



**Halifax Electric  
Membership Corporation**

208 West Whitfield Street • Post Office Box 667  
Enfield, North Carolina 27823-0667  
Telephone: (252) 445-5111

Your Touchstone Energy® Partner 

September 1, 2011

**FILED**  
SEP 01 2011  
Clerk's Office  
N.C. Utilities Commission

Ms. Renne C. Vance, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

**Re: Docket No. E-100, Sub ~~131~~ 28**

Dear Ms. Vance:

Enclosed for filing are the original and thirty (30) copies of the Halifax Electric Membership Corporation's 2011 REPS compliance plan for Docket E-100, Sub 131, 2011 REPS Compliance Plans and 2010 REPS Compliance Reports. This plan incorporates the REPS requirements for the Town of Enfield.

Please let us know if clarification of any responses is needed.

Sincerely,

Charles H. Guerry  
Executive Vice President & General Manager  
Halifax Electric Membership Corporation

Enclosures

cc: Ms. Jannie Burnette (Town of Enfield)

*Clerk's PS  
A 6  
7 Comm  
Watson  
Green  
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Kite  
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OFFICIAL COPY

Halifax Electric Membership Corporation  
NCUC Docket E-100, Sub 131 Renewable Energy and Energy Efficiency  
Portfolio Standard

Annual Compliance Plan  
September 1, 2011

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Clerk's Office  
N.C. Utilities Commission

**Rule R8-67 (b) (1)**

(i) A specific description of the electric power supplier's planned actions to comply with G.S. 62-133.8(b), (c), (d), (e), and (f) for each year:

(b) REPS for Electric Public Utilities: Not Applicable

(c) REPS for Electric Membership Corporations and Municipalities:

<u>Calendar Year</u>	<u>Requirement</u>	<u>Estimated HEMC Sales (kWh)</u>	<u>Estimated HEMC Requirement (kWh)</u>
2011	0% of 2010 sales	207,893,214 <sup>[1]</sup>	0
2012	3% of 2011 sales	199,524,654 <sup>[2]</sup>	5,985,740
2013	3% of 2012 sales	201,519,900	6,045,597
2014	3% of 2013 sales	203,535,099	6,106,053
2015	6% of 2014 sales	205,570,450	12,334,227
2016	6% of 2015 sales	207,626,155	12,457,569
2017	6% of 2016 sales	209,702,417	12,582,145
2018	10% of 2017 sales	211,799,441	21,179,944
2019	10% of 2018 sales	213,917,435	21,391,744
2020	10% of 2019 sales	216,056,609	21,605,661
2021 and thereafter	10% of prior year energy sales		

<sup>[1]</sup> Actual kWh sales for 2010.

<sup>[2]</sup> Actual kWh sales through July 2011 consistent with forecast for the year.

Halifax Electric Membership Corporation (HEMC) plans to meet its overall requirements, including requirements for the Town of Enfield, through SEPA energy entitlements for up to 30% of the total; energy efficiency programs in coordination with its member consumers and the Town of Enfield; Story Wind Renewable Energy Certificates (coordinated by NCEMC); Halifax EMC 98.56 kW Solar Photovoltaic System; and other resources to be determined for solar, swine waste, and poultry waste set-asides within the limitations of cost caps established by the NCUC.

**(d) REPS Requirement through use of Solar Energy Resources:**

<u>Calendar Year</u>	<u>Requirement</u>	<u>Estimated HEMC Sales (kWh)</u>	<u>Estimated HEMC Requirement (kWh)</u>
2011	0.02% of 2010 sales	207,893,214 <sup>[1]</sup>	41,579
2012	0.07% of 2011 sales	199,524,654 <sup>[2]</sup>	139,667
2013	0.07% of 2012 sales	201,519,900	141,064
2014	0.07% of 2013 sales	203,535,099	142,475
2015	0.14% of 2014 sales	205,570,450	287,799
2016	0.14% of 2015 sales	207,626,155	290,677
2017	0.14% of 2016 sales	209,702,417	293,583
2018	0.20% of 2017 sales	211,799,441	423,599
2019	0.20% of 2018 sales	213,917,435	427,835
2020	0.20% of 2019 sales	216,056,609	432,113
2021 and thereafter	0.20% of prior year energy sales		

<sup>[1]</sup> Actual kWh sales for 2010.

<sup>[2]</sup> Actual kWh sales through July 2011 consistent with forecast for the year.

HEMC installed a Solar Photovoltaic System with initial capacity of 98.56 kW. The facility was commissioned in October 2010. The estimated annual output is 128,128 kWh.

**(e) REPS Requirement through use of Swine Waste Resources:**

<u>Calendar Year</u>	<u>Requirement</u>	<u>Estimated HEMC Sales (kWh)</u>	<u>Estimated HEMC Requirement (kWh)</u>
2011	0.00% of 2010 sales	207,893,214 <sup>[1]</sup>	0
2012	0.07% of 2011 sales	199,524,654 <sup>[2]</sup>	139,667
2013	0.07% of 2012 sales	201,519,900	141,064
2014	0.07% of 2013 sales	203,535,099	142,475
2015	0.14% of 2014 sales	205,570,450	287,799
2016	0.14% of 2015 sales	207,626,155	290,677
2017	0.14% of 2016 sales	209,702,417	293,583
2018	0.20% of 2017 sales	211,799,441	423,599
2019	0.20% of 2018 sales	213,917,435	427,835
2020	0.20% of 2019 sales	216,056,609	432,113
2021 and thereafter	0.20% of prior year energy sales		

<sup>[1]</sup> Actual kWh sales for 2010.

<sup>[2]</sup> Actual kWh sales through July 2011 consistent with forecast for the year.

North Carolina's electric suppliers have contracted jointly for two development projects and are in negotiation with others to meet statewide requirements for swine waste generation. HEMC is a participant in the initiative. Compliance costs have been estimated to be \$0.10/kWh based on preliminary contract estimates. However, HEMC has been advised the collaborative group is not expected to be able to meet the statewide requirement in 2012 for swine waste resources fully.

**(f) REPS Requirement through use of Poultry Waste Resources:**

<u>Calendar Year</u>	<u>Requirement</u>	<u>Estimated HEMC Requirement (kWh)</u>
2011	0 MWh (statewide)	0
2012	170,000 MWh (statewide)	255,000
2013	700,000 MWh (statewide)	1,050,000
2014	900,000 MWh (statewide)	1,350,000
2015	900,000 MWh (statewide)	1,350,000
2016 and thereafter	900,000 MWh minimum (statewide)	1,350,000 minimum

On June 25, 2010 (NCUC Docket E-100, Sub 113), the Commission approved a joint motion for electric utilities in the state to work collectively to meet the poultry waste set-aside requirement. HEMC is a participant in the joint initiative with 0.15% share of the statewide requirement. The technical feasibility and cost of meeting the statewide requirement are uncertain at this time. As a placeholder, compliance costs have been estimated to be \$0.15/kWh.

**(ii) A list of executed contracts to purchase renewable energy certificates (whether or not bundled with electric power), including type of renewable energy resource, expected MWh, and contract duration:**

NextEra wind energy facility, Story County, Iowa (coordinated by NCEMC)

Type of Resource: Wind  
 Expected MWh: Approximately 370 MWh per year  
 Contract duration: 10 years  
 NC-RETS ID: IMP293

**Swine Contracts**

HEMC is a participant in the statewide initiative to address the swine REPS requirement.

**(iii) A list of planned or implemented energy efficiency measures, including a brief description of the measures and projected impacts:**

- 1) The following programs have been implemented: (1) promotion and distribution of compact fluorescent light bulbs, (2) rebates for installation of high efficiency heat pumps, (3) incentives for energy efficiency initiatives based on energy audits, and (4) the Town of Enfield's replacement of existing streetlights with LED streetlights.
- 2) Energy efficiency measures are being evaluated at local schools and are contemplated for other non-residential services through energy audits.

- 3) Energy efficiency initiatives also are being discussed with the one industrial customer on the Enfield system.
- 4) The Town of Enfield has converted lighting fixtures in twelve municipal buildings to more efficient fluorescent lighting. The Town is projected to save 36,492 kWh per year.
- 5) HEMC is in the process of filing for approval of an LED Outdoor Lighting Program.
- 6) HEMC is also looking into programmable thermostats and the Energy Star Plus Program for manufactured homes.

**(iv) The projected North Carolina retail sales and year-end number of customer accounts by customer class for each year:**

	<u>Projected NC Retail Sales (kWh)</u>	<u>Residential Customers</u>	<u>Commercial Customers</u>	<u>Industrial Customers</u>	<u>Total Customers</u>
2009	193,698,564	11,640	1,405	1	13,046
2010	207,893,214	11,598	1,389	1	12,988
2011	199,524,654	11,714	1,403	1	13,118
2012	201,519,900	11,831	1,417	1	13,249
2013	203,535,099	11,949	1,431	1	13,381

Note: kWh sales and customer counts include the Town of Enfield.

**(v) The current and projected avoided costs rates for each year:**

See Appendix A for avoided costs rates. (Provided by NCEMC.)

**(vi) The projected total and incremental costs anticipated to implement the compliance plan for each year:**

	<u>Projected Incremental Costs</u>	<u>Projected Total Costs</u>
2011	\$ 105,815	\$ 111,149
2012	89,662	94,996
2013	209,052	214,386

**(vii) A comparison of projected costs to the annual cost caps for each year:**

	<u>Projected Incremental Costs</u> <sup>[3]</sup>	<u>Residential Cost Cap</u> <sup>[4]</sup>	<u>Commercial Cost Cap</u> <sup>[4]</sup>	<u>Industrial Cost Cap</u> <sup>[4]</sup>	<u>Total Annual Cost Caps</u> <sup>[4]</sup>
2010 <sup>[5]</sup>	\$ 86,196	\$ 116,400	\$ 70,250	\$ 500	\$ 187,150
2011	105,815	115,908	69,450	500	185,930
2012	89,662	140,568	210,450	1,000	352,018
2013	209,052	141,972	212,550	1,000	355,522

<sup>[3]</sup> Does not include net revenue loss (revenue less avoided cost). The net revenue loss is considered outside the REPS recovery, consistent with the treatment for electric public utilities by the NCUC.

<sup>[4]</sup> Based on prior year end customer counts, which are estimated for December 31, 2011 and December 31, 2012.

<sup>[5]</sup> Actual Incremental Costs and Cost Caps.

**(viii) For electric public utilities, an estimate of the amount of the REPS rider and the impact on the cost of fuel and fuel-related costs rider necessary to fully recover the projected costs:**

Not Applicable

**(ix) The electric power supplier's registration information and certified statements required by Rule R8-66, to the extent they have not already been filed with the Commission:**

HEMC installed a Solar Photovoltaic System with initial capacity of 98.56 kW. The facility was commissioned in October 2010. The estimated annual output is 128,128 kWh. (EC-33, Sub 59 Application for Certificate of Public Convenience and Necessity and Approval of Solar Generating Facility, 98.65 kW).

The Town of Enfield does not own generation resources for which REPS credits are applicable.

## Appendix A: Avoided Costs Rates

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**From:** Stephenson, Wendy [Wendy.Stephenson@ncemcs.com]  
**Sent:** Monday, August 23, 2010 9:51 AM  
**To:** Burnette, Mike; Steve Miller  
**Subject:** RE: Halifax REPS Compliance Plan: Avoided Costs

Attached are the avoided cost rates for 2010-2011.



2010 QF -  
Rates.docx

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**From:** Burnette, Mike  
**Sent:** Monday, August 23, 2010 9:49 AM  
**To:** Steve Miller  
**Cc:** Stephenson, Wendy  
**Subject:** RE: Halifax REPS Compliance Plan: Avoided Costs

Good Morning Steve,

Back in March the BOD approved for NCEMC a new set of avoided cost rates. The new schedule is similar to that filed by the IOUs in that it provides for a 2 year variable and a 5 and 10 year fixed option. In addition, the rates will be calculated on a biannual basis. So the rates that we currently have will be effective until December 31, 2011.

Wendy, will you please send Steve the avoided cost rate sheet.

Thanks,  
Mike

SCHEDULE QF – 2010 DRAFT

POWER PURCHASES FROM QUALIFYING FACILITIES

RATES

NCEMC shall pay eligible Qualifying Facilities for energy and /or capacity furnished to NCEMC the credits set forth below as applicable. Such payments shall be reduced by both the Administrative charge and any applicable Interconnection Facilities Charges.

Effective Dates: January 1, 2010 through December 31, 2011 or until revised

\$ / MWh		Variable	5 Year	10 Year
Energy	On-Peak Hours	40.22	48.04	54.27
	Off-Peak Hours	26.84	32.96	38.14
Capacity	On-Peak Months	34.46	35.48	37.10
	Off-Peak Months	16.50	16.92	17.68

On/Off-peak Definition

- On-Peak Hours (Mon – Fri)
  - Apr 1st - Sep 30<sup>th</sup> 10:00 am thru 10:00 pm
  - Oct 1st - Mar 31<sup>st</sup> 6:00 am thru 1:00 pm and 4:00 pm thru 9:00 pm
- Off-Peak Hours: all other weekday hours not defined in above, plus weekends and holidays
  - Holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Day After, Christmas Day
  - If the holiday falls on Saturday, the Friday before will be considered off-peak
  - If the holiday falls on Sunday, the Monday after will be considered off-peak
- On-Peak Months (Capacity Credit): June through September and December through February

Capacity Credit

- Applicable to only On-Peak Hours

**STATE OF NORTH CAROLINA**

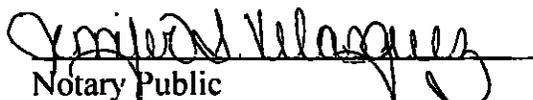
**COUNTY OF HALIFAX**

Charles H. Guerry, having been first duly sworn, deposes and says:

1. He has read the foregoing 2011 REPS Compliance Plan and knows its contents.
2. The matters stated in this instrument are true of his knowledge, except as to those matters that are stated to be on information and belief, and, as to those matters, he believes them to be true.

  
\_\_\_\_\_  
Charles H. Guerry  
Executive Vice President

Sworn to and subscribed before me  
this 26th day of August, 2011.

  
\_\_\_\_\_  
Notary Public  
Jennifer S. Velasquez

My Commission Expires: 02/17/2015

[SEAL]

