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ARTICLES

RIPENING ON THE VINE: NORTH CAROLINA’S RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD SHOULD BE LEFT UNCHANGED AHEAD OF 2012 COMPLIANCE DEADLINE

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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

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Assembly. The article concludes that major amendments to the REPS statute are premature prior to the first significant compliance deadline.

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.\(^3\) 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.”\(^4\) 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.\(^5\) 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.\(^6\)

The new policy changes create tension with the historical policy of a “least cost mix of generation,”\(^7\) because almost all renewable energy sources for electricity generation are more expensive than conventional generation sources.\(^8\) The tension is evident in the legislative process that produced the REPS and the rulings by the Commission interpreting the legislation.

Currently, North Carolina’s electricity consumers are served by three types of electric power providers: 1) investor-owned utilities such as Progress Energy Carolinas, Inc. (“Progress Energy”), Duke

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4. Id. § 62-2(a).
5. See id. § 62-2(a)(1)-(10).
Energy Carolinas, LLC ("Duke Energy"), and Dominion North Carolina Power ("Dominion"); 2) rural electric membership corporations, commonly known as 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 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 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.

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), has veto power of legislation enacted by the General Assembly, 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) and the North Carolina Department of Commerce. The NC DENR regulates air and water quality and is the administrative home to the Environmental Management Commission and the Department of Commerce houses the N.C. Energy Division (formerly, the State Energy Office) and the Energy Policy Council.

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

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9. See e.g. North Carolina Chapter of the Sierra Club, The North Carolina Chapter, http://nc.sierraclub.org/about/about.html (last visited Mar. 15, 2012)(stating that as of 2009, the Chapter had 17,000 members and 13 local groups across the state).
11. Id. § 62-10(a).
12. N.C. CONST. art. II, § 22(1).
13. See N.C. GEN. STAT. § 143-211(c) (2000).
15. N.C. GEN. STAT. § 113B-3(a) (2010).
members as Chair. The Council’s membership is made up of a cross section of legislators and business, industry, and environmental advocates. 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.”

Finally, there is the Environmental Review Commission (ERC), which the General Assembly established to undertake detailed review of studies and reports related to the environment and, by implication, utilities. The ERC and its staff attorneys work in 2005 and 2006 was key to the enactment of the REPS in 2007. Thus, the case study of the legislative process begins with the ERC.

The article explores the dynamic of the tension between the REPS and the traditional electricity policy by providing a case study of the legislative process relying on both the legislative record and the authors’ first-hand observations of the process. Next, the article reviews 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.

Case Study of Legislative Process

The La Capra Study

At a meeting on January 24, 2006, the ERC 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 ERC that day outlined a study process that involved the hiring of a consultant to produce a “factual, analytical reference point” rather than policy recommendations. According to Commissioner Kerr’s presentation, a group of stakeholders including load serving entities, regulated utilities, the NC Sustainable Energy Association (NCSEA), 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

16. Id.
17. Id.
21. Id. at 3.
the report. NCUC would then undertake a comment period and produce a final report, which would be presented to the ERC and the General Assembly before the beginning of the 2007 legislative session.

The study became informally known as the "La Capra Study," aptly named for the consulting firm, La Capra Associates, Inc. ("La Capra"), which produced it. In December 2006, La Capra presented the results to the ERC and delivered to the NCUC technical reports, authored by Sustainable Energy Advantage, LLC and La Capra, and a report on energy efficiency by the engineering and consulting firm, GDS Associates, Inc. The La Capra study issued three key findings:

[1] North Carolina should have sufficient renewable resources within the State to meet a 5% renewable energy portfolio standard (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 offshore 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.

The study went on to examine the following: the practical and technical potential of various types of renewable resources that could be used to produce electric power in North Carolina; the impact of en-

22. Id. at 3-4.
23. Id.
26. See La Capra Associates, supra note 22.
28. La Capra Associates, supra note 22, at ii.
nergy source changes on electricity rates; the effect of potential changes on economic development; environmental impacts caused by the changes, and how the changes would affect portfolio diversification benefits.29 The study closed with identification of a number of issues left to be addressed in the legislative process, including: whether electric cooperatives and municipal owned power providers should be included in the REPS requirement; the stability of the requirements over time and how fast the requirements increase; designing a cost effective compliance program; and determining the compatibility of the changes with other state policies.30 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.31

On December 13, 2006, after a presentation to the ERC32 and publication on the NCUC website,33 development of the REPS began in earnest. On December 15, 2006, the NCUC published a notice soliciting written comments on the La Capra Study.34 Comments were gathered and delivered to the ERC in time for consideration during the General Assembly’s 2007 session.35 By February 5, 2007, the Commission had received comments from 19 parties, including environmental advocates, utilities, individuals, and others.36 The substance of the parties’ comments reflected the starting point for the debate that was already underway in 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.37 As introduced, the legislation 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

29. La Capra Associates, supra note 22, at iii-xvii.
30. La Capra Associates, supra note 22, at iii-xvii.
31. La Capra Associates, supra note 22, at xvii.
32. See La Capra Associates, supra note 22.
35. Id.
36. See id.
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 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 that 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 contained 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 would increase consumers’ electricity costs.

38. 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 resource to an electric power supplier”).
39. Id.
40. Id.
41. Id. See also N.C. GEN. STAT. § 62-133 (2010).
42. Id. at 2.
44. Id. at 2.
45. Id. at 2 (referring to existing North Carolina law as well as public resistance as obstacles to development of wind projects).
costs; however, Duke Energy emphasized the decision to increase consumers’ electricity costs was a “public policy issue” for legislators to determine after weighing whether the benefits of the REPS outweigh the costs of increased electric rates. 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.

Progress Energy’s comments were similar to those of Duke Energy. As to the methodology of the La Capra study, Progress noted that the results “may be reasonable indicators of relative costs, but the results are not precise.” 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. Additionally, Progress Energy agreed with Duke Energy and 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. Progress Energy closed its comments with identification of “a host of other details” that required 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.

In 2007, only a small portion of Dominion’s customers were located in North Carolina, totaling roughly 114,000 retail customers in northeast North Carolina, including portions of the Outer Banks. Unlike

46. Id. at 3.
47. Id. at 3 (“Duke Energy Carolinas encourages the development of consistent energy policies that discuss 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”).
49. Id. at 4. See also N.C. Gen. Stat. § 113A-205 (2010), et. seq.
50. Id. at 3.
51. Id. at 5.
52. Comments of Dominion North Carolina Power on Renewable Portfolio Standards Study, In re Request of the North Carolina Sustainable Energy Association for Appropriate
Progress Energy and Duke Energy, Dominion is a member of the PJM Interconnection, a regional transmission organization that covers thirteen states.\(^{53}\) Dominion’s comments reflected its unique situation in the state. 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.\(^{54}\) Dominion also identified parts of the La Capra study that mention, but did not sufficiently address, the Commerce Clause issues raised by excluding the use of renewable energy imports.\(^{55}\) 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.\(^{56}\) Dominion also commented that: the La Capra study did not sufficiently analyze transportation and interconnection costs, a tracking system must be established to measure the effectiveness of the REPS, and details of the role of the program administrator discussed in the La Capra study were needed.\(^{57}\)

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’s process and the potential for renewable energy development.\(^{58}\) NCEMC noted a distinguishing characteristic of electric cooperatives; as consumer-owned businesses, the “cooperatives operate ‘at-cost’ and must immediately pass on increased costs directly to the consumer.”\(^{59}\) 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.”\(^{60}\) The comments of NCEMC identified a number of findings in the La Capra study that “should be carefully scrutinized,” among them: the limited number of

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\(^{54}\) Id. at 3.

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

\(^{56}\) Id. at 4 (identifying a project located in North Carolina that was selling into the PJM market).

\(^{57}\) Id. at 4-5.


\(^{59}\) Id.

\(^{60}\) Id.
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 for 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 including additional energy efficiency measures, to consider the La Capra Study's results within the context of more specific North Carolina data (as opposed to the national data used), and to include combined heat and power generation in any standard. In summary, NCSEA expressed support for a REPS because of: the economic and social benefits of a REPS, its potential to establish North Carolina as a leader in the promotion of renewable energy in the Southeast, and its potential 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

61. Id. at 1-2.
62. Id. at 3.
65. Id. at 4.
support for the REPS by discussing four main points: 1) electric reliability would not be sacrificed by requiring use of renewable resources; 2) a REPS would have a positive impact on the State’s economy; 3) the La Capra Study over-estimated the costs of renewable energy and under-estimated the cost of conventional generation technologies; and 4) a REPS presented 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 was not unattainable.

While a number of other individuals and businesses filed comments in the NCUC’s RPS folder, the foregoing summarizes what 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 noted issues related to out-of-state resources. On the other hand, Environmental Advocates expressed optimism about the potential for an REPS to the extent that, in their view, study underestimated the potential for energy efficiency, renewable resources, and job creation and overestimated the costs of renewable generation sources. Thus, as the legislative process began in 2007, an adversarial posture between the utilities and the Environmental Advocates 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 a 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 as 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 did not typically frequent the meetings, but occasionally attended to monitor the progress or encourage compromise when impasses arise. 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 grew from four 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 were subject to 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 as a means to specifically mandate compliance with the REPS through use of solar energy and energy derived from swine waste, and poultry waste. The solar set-aside initially required 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 subse-

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71. See id.
73. See supra note 22.
quent years.75 Similarly, the swine waste set-aside required 0.07% of 2012 retail sales to be supplied by swine waste resources, with the requirement reaching 0.20% in 2018 and subsequent years.76 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 generated from poultry waste in 2012, and reaching an annual requirement of 900,000 MWh in 2014 and beyond.77

Provisions related to utilities' cost recovery were added to the legislation.78 The key cost recovery provision was the authorization of an "annual rider," a line item charge on customers' bills, which was limited based upon the type of utility customer's account: residential accounts could be charged up to $10 per year from 2008-2011; $12 per year from 2012-2014; and $34.00 per year from 2015 and beyond.79 Commercial and industrial accounts could be charged significantly higher amounts: $150 per year from 2015 and beyond for commercial accounts, and $1,000 per year for industrial accounts.80 These provisions also dealt with the possibility of a federal REPS, allowing for recovery of these costs as well.81 In addition, utilities won inclusion of provisions allowing for the recovery of costs for demand side management and energy efficiency,82 and inclusion of a broader range of fuel related costs in the existing "fuel charge adjustment."83

The second edition included rule-making authority for the NCUC to implement the REPS.84 It foreshadowed an additional round of policy making, detailed below. This authority also included 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."85

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.86 Known in the utility regulation vernacular as "construction while in progress" or "CWIP," these provisions allow utilities to recover the costs associated with

75. Id. (codified at N.C. GEN. STAT. § 62-133.8(d)).
76. Id. (codified at N.C. GEN. STAT. § 62-133.8(e)).
77. Id. (codified at N.C. GEN. STAT. § 62-133.8(f)).
78. Id. (codified at N.C. GEN. STAT. § 62-133.8(h)).
79. Id. (codified at N.C. GEN. STAT. § 62-133.8(h)(4)(2008)).
80. Id.
81. See id. (codified at N.C. GEN. STAT. § 62-133.8(h)(1)(c) and (2)).
82. Id. at § 4a (codified at N.C. GEN. STAT. § 62-133.9)).
83. Id. at § 5 (codified at N.C. GEN. STAT. § 62-133.2).
84. Id. at § 2a (codified at N.C. GEN. STAT. § 62-133.8(i)).
85. Id. (codified at N.C. GEN. STAT. § 62-133.8(i)(2)(2008)).
86. Id. at § 6 (codified at N.C. GEN. STAT. § 62-110.1).
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. 87

The concept of the renewable energy certificate (REC) was incorporated into the REPS. 88 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. 89 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 allowed by purchasing out-of-state RECs. 90 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. 91 The restrictions on out-of-state REC purchases was a major compromise between renewable industry advocates, which sought the REPS as an incentive to grow the renewable industry in North Carolina, and utilities, which 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. 92 Second, there was inclusion of a new tax credit for constructing an energy-efficient home. 93 Third, there was a new tax credit for contributing to a nonprofit organization that invests in renewable energy property. 94

Finally, a number of other details included in the second edition of Senate Bill 3 represented major bargaining points for the stakeholders. For example, electric cooperatives and municipalities not only won a less aggressive REPS mandate schedule, but also won a sepa-

87. Id. (codified at N.C. Gen. Stat. §§ 62-110.1 (f1) and 62-133(b)(1)).
88. Id. at § 2(a) (codified at N.C. Gen. Stat. § 62-133.8(a)(6)).
89. Id.
90. 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)).
91. Id. (codified at N.C. Gen. Stat. § 62-133.8(b)(2)(e)).
92. Id. at § 10 (codified in various sections of N.C. Gen. Stat. Ch. 105).
93. Id. at § 13.
94. Id. at § 14.
rate menu of compliance options. Significantly, this separate menu included hydroelectric power purchased through the Southeastern Power Administration, a unit of the federal government that has supplied electric cooperatives and municipalities with hydroelectric power for years. Electric cooperatives and municipalities could use this power for up to 30% of their REPS compliance. 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. Another example was the recognition of the unique position of Dominion, serving a relatively small number of customers in the Outer Banks. The provisions included in the second edition allowed Dominion unlimited purchase of out-of-state RECs and recognized the separate cost recovery model previously approved by the NCUC.

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 Committee on Finance without change. The Senate passed Senate Bill 3 on July 3, 2007 by a vote of 47-1, after rejecting the only amendment offered.

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. The Energy and Energy Efficiency Committee reported a third edition of Senate Bill 3, with much of the substance of the legislation outlined above unchanged. The third edition included a new provision requiring best available control technology (BACT) for biomass combustion processes at renewable energy facilities that produce elec-

95. Id. at § 2(a) (codified at N.C. GEN. STAT. § 62-133.8(c)(2)(2008)).
98. Id. (codified at N.C. GEN. STAT. § 62-133.8(c)(2)(e)).
99. See supra notes 50 and 51 and associated text.
101. Id. at § 5 (codified at N.C. GEN. STAT. § 62-133.2(a3)(2008)).
103. Id.
104. Id.
tricity.106 Next, the House Committee on Public Utilities reported Senate Bill 3 without changes just one day after the bill was referred to the committee.107 The final House Committee to consider Senate Bill 3, the House Finance Committee, did so by reporting a new edition of the bill.108 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.109 The House of Representatives rejected two amendments to the bill and passed the fourth version unchanged by a vote of 107-9.110 The Senate then accepted the House changes, sending Senate Bill 3 to the Governor.111 Governor Easley signed the bill into law on August 20, 2007.112

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.113 The major electric power suppliers were made parties to the docket as were dozens of other stakeholders by way of motions to intervene.114 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, 2008.115 To focus the efforts of the parties, the Order included an appendix enumerating 18 issues as

108. Id.
111. Id.
112. Id.
114. Id. at 2.
115. Id.
116. Id. at 1.
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to which the Commission was “specifically interested in receiving comments or suggestions.” Lastly, the Commission announced its intention to separately issue orders regarding net metering and inter-connection 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 system. During the ensuing years, the Commission resolved many other issues under Docket No. E-100, Sub 113, which over time became the “catchall” docket for REPS filings seeking to clarify NCUC rules and interpret the statute.

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 it 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 obligation 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 amongst themselves how to comply with these aggregate requirements, raising anti-trust concerns that the Commission resolved in

117. Id. at app. A.
118. Id. at 2.
120. Id. See also NCUC REC Tracking System, http://www.ncuc.net/reps/REC_Tracking_System.htm.
122. Id. at 5.
123. Id.
124. Id. at 7-8.
125. Id. at 7.
the same order. 126 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 RECs must be generated by or delivered to an electric power supplier. 127 Fourth, the Commission determined that thermal power generated out-of-state cannot be considered “in-state” and is, therefore, subject to the 25% out-of-state limit. It also determined that RECs can be held by a public utility for up to seven years after cost recovery and indefinitely by an electric cooperative or municipality, but in any event, a REC can only be used for REPS compliance during the three years after its creation. 128

Orders issued in the summer and fall of 2009 further refined the implementation of the REPS. A June 17th 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.” 129 This question was made stark by divergent readings of the REPS provisions related to hydroelectric generation resources.130 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

126. 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)).
127. Id. at 13.
128. Id. at 16-18.
130. See N.C. GEN. STAT. § 62-133.8(a)(5)(2010) (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 Green Power 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 see N.C. Gen. Stat. § 62-133.8(b)(7) (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 . . .”). See also N.C. GEN. STAT. § 62-133.8(a)(8) (defining “renewable energy resource” as a “solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy at a retail electric customer’s facility; or hydrogen derived from a renewable energy resource. “Renewable energy resource” does not include peat, a fossil fuel, or nuclear energy resource).
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REPS compliance. Relying on principles of statutory construction and citing “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. 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.

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 Carolina are eligible for REPS compliance, but are subject to the 25% out-of-state limitation and clarified the requirement that a renewable energy facility must be placed into service on or after January 1, 2007 to qualify as a “new renewable energy facility.” 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.


132. Id. at 11-12. 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]”).

133. Id. at 12-16.

134. Order on Joint Motion to Determine Whether RECs are In-State or Out-of-State at 3-4, In re Rulemaking Proceeding to Implement Session Law 2007-397, 3-4 (July 13, 2009) (No.E-100, SUB 113), http://ncuc.commerce.state.nc.us/cgi-bin/webview/senddoc.pgm?dispfmt=&itype=Q&authorization=&parm2=9BAAAA49190B&parm3=000127195. Compare Id. at 2 n.1 and associated text and Order Initiating Rulemaking Proceeding, supra note 111 at app. A (distinguishing the facts presented in the cited order from those involved in the May 7 Order).


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.\(^\text{137}\) Dominion, Duke Energy, NCEMC, and Progress Energy requested a modification such that each utility would only have to meet its pro rata share.\(^\text{138}\) After numerous interventions by various parties, several rounds of filings, and testimony on these issues, the utilities filed to withdraw their motion in part,\(^\text{139}\) and later in its entirety, after reaching an agreement as to an allocation of the obligation under these two set asides.\(^\text{140}\) The Commission allowed the withdrawal\(^\text{141}\) and, after additional comments and filings, approved the allocation method as proposed by Progress Energy.\(^\text{142}\)

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, which represented the municipal owned utilities.\(^\text{143}\) The municipalities initially presented a constitutional argument that the NCUC would overstep its statutory authority by approving the proposal because approval would constitute an amendment to the statute and an unconstitutional delegation of power by the legislature.\(^\text{144}\) The Commission rejected this argument.\(^\text{145}\) 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 forced 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.\(^\text{146}\) After lengthy considera-
tion, the Commission reiterated its earlier holding that the set-asides have priority over other methods of compliance with the general REPS obligations.\footnote{Id. at 7-11.} The proposed pro rata allocation did 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.\footnote{Id. at 10-11. See also supra notes 120 and 121.} On that basis, after noting that the Commission would have preferred unanimity among the electric providers,\footnote{Id. at 7.} the Commission ordered approval of the pro rata allocation method.\footnote{Id. at 11.}

The Commission decided a number of other issues in 2010, some of which became subject of litigation and legislation. Peregrine Biomass Development Company, LLC ("Peregrine") sought to persuade the Commission to invoke the "off-ramp" provision\footnote{See N.C. GEN. STAT. § 62-133.8(i)(2)(2010). See also supra note 83.} to allow RECs associated with the thermal energy output of a combined heat and power facilities, which use poultry waste, to count toward the poultry waste set-aside requirement.\footnote{Order Denying Petition to Modify Poultry Waste Set-Aside Requirement, In re Rulemaking Proceeding to Implement Session Law 2007-397, 1 (Aug. 10, 2010) (No. E-100, SUB 113), http://ncuc.commerce.state.nc.us/cgi-bin/webview/senddoc.pgm?dispfmt=&itype=Q&authorization=&parm2=CAAAAA18201B&parm3=000127195.} The Commission concluded that, as enacted, the REPS did 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.\footnote{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).} Thus, the off-ramp provision would be the only avenue for the Commission to allow use of thermal RECs to comply with the poultry waste set-aside, absent an amendment to the statute.\footnote{Order Denying Petition to Modify Poultry Waste Set-Aside Requirement, supra note 150, at 8.} The Commission denied Peregrine's request, noting the "exceptional nature of the off-ramp provision and the authority delegated to" the Commission by the General Assembly and that compliance was not required until 2012; and therefore, an inability to meet the poultry waste set-aside could not be demonstrated.\footnote{Id. See infra notes 171 and 172.} Ultimately, the General Assembly granted Peregrine's request through amendment of the statute.\footnote{Id. at 7.}

\textit{energy efficiency and demand-side management can realize substantial energy savings at a cost less than the average avoided cost in North Carolina).}
A second Order, also issued in 2010, became 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.”157 In accepting this registration, the Commission decided a broader issue that drew sharp objection from environmentalists: whether wood biomass, including wood chips from whole trees harvested for electricity generation, qualified as a “biomass resource,” and thus, a “renewable energy resource.”158 While the Commission decided the issue in the affirmative,159 it did so by an unusually divided vote with a written dissent by Commissioner William Culpepper.160 Environmentalists appealed the decision, but the North Carolina Court of Appeals affirmed the Commission’s order.161

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, North Carolina, 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.162 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.163 Advocates for the renewable energy industry approached 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 pol-

158. Id. at 15.
159. Id. at 17-18.
160. See id. at 19-22.
icy and market development improvements” were needed to continue the trend. As the 2011 legislative session got underway, both groups found 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 lawmakers did 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 proposed to repeal, 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. Tax breaks for farmers and manufacturers would be repealed, 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 proposed 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 pursued amendments to the REPS. By late April, the General Assembly 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 electricity providers. 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.\textsuperscript{172}

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.\textsuperscript{173} This effectively overturned the NCUC Order reaching the opposite conclusion.\textsuperscript{174} 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.\textsuperscript{175} The bill was not signed by the Governor but became law after expiration of the ten day period in which the Governor must act on legislation.\textsuperscript{176}

Other legislation proposing amendments to the REPS did 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.\textsuperscript{177} A similar fate befell proposals to require energy efficiency for compliance with the REPS by investor-owned utilities.\textsuperscript{178} Also not acted upon in 2011, were more sweeping proposals such as a bill that would have expanded the definition of “renewable energy resource”\textsuperscript{179} to include plantation-grown wood, repealed the poultry waste set-aside, and clarified the limitations on city and county ordinances and deed restrictions that regulate installation of solar collectors.\textsuperscript{180} A related proposal to amend the definition of “public utility”\textsuperscript{181} to exempt third-party sales from renewable energy facilities with less than two mega-
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watts capacity was also not acted upon but is the subject of an interim study committee.

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. The REPS 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 have 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. These deadlines are based upon 2011 North Carolina retail sales. The NCUC has ordered that this means actual retail sales, not projected sales. The compliance deadline is in place for three years, and will increase in 2015, increase again in 2018, and then increase again for investor-owned utilities in 2021. Thus, utilities will not even know the exact compliance cost until 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 prove to be a viable commercial options. On this basis, 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.

184. See N.C. GEN. STAT. § 62-133.8(b)(1) and (b)(2)(2010).
185. Id.
187. Id. But see also N.C. GEN. STAT. § 62-133.8(b)(1) (providing that electric cooperatives and municipalities' REPS compliance obligation will be at 10% of 2017 North Carolina retail sales for 2018 and thereafter).