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**Clerk's Office
N.C. Utilities Commission**

INFORMATION SHEET

PRESIDING: Commissioner Beatty and full Commission
PLACE: Dobbs Building, Raleigh, NC
DATE: March 9, 2015
TIME: 7:00 p.m. to 9:10 p.m.
DOCKET NO.: E-100, Sub 141
COMPANY: Duke Energy Progress/Duke Energy Carolinas/Dominion NC Power
DESCRIPTION: 2014 Biennial Integrated Resource Plans and Related 2014 REPS Compliance Plans
VOLUME: 1

APPEARANCES

DUKE ENERGY:

Bo Somers, Esq.

DOMINION NC POWER:

Brett Breitschwerdt, Esq.

SIERRA CLUB and SOUTHERN ENVIRONMENTAL LAW CENTER:

Gudrun Thompson

NC WARN:

John Runkle, Esq.

NC SUSTAINABLE ENERGY ASSOCIATION:

Peter Ledford, Esq.

PUBLIC STAFF:

Robert S. Gillam

WITNESSES

Bobi Gallagher

Avram Friedman

Michael Carroway

Jim Senter

Harvey Richmond

Nick Brown

John Shaw

Harry Phillips

Stuart Glover

Bob Rodriguez

Mac Legerton

Beth Henry

Ken Moore

EXHIBITS

Friedman Exhibit 1 (I/A)

COPIES ORDERED: Gillam – email; Runkle – email

REPORTED BY: Kim Mitchell

TRANSCRIBED BY: Kim Mitchell

DATE TRANSCRIBED: March 24, 2015

TRANSCRIPT PAGES: 106

PREFILED PAGES: 0

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/9/15 DOCKET #: E-100 Sub 141
NAME AND TITLE OF ATTORNEY Lawrence B. Somers, Deputy General Counsel
FIRM NAME Duke Energy Corp
ADDRESS P.O. Box 1551
CITY Raleigh ZIP 27602

APPEARING FOR: Duke Energy Carolinas + Duke Energy Progress

APPLICANT _____	COMPLAINANT _____	INTERVENER _____
PROTESTANT _____	RESPONDENT _____	DEFENDANT _____

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Name: _____
Phone #: _____
Email: _____

Signature: Lawrence B. Somers

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Signature: _____

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/9/14 DOCKET #: E-100 Sub 141
NAME AND TITLE OF ATTORNEY E. Brett Breitschwerdt
FIRM NAME McGuire Woods
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CITY Raleigh ZIP 27601

APPEARING FOR: Dominion North Carolina Power

APPLICANT	<u>X</u>	COMPLAINANT	_____	INTERVENER	_____
PROTESTANT	_____	RESPONDENT	_____	DEFENDANT	_____

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Signature: E. Brett Breitschwerdt

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/9/15 DOCKET #: E100 sub 141
NAME AND TITLE OF ATTORNEY John Runkle
FIRM NAME _____
ADDRESS 2121 Damascus Ch. Rd
CITY Chapel Hill NC ZIP 27516

APPEARING FOR: NC WARN

APPLICANT _____	COMPLAINANT _____	INTERVENER <input checked="" type="checkbox"/>
PROTESTANT _____	RESPONDENT _____	DEFENDANT _____

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Signature: John Runkle

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/9/15 DOCKET #: E-100, Sub 141
NAME AND TITLE OF ATTORNEY Gordon Thompson
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CITY Chapel Hill NC ZIP 27516

APPEARING FOR: Southern Alliance for Clean Energy and
The Sierra Club
APPLICANT _____ COMPLAINANT _____ INTERVENER ☒
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

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NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 3/9/15 DOCKET #: E-100 Sub 141
NAME AND TITLE OF ATTORNEY Peter Ledford
FIRM NAME NC Sustainable Energy Association
ADDRESS 4800 Six Forks Road Suite 300
CITY Raleigh, NC ZIP 27609

APPEARING FOR:

APPLICANT _____ COMPLAINANT _____ INTERVENER X
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

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NORTH CAROLINA UTILITIES COMMISSION
PUBLIC STAFF - APPEARANCE SLIP

DATE 3/9/15 DOCKET # : E-100, Sub 141
PUBLIC STAFF MEMBER Bob Gillam

ORDER FOR TRANSCRIPT OF TESTIMONY TO BE **EMAILED** TO THE
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Robert S. Gillam
Signature of Public Staff Member

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2015

Friedman
Exhibit I
I/A
(Public)

Short Title: Efficient and Affordable Energy Rates.

A BILL TO BE ENTITLED

1
2 AN ACT (1) TO REQUIRE THE NORTH CAROLINA UTILITIES COMMISSION TO
3 ESTABLISH TIERED ELECTRICITY RATES FOR RESIDENTIAL, COMMERCIAL,
4 PUBLIC, AND INDUSTRIAL CUSTOMERS TO ENCOURAGE ENERGY
5 CONSERVATION AND ENERGY EFFICIENCY; (2) TO CREATE THE ENERGY
6 EFFICIENCY BANK TO BE USED FOR LOANS TO
7 CUSTOMERS FOR THE COSTS OF CERTAIN ENERGY EFFICIENCY OR
8 RENEWABLE ENERGY PROJECTS; AND (3) TO CREATE AN INCENTIVE FOR
9 CONSUMERS TO PURCHASE ENERGY STAR QUALIFIED HOUSEHOLD
10 PRODUCTS.

11 The General Assembly of North Carolina enacts:

12 **SECTION 1.** Article 7 of Chapter 62 of the General Statutes is amended by adding
13 a new section to read:

14 "§ 62-155.1. Electric power tiered rates established.

15 The Commission shall develop, for the purpose of promoting energy conservation and
16 energy efficiency, separate rate structures for all residential, commercial, public, and industrial
17 customers of electric power generated by electric public utilities. The rate structures shall
18 include all of the following elements:

19 (1) The residential, commercial and public rate structures shall be inverted. Under the residential,
20 commercial and public inverted rate structures, the use of larger quantities of electricity shall
21 result in a higher price per kilowatt hour for the customer: lower usage shall result in a lower
22 price.

23 (2) The residential, commercial and public rate structures shall be in the form of tiered blocks.
24 The inverted tiered block rate structure shall allow that, when energy usage within a month or
25 other billing period exceeds one tiered block, the customer shall begin to pay a higher rate for
26 energy use in the next higher tiered block. Electricity used during peak demand periods, as
27 that term is defined by the Commission, shall be charged at a higher tiered rate for the
28 purpose of leveling out peak demand and minimizing the need for excess polluting
29 generating capacity.

30 (3) The number of inverted tiered blocks for residential, commercial and public customers
31 and the cost thresholds the tiered blocks represent shall be developed for the purpose
32 of achieving the goals of promoting energy conservation and energy efficiency as provided
33 in this section.

- (4) The inverted tiered-block rate structure for residential customers shall be designed to avoid a negative economic impact on low-income families living in rental units. There will be a system of exemptions from higher tiered rates for families living in rental units who have an annual income of less than 150% of the federally defined poverty level. Previous year state or federal tax forms, Social Security statements, unemployment insurance statements or other documents deemed as proof of income by the determining state agency shall be acceptable in granting exemptions from higher tiered rates for low-income families living in rental units.
- (5) The inverted tiered block rate structure for residential customers shall be scaled to achieve a forty percent (40%) to sixty percent (60%) statewide reduction in electricity consumption from 2015 levels within 10 years.
- (6) The inverted tiered block rate structure for industrial customers shall be tailored on a case-by-case basis to maximize the financial benefit of investing in energy efficiency and job creation. Energy use thresholds for each industry shall be determined through the use of a comprehensive, standardized, energy-audit form to determine the minimum energy use required to fulfill the industry's needs and the efficiency with which the industry is using energy. Each industrial establishment is responsible for submitting a completed energy-audit form once every three years to the Utilities Commission for rate determination. A determination of 90% or greater of maximum efficiency potential will result in lower tier rates for all energy use by the industry. A determination of lower than 90% efficiency will result in higher tier rates for that portion of energy use deemed as excess each month.
- (7) A deliberately falsified energy-audit form submission shall be subject to a fine of \$50,000.
- (8) All inverted tiered block rate structures shall be designed to guarantee electric public utilities regulated by the provisions of this Chapter will receive the reasonable rate of return on their capital expenditures as determined by rate-case review performed by the Utilities Commission.
- (9) All ratepayers shall be informed on each monthly utility bill, in the year prior to the implementation of the inverted, tiered-block rate structure, of the changes in the rate structure to come. The utility company shall provide its customers with a comparison of rates they will experience in the event they consume a similar, greater or lesser amount of energy in the following year. The company shall also provide its customers with information on the availability of low-interest loans from the Energy Efficiency Bank for energy efficiency projects, rooftop or stand-alone solar energy systems, residential wind energy systems, micro-hydro energy systems or co-generation systems.
- (10) The tiered rate-block system shall be implemented 18 months after the date of enactment of this legislation.

SECTION 2. Article 7 of Chapter 62 of the General Statutes is amended by adding a new section to read:

"§ 62-155.2. Energy Efficiency Bank

(a) Loan Fund Created. – The "Energy Efficiency Bank" is created.

The Commission shall contract with a third-party administrator or an independent government agency to administer this Loan Fund. The Loan Fund shall consist of funds from any of the following sources:

- (1) **The proceeds from the avoidable pollution fee levied on the sale of energy inefficient household products under Article 5H of Chapter 105 of the General Statutes.**
- (2) **Annual Public Utility revenues derived from higher tiered rates that may cause an excess of return on capital expenditures as developed under G.S. 62-155.1**
- (3) **The difference in allowable revenue return on capital expenditures for an electric public utility prior to the closure of a peak demand electric power facility and the allowable return on capital expenditures for the utility after the closure.**

- 1 (4) Interest paid on loans from the Energy Efficiency Bank Loan Fund.
- 2 (b) Purpose of Loan Fund. – The purpose of the Energy Efficiency Bank Loan Fund is to issue
- 3 loans, subject to subsection (e) of this section, to customers to be used to invest in energy
- 4 efficiency and renewable energy projects in order to promote energy efficiency, energy conservation,
- 5 and a reduction in electric energy consumption.
- 6 (c) Loan Payments. – Loan payments due to be paid by the customer shall be integrated within each
- 7 monthly, or other billing period, utility bill and shall reflect the savings that result from the energy
- 8 efficiency and renewable energy investment made by the customer as previously determined at the
- 9 time the customer entered into the loan agreement.
- 10 (d) Eligible Projects. – The only efficiency and renewable energy projects that are eligible for loans
- 11 under this section are projects that can be shown to the satisfaction of the administrator of the Energy
- 12 Efficiency Bank Loan Fund to result in a lower utility bill for that customer when the utility bill
- 13 includes the loan payment amount due under subsection (c) of this section.
- 14 (e) Grants to Low-Income Households. – If excess funds are available in the Energy Efficiency Bank,
- 15 the funds may be used to issue grants to low-income ratepayers to be used to invest in
- 16 energy efficiency and renewable energy projects.
- 17 (f) Definitions. – As used in this section, "renewable energy resources" has the same meaning as in
- 18 G.S. 62-133.8.
- 19 (g) Authority to Adopt Rules. – The Commission may adopt rules to implement this 1 section."

20 SECTION 3. Chapter 105 of the General Statutes is amended by adding a new Article to read:

21 "Article 5I.

22 "Avoidable Pollution Fee for Certain Energy Inefficient Products.

23 "**§ 105-187.75. Definitions.**

24 The definitions in G.S. 105-164.3 apply to this Article, except that the term "sale" does not include lease or

25 rental. The term "energy inefficient product" means a product that (i) is placed in service for residential

26 purposes, (ii) belongs to a product category that is evaluated by the United States Environmental Protection

27 Agency and the United States Department of Energy for purposes of setting energy efficiency guidelines and

28 of qualifying products within the category for the Energy Star label, and (iii) does not qualify for the Energy

29 Star label.

30 "**§ 105-187.76. Avoidable Pollution Fee imposed.**

31 A fee is imposed on an energy inefficient product retailer for each new energy

32 inefficient product that is sold by the retailer. The rate of the fee is five percent (5%) of the sales price of

33 the energy inefficient product. This Avoidable Pollution fee is in addition to any taxes.

34 "**§ 105-187.77. Administration.**

35 The Avoidable Pollution Fee this Article imposes on an energy inefficient product retailer is in

36 addition to State sales tax. Except as otherwise provided in this Article, this fee shall be collected

37 and administered in the same manner as the State sales and use taxes imposed by Article 5 of this

38 Chapter.

39 "**§ 105-187.78. Exemptions and refunds.**

40 Except for the exemption for sales a state cannot constitutionally tax, the exemptions and refunds allowed

41 in Article 5 of this Chapter do not apply to the Avoidable Pollution Fee imposed by this Article.

42 "**§ 105-187.79. Use of Avoidable Pollution Fee proceeds.**

43 The Secretary must credit the fees collected under this Article, less the Department of Revenue's allowance

44 for administrative expenses, to the Energy Efficiency Bank Loan Fund created in

45 G.S. 62-155.2. The Secretary may retain the Department's cost of collection, not to exceed four

46 hundred twenty-five thousand dollars (\$425,000) a year, as reimbursement to the Department."

47 SECTION 4. This act becomes effective January 1, 2016.



Why the Efficient and Affordable Energy Rates Bill is Good for Industry in North Carolina

"Those who are concerned about the cost of energy efficiency are making the same mistake as the scientists who designed the Hubble space telescope when they produced the first faulty lens. They are confusing the plus(+) and minus (-) signs."

Amory Lovins

Inverted, tiered-block rates target the elimination of wasted energy. This system does not penalize industries for using as much energy as needed for their efficient operations.

Under the terms outlined in the NC Efficient and Affordable Energy Rates Bill (NCEAER), there will be separate inverted rate structure programs for residential, commercial and industrial ratepayers.

Upper tiered rates for industry will not be determined by comparison to residential or commercial ratepayer energy usage.

No industry will have to pay higher rates merely because it uses more energy than residential, commercial or other industrial ratepayers.

Clearly, each industry has different energy needs for its operations. Therefore, the NCEAER Bill mandates that industrial rates be determined on a case by case basis to establish lower and upper tiered rates for that specific industrial facility, based on its energy needs.

How can the Utilities Commission design an inverted, tiered-block rate structure to ensure that an industry already operating efficiently will not be subjected to higher-tiered rates? By putting these rate-determining rules in place:

If an energy audit reveals that an industry is operating at full efficiency it will benefit from lower-tiered utility rates, regardless of its quantity of energy use compared to other industries and ratepayers.

If an energy audit reveals that an industry can make considerable improvements in energy efficiency and that it would be profitable, on a monthly basis, to secure a low-interest loan to make those improvements, then the industry will benefit from lower-tiered utility rates if it makes that investment. This means the industry will profit every month from energy savings that exceed the monthly payments on the loan.

If it cannot be demonstrated that a loan for an efficiency improvement will be profitable on a monthly basis, then the industry will not qualify for the loan and is not required to make the investment to qualify for lower-tiered electrical rates. The industry still qualifies for lower-tiered rates.

The only circumstance in which an industry is subjected to upper-tiered electrical rates is when an energy audit reveals a considerable waste of energy, the industry qualifies for a profitable low-interest efficiency improvement loan, but fails to take advantage of the investment. In other words, if an industry insists on wasting energy, despite its unnecessary cost, it will pay a penalty premium, or higher-tiered rates.

**Pass the NCEAER Bill for a healthier economy in North Carolina
and to address the urgent issue of climate change by reducing energy
consumption and the use of fossil fuels.**

Elements of the Efficient and Affordable Energy Rates Bill

- I. **The North Carolina Utilities Commission shall perform the task of creating and implementing a set of Electric Public Utility rate structures that include the following aspects:**
 - A. All rate structures will be "inverted" for the purpose of promoting energy conservation and investment in energy efficiency. Larger quantities of energy use will bring a higher price per kilowatt/hour. Lower usage will bring a lower price.
 - B. There will be a "tiered block" rate structure. When energy usage within a month exceeds one tiered-rate block, the ratepayer will begin to pay a higher price for energy use within the next, higher tiered-rate block.
 - C. Separate inverted rate structures will be designed for residential, commercial, public and industrial rate-payers.
 - D. The residential rate structure will be designed to avoid negative economic impact on low-income families and rental units.
 - E. The residential inverted rate structure will be scaled to achieve a 40-60% statewide reduction in electrical energy consumption from 2013 levels within a 10-year period.
 - F. Energy used during "peak" hours will be charged at a higher tiered rate with the purpose of leveling out peak demand and minimizing the need for excess polluting generating capacity.
 - G. Industrial and commercial rate-structures will be tailored on a case-by-case basis to maximize the financial benefit of investment in efficiency and job creation.
 - H. All rate structures will maintain the guarantee that regulated Public Utility companies receive a reasonable rate of return on all capital expenditures.
 - I. For all rate structures, the number of tiered-rate blocks and the cost thresholds they represent will be determined by the Utilities Commission in the course of achieving the above goals (A-H).
- II. **Creation of an Energy Efficiency Bank (EEB).**

This bank will exist for the sole purpose of issuing low-interest loans for ratepayers to invest in energy efficiency and renewable energy projects that will result in less consumption of electrical energy produced by non-renewable and polluting sources.

 - A. The EEB will be administered by an independent agency that manages the finances on all utility bills.
 - B. Qualifying ratepayers will be issued loans through this agency.
 - C. Loan payments will be integrated within each monthly utility bill, reflecting the money saved as a result of the efficiency investment made by the ratepayer.
 - D. Only projects that can be proven to result in lower monthly utility bills, including loan payments, will qualify for loans through the EEB.
 - E. The EEB will issue grants to qualifying low-income households for efficiency projects, when funds are available.
 - F. Funds for the EEB will be derived from:
 - a. A 5% Avoidable Pollution Fee levied on the purchase of all non-Energy Star household electrical products.
 - b. Interest paid on efficiency loans.
 - c. Excess revenues collected from higher-tiered rates.
 - d. Excess revenues collected after closure of peak power plants and other excess generating sources.
- III. **The State shall establish a 5% Avoidable Pollution Fee levied against the purchase of all household non-Energy Star electrical products. The funds collected from this fee shall be earmarked as seed money for the creation of the Energy Efficiency Bank described in Section II.**