further, the legislation directed the Commission to adopt rules implementing the new law, including allowing up to 25% of the requirement to be met by energy efficiency, providing for monitoring of compliance and enforcement of the requirements, considering a multiplier credit to promote certain (although unnamed) renewable energy resources, and including a procedure for recovery of compliance costs as an alternative to the rate fixing statute. The stage was set for a long and arduous policy development process, and what emerged was a complex and delicately crafted proposal to set a course for North Carolina’s electric energy policy for the next fourteen years and beyond.

The comments received by the NCUC are the most instructive record available for detailing the policy preferences of the stakeholders. Each of the electric power suppliers filed comments individually, although their comments contain common themes. Duke Energy’s comments characterized the La Capra Study as “a valuable starting point,” but noted that the La Capra study did not use comprehensive utility planning models used in the utilities’ integrated resource planning process. Duke Energy further commented that the La Capra study largely agreed with Duke’s then-current plans of bringing online a large amount of conventional generation regardless of the REPS goal scenario. Duke’s strongest criticism of the La Capra study was that the assumptions underlying the conclusion that would allow the State to achieve a 10% REPS did not adequately account for availability and costs of existing renewable resources. Duke Energy and La Capra agreed that the REPS will increase consumers electricity costs, however, Duke Energy emphasized that decision as a “public policy issue” for

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38 Id.
39 Id.
40 Id. See also N.C. Gen. Stat. § 62-133.
42 Id. at 2.
43 Id. at 2 (referring to existing North Carolina law, as well as public resistance as obstacles to development of wind projects).
legislators to determine whether the benefits of the REPS outweigh the costs of increased electric rates.\textsuperscript{44} Duke Energy’s comments closed with several specific policy recommendations: a mechanism for timely recovery of costs incurred to meet the REPS requirement, a cap on rate impacts, a provision for reduction in the REPS target if unexpected increases in rates occur, a market for trading renewable energy credits, and development of consistent energy policies that integrate a number of planning and financing issues.\textsuperscript{45}

Progress Energy’s comments were similar to those of Duke. As to methodology of the La Capra study, Progress also noted that the results “may be reasonable indicators of relative costs, but the results are not precise.”\textsuperscript{46} Progress Energy’s comments also highlighted the uncertainty surrounding the ability to site wind resources and specifically pointed to the Mountain Ridge Protection Act of 1983, which would stymie large-scale wind development in Western North Carolina.\textsuperscript{47} Progress Energy also commented that the ultimate question of whether the benefits of a REPS outweigh the costs was a public policy issue to be determined by the General Assembly.\textsuperscript{48} Progress closed its comments with identification of “a host of other details” that require further consideration, including: a mechanism (such as an annual adjustment clause) to allow utilities timely recovery of costs, development of mechanisms to minimize compliance costs (such as provisions for the purchase of Renewable Energy Certificates or making alternative payments), and defining renewable resources broadly to allow for achievement of REPS targets as cost-effectively as possible.\textsuperscript{49}

\textsuperscript{44} Id. at 3.
\textsuperscript{45} Id. at 3 (identifying customer rate impacts, changes in reliability, other generation sources, cost-recovery, and long-term system planning impacts, such as generation, transmission, and distribution as issues that should be considered concurrently with the adoption of an REPS).
\textsuperscript{47} Id. at 4.
\textsuperscript{49} Id. at 3.
\textsuperscript{50} Id. at 5.
Dominion’s comments reflect its unique situation in the state. In 2007, Dominion served roughly 114,000 retail customers in northeast North Carolina, including portions of the Outer Banks.\(^{50}\) Dominion is a member of the PJM Interconnection, a regional transmission organization that covers thirteen states.\(^{51}\) Dominion emphasized both of these characteristics when objecting to the La Capra study recommendation to disallow out-of-state renewable energy to satisfy a portion of the REPS.\(^{52}\) Dominion also identified parts of the La Capra study that mention, but do not sufficiently address the Commerce Clause issues raised by excluding the use of renewable energy imports.\(^{53}\) Similarly, Dominion criticized the La Capra report for seemingly assuming that all renewable resources built in North Carolina would be used exclusively in North Carolina.\(^{54}\) Dominion also commented that the La Capra study did not sufficiently analyze transportation and interconnection costs, that a tracking system must be established to measure the effectiveness of the REPS, and that details of the role of the program administrator discussed in the La Capra study were needed.\(^{55}\)

The comments of the North Carolina Electric Membership Corporation (“NCEMC”) filed on behalf of North Carolina’s electric cooperatives opened with a positive assessment of the study process and the potential for renewable energy development.\(^{56}\) NCEMC noted a distinguishing characteristic of electric cooperatives, that as consumer-owned businesses, the “cooperatives operate ‘at-cost’ and must immediately pass on increased costs directly to the

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\(^{51}\) Id. at 3 and 6. See also “About PJM.” PJM. http://www.pjm.com/about-pjm.aspx.

\(^{52}\) Id. at 3. \(^{53}\) Id. at 3. \(^{54}\) Id. at 4 (identifying a project located in North Carolina that was then selling into the PJM market).

\(^{55}\) Id. at 4-5.

That reality, and the state of the economy in rural North Carolina made the electric cooperatives “very concerned” that discussion of “mandates for renewable or energy efficiency consider the impact to the end-use consumer who will ultimately foot the bill.” The comments of NCEMC went on to identify a number of findings in the La Capra study that “should be carefully scrutinized,” among them: the limited number of viable renewable technologies in North Carolina, the magnitude of the cost to consumers, the simplified methodology of the study, the structure of an energy efficiency program, and the potential that a renewable energy mandate would actually raise the costs of already comparatively high renewable power sources. In closing, NCEMC expressed support for “inclusion of renewable energy and energy efficiency programs as part of a balanced and responsible energy strategy,” but at the same time urged a careful consideration of implementation issues, the costs of renewable mandates and the impact to the rate-paying public.

Two filings set out the positions of environmental advocates, renewable energy developers, and others who promote development of renewable energy and reducing reliance on conventional generation sources. The first was filed by the North Carolina Sustainable Energy Association (NCSEA), a non-profit that “works to ensure a sustainable future by promoting renewable energy and energy efficiency in North Carolina through education, public policy and economic development.” NCSEA encouraged policy makers to consider scenarios that include additional energy efficiency measures, to consider the La Capra Study’s results within context of more specific North Carolina data (as opposed to the national data used), and to include

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57 Id.
58 Id.
59 Id. at 1-2.
60 Id. at 3.
combined heat and power generation in any standard. In summary, NCSEA expressed support for an REPS because of the economic and social benefits of an REPS, its potential to establish North Carolina as a leader in the promotion of renewable energy in the Southeast, and to incorporate the benefits of energy efficiency as a low cost resource. NCSEA also signed the second filing, and was joined by the NC Sierra Club, Environmental Defense, Carolinas Clean Air Coalition, North Carolina Conservation Network, the NC Waste Awareness and Reduction Network, and others (collectively, “Environmental Advocates”). Environmental Advocates expressed support for the REPS by discussing four main points: 1) electric reliability is not sacrificed by requiring use of renewable resources; 2) an REPS has a positive impact on the State’s economy; 3) the La Capra Study over-estimated the costs of renewable energy and underestimated the cost of conventional generation technologies; and 4) an REPS is the state’s best opportunity to improve the utility industry and address the causes of global climate change. In sum, the Environmental Advocates endorsed a 10% REPS mandate and suggested that a 20% REPS target is not unattainable.

While a number of other individuals and businesses filed comments in the NCUC’s RPS folder, the foregoing summarizes the positions of the interested parties were at the outset of the legislative process. On the one hand, utilities generally expressed reservation about details of the study related to cost models, uncertainty that wind resources could be sited, and issues related to out-of-state resources. On the other hand, Environmental Advocates expressed optimism about

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63 Id. at 4.
65 Id. at 1-4.
66 Id. at 4.
67 See Documents for RPS (Renewable Portfolio Standard) for North Carolina folder, NCUC at http://ncuc.commerce.state.nc.us/cgi-bin/miscfldrdocs.ndm?INPUT?flddesc=RPS+RENEWABLE+PORTFOLIO+STANDARD+FOR+NORTH+CAROLINA&numret=100&Search (last visited 1/4/12).
the study in that the study underestimated the potential for energy efficiency and renewable resources, job creation, and overestimated the costs of renewable generation sources. Thus, as the legislative process began in 2007, an adversarial posture between the two was well established. Over the next several months, the process would play out with winners and losers on a number of issues. The following section details the process and the final result.

**Writing REPS Legislation at the North Carolina General Assembly**

Senate Bill 3 was introduced on January 25, 2007, as a four page bill with only bare bones provisions related to an REPS. The introduction on the second day of the legislative session and the low number assigned to the bill was a signal from legislative leaders that the REPS was a priority during the legislative session. The task of writing the legislation largely took place outside of the formal legislative process. That task was delegated to the General Assembly’s Research Division staff assigned to environmental and public utility laws. They and the stakeholders in the process proceeded under the leadership of Staff Attorney George Givens in what is colloquially referred to a “605 working group process,” so named for the small conference room where Givens regularly convened these meetings.

Indeed, the REPS soon proved to be so complex and to have so many interested stakeholders that Givens moved the working group to a larger committee room in the Legislative Office Building. The group met regularly on Fridays throughout the late winter, spring and early summer months in 2007. The participants in the process represented utilities, NCUC, NCUC Public Staff, environmentalists, manufacturers, utility consumer advocates, state regulators, and the professional staff of the General Assembly. Legislators were largely excluded from the meetings, but occasionally attended to monitor the progress or encourage compromise when

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impasses arouse. It was a mammoth undertaking, one which Mr. Givens has since called his greatest accomplishment in a long career working for the General Assembly.

The product of the working group process was the second edition of Senate Bill 3, adopted by the Senate Committee on Agriculture/Environment/Natural Resources Committee meeting on June 26, 2007. The bill had grown to twenty-seven pages, handling the REPS in a much more thorough and complex manner. The key compromises and the remainder of the legislative process are summarized in this section.

The heart of the REPS statute is the mandated percentage of retail electric sales to be derived from renewable sources. The mandate was bifurcated in the second edition: Electric public utilities (investor-owned utilities) were subject to a more aggressive mandate of 12.5% of 2020 retail sales, while electric cooperatives and municipalities a less aggressive 10% of 2017 retail sales. Both schedules were at or above levels called for in the La Capra study.

“Set-asides” were added to the legislation, specifically mandating compliance with the REPS through use of solar energy, swine waste, and poultry waste. The solar set-aside would initially require 0.02% of the total electric power sold in 2010 to be supplied by a combination of new solar resources, with stepped increases in the requirement until reaching 0.20% in 2018 and subsequent years. Similarly, the swine waste set-aside would require 0.07% of 2012 retail sales to be supplied by swine waste resources, with the requirement reaching 0.20% in 2018 and subsequent years. The poultry waste set-aside was structured entirely differently, with the requirement measured by total megawatt hours (MWh) and mandating at least 170,000 MWh

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69 See id.
71 See supra note 26, and associated text.
generated from poultry waste in 2012, and reaching an annual requirement of 900,000 in 2014 and beyond.\textsuperscript{75}

Provisions related to utilities’ cost recovery were added to the legislation.\textsuperscript{76} The key cost recovery provision was the authorization of an “annual rider” that was limited based upon the type of utility customer’s account: Residential accounts could be charged up to $10/year from 2008-2011; $12/year from 2012-2014; and $34.00 from 2015 and beyond.\textsuperscript{77} Commercial and industrial accounts could be charge amounts significantly higher: $150 from 2015 and beyond for commercial accounts and $1,000 for industrial accounts.\textsuperscript{78} These provisions also dealt with the possibility of a federal REPS, allowing for recovery of these costs as well.\textsuperscript{79} In addition, utilities won inclusion of provisions allowing for the recovery of costs for demand side management and energy efficiency,\textsuperscript{80} and inclusion of a broader range of fuel related costs in the existing “fuel charge adjustment.”\textsuperscript{81}

The second edition included rule-making authority for the NCUC to implement the REPS.\textsuperscript{82} This foreshadowed an additional round of policy making detailed below. Of note here is the inclusion of the so called “off-ramp” provision, whereby the NCUC could modify or delay the provisions of the REPS “in whole or in part if the Commission determines that it is in the public interest to do so.”\textsuperscript{83}

Related to cost recovery, but of a greater import to utilities’ plant construction endeavors, were modifications to the inclusion of approved construction costs in the utilities’ rates.\textsuperscript{84} Known in the vernacular of utility regulation as “construction while in progress” or “CWIP,”

\textsuperscript{75} Id., codified at N.C. Gen. Stat. § 62-133.8(f).
\textsuperscript{76} Id., codified at N.C. Gen. Stat. § 62-133.8(h).
\textsuperscript{78} Id.
\textsuperscript{79} See id., codified at N.C. Gen. Stat. § 62-133.8(h)(1)(c) and (2).
\textsuperscript{81} S.B. 3, § 5, codified at N.C. Gen. Stat. § 62-133.2.
\textsuperscript{82} S.B. 3, § 2(a), codified at N.C. Gen. Stat. § 62-133.8(i).
\textsuperscript{83} Id., codified at N.C. Gen. Stat. § 62-133.8(i)(2).
these provisions allow utilities to recover the costs associated with building new base load plants in a general rate case before the plant is placed into service without a showing by the utility that inclusion of CWIP is necessary for the financial stability of the utility.\textsuperscript{85}

The concept of the renewable energy certificate (REC) was incorporated into the REPS.\textsuperscript{86} A “renewable energy certificate” is a “tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility...or reduced by implementation of an energy efficiency measure” which can be tracked and verified by the Commission.\textsuperscript{87} The REC gives a utility the flexibility to choose to purchase, rather than build for, the mandated renewable generated power. The second edition’s provisions limited to 25% the portion of REPS compliance by purchasing out-of-state RECs.\textsuperscript{88} However, this restriction does not apply to an electric public utility with less than 150,000 North Carolina customers, thereby exempting Dominion from the out-of-state REC restriction.\textsuperscript{89} The restrictions on out-of-state REC purchases was a major compromise point between renewable industry advocates who sought the REPS as an incentive to grow the renewable industry in North Carolina and utilities who sought more compliance flexibility and lower compliance costs.

The second edition of Senate Bill 3 included numerous tax law changes. First, there were reductions in the privilege tax charged to manufacturers and farmers on the sale of electricity, a new exemption from the sales tax for fuel used by farmers in their farming operations and by manufacturers in their manufacturing operations, and reductions in the excise tax on piped natural gas received by a manufacturer.\textsuperscript{90} Second, there was inclusion of a new tax credit for

\textsuperscript{85} Id., codified at N.C.G.S §62-110.1 (f1) and 62.133 (1)(b).
\textsuperscript{86} S.B. 3, § 2(a), codified at N.C. Gen. Stat. § 62-133.8(a)(6).
\textsuperscript{87} Id.
\textsuperscript{88} Id., codified at N.C. Gen. Stat. § 62-133.8(b)(2)(e) (applicable to investor owned electric public utilities) and § 62-133.8(c)(2)(d) (applicable to electric membership corporations and municipalities)
\textsuperscript{89} Id., codified at N.C. Gen. Stat. § 62-133.8(b)(2)(e).
\textsuperscript{90} Id. at § 10 (codified in various sections of N.C. Gen. Stat. Ch. 105).
constructing an energy-efficient home.91 Third, there was a new tax credit for contributing to a nonprofit organization that invests in renewable energy property.92

Finally, a number of other details included in the second edition of Senate Bill 3 that represented major bargaining points for the stakeholders. For example, electric cooperatives and municipalities not only won a less aggressive REPS mandate schedule, but also a separate menu of compliance options.93 Significantly, this separate menu included hydroelectric power purchased through the Southeastern Power Administration, a unit of the federal government that had supplied electric cooperatives and municipalities with below market hydroelectric power for years.94 Electric cooperatives and municipalities could use this power for up to 30% of their REPS compliance.95 Another compliance method made available to electric cooperatives and municipalities was the acquisition of all or part of their electric power through wholesale power purchase agreements.96 A further example was the recognition of the unique position of Dominion, serving a relatively small number of customers in the Outer Banks, with provisions included in the second edition that allowed for unlimited purchase of out of state97 and that recognized the separate cost recovery model previously approved by the NCUC.98

Rather amazingly, the major contents of the REPS remained unchanged through the legislative process. After approval of the second edition by the Senate Committee on Agriculture/Environment/Natural Resources, the same version was approved by the Senate

91 S.B. 3, § 13 (2007).
97 See note 89, infra and associated text.
Committee on Finance without change.\textsuperscript{99} The Senate passed Senate Bill 3 on July 3, 2007 by a vote of 47-1, after rejecting the only amendment offered.\textsuperscript{100}

Similarly, Senate Bill 3 was considered and passed by the House of Representatives with little modification. Senate Bill 3 was first referred to the House Committee on Energy and Energy Efficiency.\textsuperscript{101} The Energy and Energy Efficiency Committee reported a third edition of Senate Bill 3, with much of the substance of the legislation as outlined above unchanged.\textsuperscript{102} The third edition included a new provision requiring best available control technology (BACT) for biomass combustion processes at renewable energy facilities that produce electricity.\textsuperscript{103} Next, the House Committee on Public Utilities reported Senate Bill 3 without changes just one day after the bill was referred to the committee.\textsuperscript{104} The final House Committee to consider Senate Bill 3, the House Finance Committee, did so by reporting a new edition of the bill.\textsuperscript{105} This fourth edition made changes to the BACT provisions, provided additional rule-making authority for the NCUC related to the procedures for tracking RECs, granted new powers for the Environmental Management Commission to evaluate renewable energy technologies, prohibited charging customers for demand side management, and made changes to the various tax provisions, including deleting entirely the credit for energy efficient homes.\textsuperscript{106} The House of Representatives would reject two amendments to the bill and pass the fourth version unchanged.

\textsuperscript{100} Id.
\textsuperscript{101} Id.
\textsuperscript{102} Id.
\textsuperscript{103} S.B. 3, 3rd ed.
\textsuperscript{104} S.B. 3, §2(a), third ed., codified at N.C. Gen. Stat. § 62-133.8(g).
\textsuperscript{106} Id.
\textsuperscript{106} See generally S.B. 3, fourth edition.
by a vote of 107-9. The Senate then accepted the House changes, sending Senate Bill 3 to the Governor. Governor Easley signed the bill into law on August 20, 2007.

**Review of Significant Regulatory Rulings**

With enactment of Senate Bill 3, activity shifted to the NCUC where rulemaking, filings and orders would sketch in the granular detail of the REPS. On August 23, 2007, the NCUC opened Docket No. E-100, Sub 113 by issuance of an Order Initiating Rulemaking Proceeding. The major electric power suppliers were made parties to the docket as were dozens of other stakeholders by way of motions to intervene. The August 23rd Order adopted an expedited timeline for the rulemaking with an ultimate goal of adopting final rules implementing the REPS by January 1, 2008. To focus the efforts of the parties, the Order included an appendix enumerating nineteen (19) issues that the Commission was “specifically interested in receiving comments or suggestions.” Lastly, the Commission announced its intention to separately issue orders regarding net metering and interconnection rulemaking.

After two rounds of comments by roughly two dozen parties, the Commission issued its Order Adopting Final Rules to implement the REPS. At some 250 pages, summarizing the Order is a daunting task. In its Order the Commission amended its Rules of Practice and Procedure, and the Rules specific to electric power such as the time and contents for required filings and applications, the procedures for cost recovery, and details on the REC tracking

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108 Id.
109 Id.
111 Id. at 2.
112 Id. at 1.
113 Id. at app. A.
114 Id. at 2.
During the ensuing years, the Commission would resolve many other issues under Docket No. E-100, Sub 113, which had become the catchall for REPS filings.

On May 7, 2009, the NCUC issued its next significant REPS order in response to Duke Energy’s Motion for Clarification. First, the Commission concluded that when the per-account cost caps prevent compliance with both the set-asides for solar, swine, and poultry waste and the general REPS requirement, the set-asides take priority over the general REPS requirement, even if this results in less renewable energy being generated overall. However, as between the solar, poultry, and swine waste set-asides, no one set-aside has priority over the other. Second, the Commission concluded that the poultry and swine waste set-asides were aggregate requirements, rather than a specific pro rata share for each utility, while the solar set-aside requirement applies individually to each electric power supplier. Thus, the Commission required electric power suppliers to agree among themselves how to comply with these aggregate requirements, raising anti-trust concerns that the Commission resolved in the same order. Third, the Commission concluded that, because the purpose of the set-asides was to address “renewable energy resources and issues indigenous to North Carolina” thereby “foster[ing] development specifically of local renewable energy facilities,” compliance with the set-asides could be achieved by purchase of RECs, but the energy associated with the REC must be generated by or delivered to an electric power supplier. Fourth, the Commission determined that thermal power generated out of state cannot be considered “in state” and is therefore subject

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116 Id.
118 Id. at 5.
119 Id.
120 Id. at 7-8.
121 Id. at 9-10 (citing California Liquor Dealers v. Midcal Aluminum, 445 U.S. 97, 105 (1980) and applying the two prong test established in Parker v. Brown, 317 U.S. 341 (1943)).
122 Id. at 13.
to the 25% out-of-state limit, and that RECs can be held for up to seven years but can only be used for REPS compliance during the three years after creation of the REC.\textsuperscript{123}

Orders issued in the summer and fall of 2009 further refined the implementation of the REPS. A June 17\textsuperscript{th} Order aimed to “determine whether and under what circumstances any utility-owned hydroelectric generation resources can be used to meet a utility’s REPS compliance obligation.”\textsuperscript{124} This question was made stark by divergent readings of the REPS provisions related to hydroelectric generation resources:\textsuperscript{125} utilities argued that hydroelectric generation regardless of size, age or ownership should be allowed for REPS compliance, while the NCUC Public Staff argued that the same provisions prohibit any utility-owned hydroelectric resource, regardless of size or age, for REPS compliance.\textsuperscript{126} Relying on principles of statutory construction and citing to “the overriding policy objectives of Senate Bill 3” the Commission concluded that increments of additional hydroelectric power capacity of 10 MW or less placed into service after January 1, 2007 shall be considered a “new renewable energy facility” to the extent of incremental generation capacity.\textsuperscript{127} The Order also determined that entities that receive power from the TVA and electric cooperatives that are headquartered out of state, are subject to the REPS requirement, but university owned utilities are not.\textsuperscript{128}

In July 2009, the Commission issued orders determining that the RECs associated with thermal energy produced outside North Carolina but delivered to customers within North

\textsuperscript{123} Id. at 16-18.

\textsuperscript{124} Order on Public Staff’s Motion for Clarification, NCUC Docket No. E-100, Sub 113, 6/17/2011, at 10. Available online at http://ncuc.commerce.state.nc.us/cgi-bin/webview/senddoc.pgm?dispfmt=&itype=Q&authorization=&parm2=BBFEF068190B&parm3=000127195.

\textsuperscript{125} See N.C. Gen. Stat. § 133.8(a)(5) (defining “new renewable energy facility” as “a renewable energy facility that either: a) was placed into service on or after January 1, 2007, b) delivers or has delivered electric power to an electric power supplier pursuant to a contract with NC GreenPower Corporation that was entered into prior to January 1, 2007, [or] c) is a hydroelectric power facility with a generation capacity of 10 megawatts or less that delivers electric power to an electric power supplier”) and N.C. Gen. Stat. § 133.8(b)(2) (allowing REPS compliance by any one of the following, including: a) generate power at a “new renewable energy facility,” or b) “use a renewable energy resource to generate electric power at a generating facility…”).

\textsuperscript{126} Id. at 12-16. See also N.C. Gen. Stat. § 62-2(10) (declaring it the policy of the State “[t]o promote the development of renewable energy and energy efficiency through implementation of [an REPS]”).

\textsuperscript{127} Id. at 12-16.
Carolina are eligible for REPS compliance, but are subject to the 25% out-of-state limitation\textsuperscript{129} and clarified the requirement that a renewable energy facility must be placed into service by January 1, 2007 to qualify as a “new renewable energy facility.”\textsuperscript{130} Lastly, the Commission clarified that the each electric power supplier must individually comply with the set-aside requirements within the confines of the 25% out-of-state RECS limitation, that Dominion is exempt from the 25% out-of-state limitation, and noted that utilities had already begun acquiring and banking RECs for compliance with the general REPS obligation that begins in 2012.\textsuperscript{131}

In late 2009 and early 2010, the regulatory efforts of the utilities shifted to focus on the poultry waste and swine waste set-asides. The utilities initially filed a request that the Commission delay and reduce these two set-asides, and Dominion, Duke Energy, NCEMC and Progress Energy requested a modification such that each utility would only have to meet its pro rata share.\textsuperscript{132} After numerous interventions by various parties, several rounds of filings, and testimony on these issues, the utilities filed to withdraw their motion in part,\textsuperscript{133} and later in its entirety after reaching an agreement as to an allocation of the obligation under these two set-asides.\textsuperscript{134} The Commission allowed the withdrawal\textsuperscript{135} and, after additional comments and filings, approved the allocation method as proposed by Progress Energy.\textsuperscript{136}

\textsuperscript{129} Order on Joint Motion to Determine Whether RECs are In-State or Out-of-State, NCUC Docket No. E-100, Sub 113, 07/13/2009, at 3-4. Available online at http://ncuc.commerce.state.nc.us/cgi-bin/senddoc.pgm?dispfmt=&ittype=Q&authorization=&parm2=9BAAAA49190B&parm3=000127195. See also Id. at fn.1 and associated text (distinguishing the facts presented from those involved in the May 7 Order, see supra note 123).

\textsuperscript{130} See Order on Dominion’s Second Motion for Reclarification, NCUC Docket No. E-100, Sub 113, 07/27/2009 at 4. Available online at http://ncuc.commerce.state.nc.us/cgi-bin/senddoc.pgm?dispfmt=&ittype=Q&authorization=&parm2=8AAAAA80290B&parm3=000127195. See also N.C. Gen. Stat. 133.8(b)(2)(e), and n.79 and associated text.


\textsuperscript{132} Id. at 3.

\textsuperscript{133} Id. at 4.

\textsuperscript{134} Id. at 4-5.

The method of allocating the obligations under the poultry waste and swine waste set-asides was approved over the opposition of the municipal power agencies, who represented the municipal owned utilities.\textsuperscript{137} The municipalities initially presented a constitutional argument that the NCUC would overstep its statutory authority by approving the proposal because approval of would constitute an amendment to the statute and an unconstitutional delegation of power by the legislature.\textsuperscript{138} The Commission rejected this argument.\textsuperscript{139} Rather, the Commission addressed the municipalities’ “fundamental concern,” namely, that the prior order of the Commission requiring compliance with the set-asides prior to the general REPS requirements would force the municipalities to use up their available cost cap dollars without ever implementing the less expensive compliance methods applicable to the general REPS requirement such as energy efficiency and demand-side management.\textsuperscript{140} After lengthy consideration, the Commission reiterated its earlier holding that the set-asides have priority over other methods of compliance with the general REPS obligations and that the proposed pro rata allocation would not require utilities to exceed the cost caps nor grant a higher preference to either the swine waste or poultry waste set-asides vis-à-vis the solar set-aside.\textsuperscript{141} On that basis, after noting that the Commission would have preferred unanimity among the electric providers,\textsuperscript{142} the Commission ordered approval of the pro rata allocation method.\textsuperscript{143}

The Commission decided a number of other issues in 2010 some of which would be subject to litigation and legislation. Peregrine Biomass Development Company, LLC sought to

\textsuperscript{137} Id. at 3-11.
\textsuperscript{138} Id. at 3.
\textsuperscript{139} Id. at 8 (quoting Great Am. Ins. Co. v. Gold, 254 N.C. 168, 173 (1961) (“it is not within the Commission’s jurisdiction, as a quasi-judicial administrative agency, to rule on the constitutionality of a statute”).
\textsuperscript{140} See id. at 5-6 (quoting from the municipalities’ motion). See also id. at 10 (taking judicial notice of the La Capra Study and the Integrated Resource Plans filed by utilities that show energy efficiency and demand-side management can realize substantial energy savings at a cost less than the average avoided cost in North Carolina).
\textsuperscript{141} Id. at 10-11. See supra notes 119 and 120 and accompanying text.
\textsuperscript{142} Id. at 7.
\textsuperscript{143} Id. at 11
persuade the Commission to invoke the “off-ramp” provision\textsuperscript{144} to allow RECs associated with the thermal energy output of a combined heat and power facility which uses poultry waste to count toward the poultry waste set-aside requirement.\textsuperscript{145} The Commission concluded that, as enacted, the REPS would not allow for the use of such RECs in this manner based upon the different wording of the solar set-aside and the swine and poultry waste set-asides.\textsuperscript{146} Thus, the off-ramp provision would be the only avenue for the Commission allowing use of thermal RECs to comply with the poultry waste set-aside, absent an amendment to the statute.\textsuperscript{147} The Commission denied Peregrine’s request, first noting, the “exceptional nature of the off-ramp provision and the authority delegated to” the Commission by the General Assembly, and, second noting, that compliance was not required until 2012 and therefore an inability to meet the poultry waste set-aside could not be demonstrated.\textsuperscript{148} Later, this Order would be effectively nullified by action of the General Assembly.\textsuperscript{149}

A second order issued in 2010, would be the subject of appellate litigation. In an October 11, 2010 Order, the Commission accepted the registration of two facilities owned by Duke Energy as “renewable energy facilities.”\textsuperscript{150} In accepting this registration, the Commission had decided a broader issue that drew sharp opposition from environmentalists: whether wood biomass, including wood chips from whole trees harvested for electricity generation, qualifies as a “biomass resource,” and thus a “renewable energy resource.”\textsuperscript{151} While the Commission

\textsuperscript{144} See N.C. Gen. Stat. § 62-133.8(i)(2). See also supra note 84 and accompanying text.
\textsuperscript{146} Id. at 7. Contrast N.C. Gen. Stat. § 62-133.8(d) (allowing for solar set-aside compliance through supplying of electric power “or an equivalent amount of energy”) with § 62-133.8(f) (allowing for swine waste set-aside compliance through the supplying of electric power but omitting “equivalent amount of energy”) and (e) (also omitting “equivalent amount of energy” from the poultry waste set-aside).
\textsuperscript{147} Order Denying Petition to Modify Poultry Waste Set-Aside Requirement, supra, at 8.
\textsuperscript{148} Id.
\textsuperscript{149} See infra notes 168 and 169 and accompanying text.
\textsuperscript{151} Id.
decided the issue in the affirmative, it did so by an unusual divided vote with a written dissent by Commissioner Culpepper. Environmentalists undertook an effort to appeal, however, the North Carolina Court of Appeals affirmed the Commission’s order.

Despite the activity at the NCUC, it is yet impossible to say that North Carolina’s energy policy is complete. Energy policy, like public policy generally is ever changing. The 2010 General Election would set a potentially different course, with Republican majorities in both chambers of the General Assembly. The next section summarizes action in energy policy during the most recent session of the General Assembly.

**Activity in 2011 General Assembly**

With the election of Republican majorities in the House and Senate in 2010, legislative majorities came to Raleigh for the 2011 General Assembly focused on balancing the state budget without raising taxes, reducing regulations on businesses, preventing implementation of the federal health care reform law, and other core conservative issues. Changes to the REPS were on the periphery of this broader philosophy, with Republican-allied interest groups pushing for an outright repeal of the REPS. Advocates for the renewable energy industry would approach the 2011 session of the General Assembly declaring the great progress brought by the REPS in terms of job creation in the sector, but concluded that “continued public policy and market development improvements” were needed to continue the trend. As the 2011 legislative session got underway, both groups would find allies in the new Republican majorities. It also became clear that sweeping changes to the REPS would not be in the offing in 2011, but

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152 Id. at 17-18.
153 See id. at 19-22.
lawmakers would pursue noteworthy changes. This section brings current the REPS as amended by legislation during the 2011 General Assembly.

In late March, Representative George Cleveland introduced one of the most straightforward and simple bills of the legislative session. Consisting of one page and seven lines of text, Cleveland’s House Bill 431 would have repealed, wholesale, the REPS and a 2009 amendment to that bill. Although straightforward and simple, the approach taken in House Bill 431 was far from subtle or nuanced. Gone would be the tax breaks for farmers and manufacturers and the bill made no effort to address the costs that had already been incurred to comply with the REPS. Perhaps for this reason, among others, the legislation was never taken seriously, garnered no co-sponsors, and did not pass the first committee to which it was referred.

At the other end of the REPS debate, lawmakers would pursue amendments to the REPS. By late April, the General Assembly had enacted and Governor Perdue signed into law, legislation that added “electricity demand reduction” as a method to comply with the REPS. Electricity demand reduction is a type of “smart grid” technology that allows the customer and the utility to control appliances and other devices in the customer’s home to reduce energy usage. The legislation had long been sought by the company Consert, and would allow for REPS compliance through technology that was already being used by some North Carolina

159 Id. at p. 1.
electricity providers. 164 Senate Bill 75 passed the Senate by a vote of 49-0, the House by a vote of 78-40, and Governor Perdue later signed it into law.165

In other changes to the REPS, the General Assembly enacted and the Governor signed legislation allowing REPS compliance for RECs derived from the thermal energy output of a combined heat and power facility that uses poultry waste.166 This would effectively overturn the NCUC Order reaching the opposite conclusion.167 A section of a large bill amending the environmental laws provided an exemption for certain new renewable energy facilities from BACT requirements enacted in the REPS.168 This bill was not signed by the Governor but became law after expiration of the twenty day period.169

Other legislation proposing amendments to the REPS would not fare so well. Proposals to double the solar set-aside requirement were introduced in both the House and Senate with co-sponsors from both parties, but neither bill was reported from committee.170 A similar fate would befall proposals to require energy efficiency for compliance with the REPS by investor-owned utilities.171 Also not acted upon in 2011, were more sweeping proposals such as a bill that would have defined “renewable energy resource”172 to include plantation-grown wood, repealed the poultry waste set-aside, and clarified the limitations on city and county ordinances

164 See “Real Examples-Consert,” 01/06/2011, http://www.consert.com/real-examples (reporting that Wake Electric Membership Cooperative in Wake Forest, N.C. and the Fayetteville Public Works Commission in Fayetteville, N.C. were participating in commercialization agreements and Jones-Onslow Electric Membership Corporation was participating in a pilot program).
167 See supra note 151 and accompanying text.
168 See id. at 19.
169 See id. at 19.
and deed restrictions that regulate installation of solar collectors.\textsuperscript{173} A related proposal to amend the definition of “public utility”\textsuperscript{174} to exempt third-party sales from renewable energy facilities with less than two megawatts capacity\textsuperscript{175} was also not acted on but is the subject of an interim study committee.\textsuperscript{176}

Conclusion

Given the pressure from interest groups on both sides of the REPS debate, and in light of the potential for increasing electric cost in North Carolina, the General Assembly exercised restraint in not upsetting the careful balance crafted in the REPS legislation. That bill represented thousands of man-hours of work on the part of regulators, regulated parties, renewable energy advocates, legislators and legislative staff. Since its enactment, at least that amount of effort has gone into refining the application of the law through regulatory filings, litigation, and additional legislation. Hundreds of millions of dollars has been invested in REPS compliance, and more proposed projects have yet to be brought online.

All of this has taken place prior to the first major compliance deadline in 2012.\textsuperscript{177} These deadlines are based upon 2011 North Carolina retail sales.\textsuperscript{178} The NCUC has ordered that this means actual retail sales, not a projected level.\textsuperscript{179} That compliance deadline will be in place for three years, when it will increase, and then increase again in 2018, and then increase again for investor-owned utilities.\textsuperscript{180} Thus, utilities will not even know the exact compliance amount until

\textsuperscript{176} See North Carolina General Assembly-Third Party Sales of Electricity Committee [LRC][2011], http://www.ncleg.net/gascripts/Committees/Committees.asp?Action=ViewCommittee&xActionDetails=Non-Standing_6550.
\textsuperscript{177} See N.C. Gen. Stat. § 62-133.8(b)(1) and (b)(2).
\textsuperscript{178} Id.
\textsuperscript{180} Id. But see N.C. Gen. Stat. § 62-133.8(b)(2) (providing that electric cooperatives and municipalities’ REPS compliance obligation will be at 10% of 2017 North Carolina retail sales for 2018 and thereafter).
total 2011 retail sales are tallied. Further, the NCUC and the utilities will not know for certain whether the mandates can be met without exceeding the cost caps, or even if poultry and swine waste will prove to be viable commercial options. On this basis, it is clear that there is too much uncertainty and potential for stranded investment involved in making wholesale changes to the REPS prior to the end of 2012. For these reasons any increases in REPS mandates, or even significant changes of any type, should be delayed at least until 2012 compliance and compliance costs can be fully evaluated.