STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Rulemaking Proceeding to Implement)	FINAL ORDER MODIFYING THE
Session Law 2007-397)	POULTRY AND SWINE WASTE
)	SET-ASIDE REQUIREMENTS AND
)	PROVIDING OTHER RELIEF

HEARD: Tuesday, November 5, 2013, Commission Hearing Room 2115, Dobbs

Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Chairman Edward S. Finley, Jr., Presiding, and Commissioners Bryan E.

Beatty, Susan W. Rabon, ToNola D. Brown-Bland, Jerry C. Dockham, and

James G. Patterson

APPEARANCES:

For Duke Energy Carolinas, LLC, and Duke Energy Progress, Inc.:

Lawrence B. Somers, Deputy General Counsel, Duke Energy Corporation, P.O. Box 1551, NCRH 20, Raleigh, North Carolina 27602

For Dominion North Carolina Power, Inc.:

E. Brett Breitschwerdt and Mary Lynne Grigg, McGuireWoods LLP, 434 Fayetteville Street, Suite 2600, Raleigh, North Carolina 27601

For GreenCo Solutions, Inc.:

Richard M. Feathers, GreenCo Solutions, Inc., 3400 Sumner Boulevard, P.O. Box 27306, Raleigh, North Carolina 27611-7306

For North Carolina Eastern Municipal Power Agency and North Carolina Municipal Power Agency No. 1:

Daniel C. Higgins, Burns, Day & Presnell, P.A., P.O. Box 10867, Raleigh, North Carolina 27605

For EnergyUnited Electric Membership Corporation:

Phillip Harris, Nelson Mullins Riley & Scarborough LLP, GlenLake One, Suite 200, 4140 Parklake Avenue, Raleigh, North Carolina 27612

For the Public Works Commission of the City of Fayetteville:

James P. West, West Law Offices, P.C., 434 Fayetteville Street, Suite 2325, Raleigh, North Carolina 27601

For the Tennessee Valley Authority:

Mark S. Calvert, Senior Attorney, Tennessee Valley Authority, 400 W. Summit Hill Drive, WT 6A, Knoxville, Tennessee 37902

For the North Carolina Sustainable Energy Association:

Michael D. Youth, North Carolina Sustainable Energy Association, 1111 Haynes St, Raleigh, North Carolina 27604

For Green Energy Solutions NV, Inc.:

R. Sarah Compton, PO Box 12728, Raleigh, North Carolina 27605

For the North Carolina Pork Council:

Kurt J. Olson, Law Office of Kurt J. Olson, 3737 Glenwood Avenue, Suite 100, Raleigh, North Carolina 27612

For North Carolina Poultry Federation, Inc:

Henry W. Jones, Jr., Jordan Price Wall Gray Jones & Carlton, 1951 Clark Avenue, Raleigh, North Carolina 27605

For the Using and Consuming Public:

Robert S. Gillam and Tim R. Dodge, Staff Attorneys, North Carolina Utilities Commission – Public Staff, 4326 Mail Service Center, Raleigh, North Carolina 27699-4326

BY THE COMMISSION: On November 29, 2012, in the above-captioned proceeding, the Commission issued an Order (2012 Delay Order) modifying the 2012 poultry and swine waste set-aside requirements under the State's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) established in G.S. 62-133.8. These requirements are set forth in subsections (e) and (f) of G.S. 62-133.8, establishing set-asides within the electric power suppliers' overall renewable energy requirement. Pursuant to the 2012 Delay Order, the Commission eliminated the 2012 swine waste set-aside requirement for all electric power suppliers and delayed by one year the

poultry waste set-aside requirement for all electric power suppliers. Consistent with that Order, the electric power suppliers, in the aggregate, were required to comply with the requirements of G.S. 62-133.8(e) according to the following schedule:

<u>Calendar Year</u>	Requirement for Swine Waste Resources
2013-2014	0.07%
2015-2017	0.14%
2018 and thereafter	0.20%

Further, the electric power suppliers, in the aggregate, were required to comply with the requirements of G.S. 62-133.8(f) according to the following schedule:

Requirement for Poultry Waste Resources
170,000 megawatt hours
700,000 megawatt hours
900,000 megawatt hours

On September 16, 2013, Duke Energy Carolinas, LLC (DEC);¹ Duke Energy Progress, Inc. (DEP);² Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (DNCP);³ GreenCo Solutions, Inc. (GreenCo);⁴ the Public Works Commission of the City of Fayetteville (Fayetteville); EnergyUnited Electric Membership Corporation (EnergyUnited); Halifax Electric Membership Corporation (Halifax); and the Tennessee Valley Authority (TVA)⁵ (collectively, the Joint Movants) filed a Joint Motion to Modify and Delay the 2013 Requirements of N.C.G.S. 62-133.8(e) and (f) Due to Lack of Sufficient Swine and Poultry Waste (Joint Motion). On September 20, 2013, the

¹ DEC asserted that it is also acting in its capacity as REPS compliance aggregator for Blue Ridge Electric Membership Corporation (EMC), Rutherford EMC, the City of Dallas, Forest City, the City of Concord, the Town of Highlands and the City of Kings Mountain.

² DEP asserted that it is also acting in its capacity as REPS compliance aggregator for the towns of Sharpsburg, Lucama, Black Creek, and Stantonsburg, and the City of Waynesville.

³ Dominion asserted that it is also acting in its capacity as REPS compliance aggregator for the Town of Windsor.

⁴ In its September 3, 2013 REPS compliance plan in Docket No. E-100, Sub 113, GreenCo stated that its members are Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin County EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbee River EMC, Pee Dee EMC, Piedmont EMC, Pitt & Greene EMC, Randolph EMC, Roanoke EMC, South River EMC, Surry-Yadkin EMC, Tideland EMC, Tri-County EMC, Union EMC and Wake EMC. GreenCo has stated that it also provides REPS compliance services for Broad River Electric Cooperative and Mecklenburg Electric Cooperative, and that the REPS requirements for the Town of Oak City are included in the requirements for Edgecombe-Martin County EMC.

⁵ TVA asserted that it is acting in its capacity as REPS compliance aggregator for Blue Ridge Mountain EMC, Mountain Electric Cooperative, Tri-State EMC and Murphy Electric Power Board.

North Carolina Eastern Municipal Power Agency (NCEMPA)⁶ and North Carolina Municipal Power Agency Number 1 (NCMPA1)⁷ (collectively, the Power Agencies) filed a similar joint motion requesting that the Commission delay the 2013 poultry and swine waste set-aside requirements for one year (Power Agency Motion).

Both the Joint Movants and the Power Agencies requested that the Commission, pursuant to G.S. 62-133.8(i)(2), often referred to as the "off-ramp" provision of the REPS statute, grant relief from compliance with the 2013 poultry and swine waste set-aside requirements by ordering a one-year delay of both set-aside requirements. G.S. 62-133.8(i)(2) states that the Commission may modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of G.S. 62-133.8 in whole, or in part, if the Commission determines that it is in the public interest to do so. General Statute 62-133.8(i)(2) requires that each electric power supplier requesting relief demonstrate that it made a reasonable effort to meet the requirements set out in the REPS statute.

On September 23, 2013, the Commission issued an Order Scheduling Hearing and Requiring Testimony setting the matter for hearing, establishing deadlines for filing testimony, and requiring the Joint Movants and Power Agencies to respond to questions posed by the Commission. The Order directed each electric power supplier, or its REPS compliance aggregator, to address: (1) the actions it has taken to meet the swine waste and poultry waste requirements; (2) the number of poultry and swine waste renewable energy certificates (RECs) it is currently required to retire for 2013 compliance; and (3) the number of poultry and swine waste RECs it anticipates that it will own by the end of 2013.

On October 11, 2013, DEC and DEP filed the direct testimony of Jonathan L. Byrd, Manager of Renewable Strategy and Compliance; DNCP filed the direct testimony of Chiman H. Muchhala, Manager of Market Operations; Halifax filed the direct testimony of Charles H. Guerry, Executive Vice President; EnergyUnited filed the direct testimony of Alec Natt, Chief Financial Officer; Fayetteville filed the direct testimony of Keith Lynch, Power Contracts and Regulatory Manager; NCEMPA and NCMPA1 filed the direct testimony of Andrew M. Fusco, Vice President of Member Planning and Corporate Services, ElectriCities of North Carolina, Inc.; GreenCo filed the

⁶ According to its August 26, 2013 filing in Docket No. E-100, Sub 139, NCEMPA provides REPS compliance services for the following municipalities, which are also members of NCEMPA: Apex, Ayden, Belhaven, Benson, Clayton, Edenton, Elizabeth City, Farmville, Fremont, Greenville, Hamilton, Hertford, Hobgood, Hookerton, Kinston, LaGrange, Laurinburg, Louisburg, Lumberton, New Bern, Pikeville, Red Springs, Robersonville, Rocky Mount, Scotland Neck, Selma, Smithfield, Southport, Tarboro, Wake Forest, Washington, and Wilson. (The City of Wilson meets the REPS compliance requirements of the towns of Pinetops, Macclesfield, and Walstonburg.)

⁷ According to its August 26, 2013 filing in Docket No. E-100, Sub 139, NCMPA1 provides REPS compliance services for the following municipalities, which are also members of NCMPA1: Albemarle, Bostic, Cherryville, Cornelius, Drexel, Gastonia, Granite Falls, High Point, Huntersville, Landis, Lexington, Lincolnton, Maiden, Monroe, Morganton, Newton, Pineville, Shelby, and Statesville.

direct testimony of Jason B. Nemeth, Director, Business Operations; and TVA filed the direct testimony of David B. DeHart, Program Manager, Renewable Energy.

On October 21, 2013, the Commission issued an Order Rescheduling Hearing, rescheduling the evidentiary hearing from November 6, 2013, to November 5, 2013.

On October 25, 2013, the Public Staff filed the testimony of Jay B. Lucas, Electric Engineer; the North Carolina Pork Council (Pork Council) filed the testimony of Angela W. Maier, Director of Policy Development and Communications; and the North Carolina Poultry Federation, Inc. (NCPF), filed the testimony of Summer Lanier, Public Relations Director, Prestage Farms, Inc.

On October 28, 2013, Green Energy Solutions NV, Inc., filed a written statement of position, but did not file testimony.

On November 1, 2013, the Power Agencies filed the rebuttal testimony of witness Fusco, and Fayetteville filed the rebuttal testimony of witness Lynch. Also on that date, Dominion filed a letter stating that it accepted Public Staff witness Lucas' recommendations to approve the relief requested in the Joint Motion subject to the conditions outlined in witness Lucas' testimony.

On November 5, 2013, the Commission issued an Order stipulating the testimony of Halifax witness Guerry and EnergyUnited witness Natt into evidence and excusing these witnesses from attending the hearing.

On November 5, 2013, the matter came on for hearing as scheduled. DEC and DEP presented the direct testimony of witness Byrd; TVA presented the direct testimony of witness DeHart; the Power Agencies presented the direct and rebuttal testimony of witness Fusco; Fayetteville presented the direct and rebuttal testimony of witness Lynch; the Pork Council presented the testimony of witness Maier; and the Public Staff presented the testimony of witness Lucas. The testimonies of GreenCo witness Nemeth, DNCP witness Muchhala, and NCPF witness Lanier were also stipulated into evidence and entered into the record at the opening of the hearing.

On November 12, 2013, DEC and DEP submitted a late-filed exhibit requested by Chairman Finley during the hearing.

On November 14, 2013, the Public Staff and NCMPA1 jointly submitted a late-filed exhibit requested by Chairman Finley during the hearing.

On November 26, 2013, NCPF and TVA each filed briefs. On November 27, 2013, the Power Agencies, the Public Staff, and the Joint Movants (excluding TVA) each filed proposed orders, the Pork Council filed a brief, and the North Carolina Sustainable Energy Association filed a letter supporting NCPF. Also on November 27, 2013, North Carolina Electric Membership Corporation filed a letter responding to the November 12, 2013 DEC/DEP late-filed exhibit.

On December 20, 2013, the Commission issued a Notice of Decision and Order stating that, due to the timing of the motions by the Joint Movants and the Power Agencies, it was not possible for the Commission to develop its complete order before the end of 2013, but that the Commission had made its decision in this docket. The Notice of Decision provided notice that the Commission would issue an order (1) delaying the 2013 requirements of G.S. 62-133.8(e) and (f), as established in the 2012 Delay Order, for one year; (2) requesting that the Public Staff arrange and facilitate two stakeholder meetings a year during 2014 and 2015; and (3) applying the triannual filing requirement first required by the 2012 Delay Order to DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax, NCEMPA and NCMPA1.

The Notice of Decision and Order stated that a final Order, including findings of fact and conclusions, would be issued at a later date. The instant Order is that final Order, and the time for filing an appeal from the decision of the Commission shall begin to run on the date of issuance of this Order.

FINDINGS OF FACT

- 1. The State's electric power suppliers have made a reasonable effort to comply with the 2013 statewide swine and poultry waste set-aside requirements established by G.S. 62-133.8(e) and G.S. 62-133.8(f), but will not be able to comply.
- 2. Compliance with the set-aside requirements has been hindered by the fact that the technology of power production from poultry and swine waste continues to be in its early stages of development.
- 3. Compliance with the set-aside requirements has been hindered in some respects, and promoted in other respects, by the General Assembly, which has modified the REPS on several occasions and considered other proposals for additional modifications. Legislative and regulatory developments have made new options for compliance available to electric power suppliers; on the other hand, because of periodic proposals for change, many lenders and investors perceive the future of the REPS as uncertain.
- 4. Electric power suppliers and renewable power developers have worked in good faith to resolve issues previously determined to have hindered compliance, such as negotiation of power purchase agreement terms and conditions and the cost and time required to properly interconnect poultry and swine waste generation facilities with the electric grid. Despite these efforts, and a decrease in problems regarding interconnection and contractual language, developers of waste-to-energy facilities and their lenders and investors remain cautious and slow to act.
- 5. No party presented evidence that the aggregate 2013 poultry and swine waste set-aside requirements could be met; nor did any party oppose Joint Movants' and Power Agencies' motions for relief from the 2013 poultry and swine waste set-aside requirements.

- 6. It is in the public interest to delay required compliance by the State's electric power suppliers with the requirements of G.S. 62-133.8(e) and (f) for one year.
- 7. Although a few electric power suppliers indicated their ability to meet a pro-rata allocation of the statutory requirement, it is appropriate to delay the statutory deadlines of the poultry and swine waste set-aside requirements, not only for those electric power suppliers that have been unable to comply, but for all electric power suppliers.
- 8. Electric power suppliers that have acquired poultry and swine waste RECs for 2013 REPS compliance should be allowed to bank such RECs for poultry and swine waste set-aside requirement compliance in future years.
- 9. Electric power suppliers should continue to make efforts to purchase any reasonably-priced poultry and swine waste RECs available in order to support the construction and operation of poultry and swine waste generation facilities and to fulfill requirements pursuant to this Order.
- 10. DEC and DEP should continue to file the verified triannual progress reports required by Ordering Paragraph No.4 of the 2012 Delay Order, and DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies should also file these reports. The Power Agencies should be permitted to file their reports jointly if they so desire. The filing of these progress reports should continue until the Commission orders that they be discontinued.
- 11. It is appropriate for the Public Staff to arrange and facilitate two stakeholder meetings a year during 2014 and 2015.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 1-6

The evidence supporting these findings of fact appears in the testimony of DEC/DEP witness Byrd, DNCP witness Muchhala, TVA witness DeHart, Fayetteville witness Lynch, Power Agencies witness Fusco, EnergyUnited witness Natt, Halifax witness Guerry, GreenCo witness Nemeth, NCPF witness Lanier, Pork Council witness Maier, and Public Staff witness Lucas.

DEC/DEP witness Byrd testified that DEC and DEP worked diligently to comply with the 2013 poultry and swine waste set-aside requirements. Witness Byrd stated that DEP had acquired enough poultry RECs to meet its 2013 poultry waste set-aside requirement. Witness Byrd further testified, however, that DEC could not comply with its 2013 poultry waste set-aside requirement and that neither company was able to meet the 2013 swine waste set-aside requirement. Witness Byrd stated that DEC and DEP remain in active ongoing negotiations for the purchase of in-state poultry and swine RECs; they continue to explore opportunities to secure out-of-state RECs; they maintain open solicitations for additional poultry and swine resources; and they are making good-faith efforts to assist developers with difficulties in interconnecting facilities to the

grid. In addition, witness Byrd stated that DEC is continuing to engage in swine waste research through its support of the Loyd Ray Farms project.

Witness Byrd stated that DEC and DEP have found that the production of electricity from poultry and swine waste is technologically challenging; it is more expensive than other more common forms of renewable energy; and that swine farms are typically located in very remote and rural areas, making interconnection costly and difficult. Further, witness Byrd stated that poultry and swine waste developers have encountered difficulties in financing their projects, in obtaining long-term supplies of animal waste fuel, and in other areas. As a result, developers have frequently delayed their commercial operation dates or abandoned their contracts with DEC and DEP. Witness Byrd stated that Commission decisions interpreting the poultry waste set-aside requirement, and the General Assembly's enactment of legislation affecting the requirement, caused DEC and DEP to frequently pause and reconsider their poultry waste compliance strategy, resulting in the loss of time. Witness Byrd testified that, in spite of all these difficulties, many of the poultry and swine waste developers who are working with DEC and DEP have made great strides. The developers have been confronted with a host of practical problems, and, as they have learned how to deal with these problems, they have brought their projects closer to commercial operation.

DNCP witness Muchhala testified that DNCP has participated in the Swine Waste REC Buyers Group organized by the electric power suppliers in North Carolina, has solicited numerous REC marketers and brokers, and has conducted its own search to locate operational swine waste digesters anywhere in the United States. According to witness Muchhala, all these efforts have failed and DNCP has not been able to acquire any swine waste RECs. Witness Muchhala testified that, because DNCP is permitted by statute to rely entirely on out-of-state sources, DNCP has been able to purchase sufficient out-of-state poultry RECs to meet the requirements of the poultry waste set-aside. However, DNCP has contracted to provide REPS compliance services for the Town of Windsor, which is required to provide 75 percent of its RECs from in-state sources, and it has not found any in-state swine or poultry waste RECs; consequently, DNCP is unable to comply with either of the 2013 poultry and swine waste set-aside requirements on Windsor's behalf.

TVA witness DeHart testified that TVA made reasonable efforts to comply with the 2013 poultry and swine waste set-aside requirements. Witness DeHart stated that TVA met with other North Carolina electric power suppliers to discuss joint efforts to purchase poultry and swine waste RECs, and, TVA has solicited offers from waste-to-energy developers for RECs or generation to meet the poultry and swine waste set-aside requirements. Witness DeHart testified that, despite these efforts, TVA is unable to comply with the 2013 poultry and swine waste set-aside requirements.

Fayetteville witness Lynch testified that Fayetteville is participating in the electric power suppliers' joint request for proposals (RFP) seeking poultry waste REC sales contracts; it has issued a separate RFP for swine waste RECs, to which no responses were received; and it has diligently assessed the market for opportunities to acquire

poultry and swine waste RECs, but no such opportunities have been available. Witness Lynch's testimony as to whether Fayetteville will be able to meet the 2013 poultry and swine waste set-aside requirements was confidential.

Power Agencies witness Fusco testified that there is no reason to believe the State's electric power suppliers will be able to comply with the 2013 poultry and swine waste set-aside requirements. Witness Fusco stated that the Power Agencies, along with other electric power suppliers, entered into long-term swine REC purchase agreements with four counterparties; however, three of the counterparties repeatedly failed to meet the requirements of the agreements and the agreements were subsequently terminated. The contracts with the remaining counterparty are still in effect, but the project's commercial operation date has been significantly delayed and the projected output has been reduced. Witness Fusco further stated that the Power Agencies have continued to look, with limited success, for other suppliers that could provide swine waste RECs. They were able to purchase swine waste RECs from an out-of-state supplier; however, this supplier's registration as a renewable energy facility was subsequently revoked by the Commission and the RECs were invalidated. With respect to poultry waste, witness Fusco stated that the Power Agencies have contracted to purchase RECs from various counterparties. However, according to witness Fusco, some of these counterparties' projects have failed and the others have been delayed.

Witness Fusco testified that in his view the reasons for the Power Agencies' difficulties in obtaining poultry and swine waste RECs include: (1) the small number of participants in the market for swine waste RECs; (2) the fact that most of the swine waste market participants lack actual experience with biomass technologies; (3) the lack of a website where animal waste generation projects can easily be identified and contacted; (4) the financing difficulties encountered by developers of poultry waste generation; (5) uncertainties arising from environmental regulatory permitting issues relating to poultry waste; and (6) the continuing legislative and regulatory developments directly affecting the poultry waste set-aside. Witness Fusco noted that, although these legislative and regulatory developments have created uncertainty, they have also expanded the universe of compliance options, and the Power Agencies are seeking to make use of these options. On cross-examination, witness Fusco testified that the Power Agencies have contracted with developers managing the proposed ReVenture project, which was expected to come on line by the end of 2013. According to witness Fusco, if the Reventure project remains on schedule and is on line in 2014, the Power Agencies will be able to meet the requested modified requirements of the poultry waste set-aside for 2014.

EnergyUnited witness Natt stated that EnergyUnited has purchased out-of-state poultry and swine waste RECs, and, that it has engaged in collaborative efforts with other North Carolina electric power suppliers to obtain in-state RECs. His testimony on whether EnergyUnited will be able to comply with the 2013 poultry and swine waste set-aside requirements was confidential.

Halifax witness Guerry did not appear at the hearing. Witness Guerry's testimony was admitted into the record pursuant to the Commission's November 5, 2013 Order. He testified that Halifax participated in the collaborative efforts of the State's electric power suppliers to obtain poultry and swine waste RECs, but, to date those efforts have been unsuccessful. Witness Guerry stated that Halifax entered into an individual agreement to purchase RECs from a swine waste-to-energy developer, however, this developer has not yet registered with the Commission as a renewable energy facility. Consequently, according to witness Guerry, Halifax is unable to meet the 2013 poultry and swine waste set-aside requirements.

GreenCo witness Nemeth testified that GreenCo has participated in the collaborative efforts of the State's electric power suppliers to obtain poultry and swine waste RECs, and in addition, GreenCo has had discussions with numerous developers seeking to produce power from animal waste. As a result of these discussions, GreenCo has purchased some swine waste RECs both in-state and out-of-state, and some out-of-state poultry waste RECs. However, according to witness Nemeth, GreenCo has not acquired enough RECs to meet the 2013 poultry and swine waste set-aside requirements.

NCPF witness Lanier testified that NCPF does not oppose the request for a delay of one year to the poultry waste set-aside requirements. Witness Lanier stated that her employer, Prestage Farms, Inc., is in the process of developing a poultry litter gasification facility in Bladen County. Witness Lanier listed the benefits of generating power from poultry litter, emphasizing that power generation will provide a beneficial use for poultry waste in the event that the current practice of land application is prohibited.

Pork Council witness Maier testified that, although the development of electric generation from swine waste has taken time, significant gains are being made. Witness Maier stated that there are six permitted projects in North Carolina, including a 1.3-MW facility being developed by Revolution Energy in the town of Magnolia, which is expected to be fully operational in November 2013. She noted that the use of swine waste for power generation provides an alternative to the disposition of waste in lagoons, which has disadvantages and resulted in a moratorium on the expansion of the hog industry in the State. Witness Maier stated that with the enactment of the swine waste set-aside requirement, the State's electric power suppliers were given the responsibility to actively support and assist in the development of energy production from swine waste. In witness Maier's opinion, this responsibility has not been fully embraced by all electric suppliers. She asserted that the electric suppliers should make greater efforts to ensure that the language of their REC purchase contracts does not place unreasonable burdens on developers. Finally, witness Maier recommended that the provision contained in the 2012 Delay Order, requiring DEC and DEP to file triannual progress reports, be made applicable to all of the State's electric power suppliers.

Public Staff witness Lucas testified that the Joint Movants' and the Power Agencies' motions should be granted because the electric power suppliers are unable to comply with the 2013 poultry and swine waste set-aside requirements. Witness Lucas stated that, even though DEC and DEP have not acquired enough poultry and swine waste RECs to meet the requirements, it is clear that they have made good-faith efforts to do so. Witness Lucas further stated his belief that the other electric power suppliers have made good-faith efforts to comply, but that he cannot say so with the same degree of certainty because the other suppliers have not been required to meet the same level of transparency and additional reporting requirements that DEC and DEP were required to adhere to pursuant to the 2012 Delay Order.

Witness Lucas further testified that at the hearing prior to the 2012 Delay Order, he identified several factors that made compliance with the set-asides difficult, including: (1) uncertainty as to the environmental requirements applicable to waste-to-energy facilities; (2) uncertainty arising from the numerous statutory amendments affecting the poultry waste set-aside; (3) disagreements between electric power suppliers and developers on contract terms, particularly those relating to change of law provisions; and (4) difficulties in reaching satisfactory interconnection agreements. Witness Lucas stated that uncertainty surrounding potential changes to the REPS statute continues to exist, while the uncertainty about environmental requirements has diminished to some degree because several waste-to-energy facilities have received rulings from the Division of Air Quality of the North Carolina Department of Environment and Natural Resources that they are not subject to the restrictions applicable to solid waste incinerators. Witness Lucas further stated that most of the contractual issues relating to change of law have largely been addressed and the difficulties with interconnection agreements have for the most part been resolved.

In its determination that the effective dates of the poultry and swine waste set-asides should again be delayed, the Commission initially notes that its authority under G.S. 62-133.8(i)(2) "to modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of [G.S. 62-133.8) in whole or in part" may be exercised only if the electric power suppliers requesting the modification or delay "demonstrate that [they] made a reasonable effort to meet the requirements set out" in the statute. In this case, the evidence demonstrates that the electric power suppliers made reasonable efforts to comply with their 2013 poultry and swine waste set-aside requirements. However, no supplier is able to comply with the 2013 swine waste set-aside requirement and a limited few are in a position to comply with the 2013 poultry waste set-aside requirement. Witnesses Maier and Lucas expressed some concern as to whether certain suppliers' compliance efforts might have been more vigorous and extensive, but neither contended that any supplier failed to make a reasonable effort. The Commission concludes that the limited availability of poultry waste RECs, and the near unavailability of swine waste RECs, resulted in a scenario in which compliance could not be achieved. The primary cause of these limitations is the immature and undeveloped state of the technology of electric power generation from poultry and swine waste. Many states have adopted renewable energy portfolio standards, however, North Carolina is the only state with set-aside requirements for energy generated from swine or poultry

waste. Witnesses Byrd, Fusco and Nemeth testified that almost every developer that agreed to provide power from poultry or swine waste had to postpone startup dates or abandon the projects entirely.

The evidence shows little disagreement regarding other causes of the electric power suppliers' difficulty with compliance in 2013. Witnesses Byrd, Fusco and Lucas all noted that new legislative developments affecting the poultry waste set-aside have resulted in uncertainty and delays, although they have also provided suppliers with new ways of complying with the set-aside. Witness Lucas further testified that there have been disputes about the terms and conditions of REC purchase agreements and disagreements and misunderstandings as to the interconnection of facilities. The testimony of these witnesses was not contradicted by any party.

The Commission notes that despite setbacks, which are inevitable with the development of a new technology, several of the State's waste-to-energy developers are making significant strides. Witness Byrd testified that many developers have made significant progress and are close to having their facilities on line. Additionally, witness Byrd stated that DEP is in a position to comply with its 2013 poultry waste set-aside requirement. Witness Fusco stated that the ReVenture project was expected to begin producing poultry waste RECs by the end of 2013; witness Nemeth indicated that GreenCo is purchasing a small amount of in-state swine waste RECs; and witness Lanier testified that the Revolution Energy swine waste plant in Magnolia is scheduled to come on line in the near future.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 7-9

The evidence supporting these findings of fact appear in the testimony of DNCP witness Muchhala and Power Agencies witness Fusco.

DNCP witness Muchhala testified that, despite the fact that DNCP is in compliance with the 2013 poultry waste set-aside requirements and the Town of Windsor has acquired some poultry waste RECs, their compliance schedule should be delayed uniformly with the other electric power suppliers. Witness Muchhala further testified that DNCP should be allowed to bank its already acquired RECs for future use. Witness Muchhala contended that this approach maintains fairness among the electric power suppliers and is appropriate because the poultry waste set-aside requirement is a joint annual compliance requirement to be achieved by all the electric power suppliers.

Power Agencies witness Fusco testified that, if any electric power supplier is granted a delay to the 2013 poultry and swine waste set-aside requirements, the same relief should be granted to those electric power suppliers capable of whole or partial compliance. Witness Fusco stated that if suppliers that incurred costs in good faith to acquire poultry and swine waste RECs are required to retire those RECs in 2013, while those suppliers who acquired no RECs are excused from compliance, the practical effect is that the suppliers who purchased RECs will be penalized for good faith efforts to comply with the requirements.

No party offered testimony in opposition to the contentions of witnesses Muchhala and Fusco.

In the 2012 Delay Order the Commission modified the 2012 poultry and swine waste set-aside requirements uniformly for all parties, including those that were able to fully or partially comply with the set-asides, as well as those that had not acquired any swine or poultry waste RECs. Further, the Commission allowed parties that had acquired RECs to bank them for compliance in future years. The Commission directed all electric power suppliers to continue to make efforts to purchase any reasonably priced poultry and swine waste RECs that were available. These procedures are fair to all parties and are not opposed by any party to this proceeding. Further, the nature of the poultry and swine waste set-aside requirements, as aggregate requirements, would render compliance planning exceedingly complex were different electric power suppliers held to different compliance schedules. Consequently, the Commission will adopt the same procedures for use in this proceeding. However, the Commission notes that, as poultry and swine waste RECs become more readily available and more electric power suppliers are able to comply with the requirements, the Commission reserves the right to revisit the uniform application of compliance delays in potential future proceedings if the Commission finds it necessary to do so.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 10-11

The evidence supporting these findings of fact appear in the testimony of Public Staff witness Lucas, Pork Council witness Maier, Fayetteville witness Lynch, and Power Agencies witness Fusco.

Public Staff witness Lucas testified that the triannual progress reports, currently filed by DEC and DEP pursuant to Ordering Paragraph No. 4 of the Commission's 2012 Delay Order, should also be filed by DNCP, TVA, Fayetteville, the Power Agencies, and GreenCo. He stated that this requirement would provide greater transparency as to these suppliers' compliance efforts. On cross-examination and redirect, witness Lucas testified that the triannual progress reports should not only include the names of developers with whom a supplier has had discussions and the reasons why these discussions did or did not lead to a REC purchase contract, but should also include some degree of detail as to each developer's proposal. In witness Lucas' opinion, the preparation of an electric power supplier's initial progress report will require some effort. However, subsequent reports should be relatively easy to prepare since the electric power supplier can use its first report as a template and insert new information or delete outdated material as needed.

Pork Council witness Maier testified that the triannual reports should be filed by all electric power suppliers. Witness Maier stated that these reports include useful information about the suppliers' compliance efforts, provide additional incentive for the suppliers to focus on compliance with the poultry and swine waste set-asides, and give interested parties an opportunity to intercede if necessary. Further, witness Maier

suggested that periodic stakeholder meetings would help reduce uncertainty by displaying a commitment on the part of developers and the electric power suppliers.

Power Agencies witness Fusco stated that he did not believe the electric power suppliers, other than DEC and DEP, should be required to file triannual reports. Witness Fusco stated that DEC and DEP agreed to file these reports in a settlement agreement in the 2012 proceeding. However, the other electric power suppliers were not parties to the settlement agreement and never agreed to file the reports. Witness Fusco stated that electric power suppliers already file annual compliance plans and compliance reports, and additional reporting requirements would be overly burdensome and would not produce any additional RECs. Witness Fusco stated that, in his opinion, the only obligation of the electric power suppliers under G.S. 62-133.8 is to acquire the number of RECs specified in the statute; they are not required to actively support and assist in the development of renewable energy.

On cross-examination, witness Fusco stated that the labor costs required to compile a triannual report and have it reviewed by the Power Agencies' legal staff would be significant, amounting to about \$1,000. He agreed that the triannual reports would help keep the Commission abreast of the electric power suppliers' compliance efforts and would provide the electric power suppliers with an opportunity to bring their concerns forward to the Commission. Witness Fusco stated that the Power Agencies' annual compliance reports and compliance plans are filed in September and their off-ramp motion this year was also filed in September. Witness Fusco acknowledged that for the rest of the year, if they are not required to file triannual reports, the Power Agencies will not make any information available about their compliance activities.

Fayetteville witness Lynch testified that Fayetteville should not be burdened with preparing triannual reports because it is a small supplier and its efforts to comply with the poultry and swine waste set-aside requirements are limited to participating in purchasing collaboratives. On cross-examination, witness Lynch agreed that swine and poultry production are important industries to the State's economy that produce an undesirable waste product, and that in enacting G.S. 62-133.8(e) and (f) the General Assembly hoped to create a way of disposing of this waste product while producing useful electric power. He further acknowledged that to achieve this goal the electric power suppliers and the waste-to-energy developers must cooperate in good faith, and, in particular, they must communicate with each other.

Whether to require triannual reports from electric power suppliers other than DEC and DEP is the only contested issue before the Commission in this proceeding. In this matter the Commission agrees with the Public Staff and the Pork Council. The triannual reports filed this year by DEC and DEP have been valuable to the Commission. The filing of similar reports by DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies should likewise provide helpful information on their compliance activities; should help keep the Commission informed on whether progress is continuing toward making the generation of power from poultry and swine waste a practical reality; and should assist the Commission in ruling on similar future motions, if necessary.

Further, the filing of triannual reports will provide regular notice to the Commission of electric power suppliers' compliance, or lack thereof, with the poultry and swine waste set-aside requirements, rather than the Commission relying upon the electric power suppliers to file motions for relief, which have occurred late in the calendar year.

As witnesses Fusco and Lynch pointed out, the electric power suppliers will incur some costs in preparing triannual reports; however, the Commission agrees with witness Lucas that a supplier's second and subsequent reports will be less time-consuming and expensive than its first one. The Commission does not find this to be an unreasonable expense for larger electric power suppliers. The Commission has taken the cost of the reports into account, however, in choosing to exempt the smallest suppliers from the reporting obligation.

Accordingly, the Commission concludes that DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies, as well as DEC and DEP, should be required to file the verified triannual Progress Reports required by Ordering Paragraph No. 4 of the Commission's 2012 Delay Order. Further, the Public Staff is requested to arrange and facilitate two stakeholder meetings a year during 2014 and 2015 that shall be attended by the electric power suppliers that are subject to the triannual reporting requirement. The purpose of the stakeholder meetings is to encourage communication between electric power suppliers and developers and to discuss potential obstacles to achieving compliance with the poultry and swine waste set-aside requirements and options for addressing them.

IT IS, THEREFORE, ORDERED as follows:

1. That the 2013 requirement of G.S. 62-133.8(e), as established in the Commission's 2012 Delay Order, is delayed for one year. The electric power suppliers, in the aggregate, shall comply with the requirements of G.S. 62-133.8(e) according to the following schedule:

Calendar Year	Requirement for Swine Waste Resources
2014-2015	0.07%
2016-2018	0.14%
2019 and thereafter	0.20%

2. That the 2013 requirement of G.S. 62-133.8(f), as established in the Commission's 2012 Delay Order, is delayed for one year. The electric power suppliers, in the aggregate, shall comply with the requirements of G.S. 62-133.8(f) according to the following schedule:

Calendar Year	Requirement for Poultry Waste Resources
2014	170,000 megawatt-hours
2015	700,000 megawatt-hours
2016 and thereafter	900,000 megawatt-hours

- 3. That the Public Staff is requested to arrange and facilitate two stakeholder meetings a year during 2014 and 2015. The electric power suppliers that are subject to the triannual filing requirement (as discussed herein) shall attend. Developers and other stakeholders are encouraged to participate and discuss potential obstacles to achieving the swine and poultry waste requirements and options for addressing them.
- 4. That the triannual filing requirement first required by the Commission's 2012 Delay Order and that now applies to DEP and DEC shall apply to DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax, NCEMPA and NCMPA1. The reports to be filed shall be due to the Commission on each May 1, September 1, and January 1, until the Commission finds that they are no longer necessary. The filing requirements shall be as specified in ordering paragraph 4 of the Commission's 2012 Delay Order.

ISSUED BY ORDER OF THE COMMISSION

This the <u>26th</u> day of March, 2014.

NORTH CAROLINA UTILITIES COMMISSION

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Paige J. Morris, Deputy Clerk