DUKE ENERGY. CAROLINAS

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N.C. Utilities Commission

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June 3, 2013

Ms. Gail L. Mount
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury
Raleigh, NC 27699-4325

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AG
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Ericson
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PSExecDir
3 PS Legal
3 PS Elec
3 PS Acct
2 PS EcRes

RE: **Docket No. E-7 Sub 1033**
Application of Duke Energy Carolinas, LLC Pursuant to G.S. 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments for Electric Utilities

Dear Ms. Mount:

Enclosed for filing in the above-referenced docket are an original and thirty (30) copies of Robert J. Duncan, II's Supplemental Testimony on behalf of Duke Energy Carolinas, LLC ("DEC") in the above-referenced docket.

Also included for filing are an original and thirty (30) copies of Kim H. Smith's Revised Smith Exhibits and Workpapers. The revisions do not have an impact on the Fuel and Fuel Related factors filed in the stipulation today with the Commission. On Smith Exhibit 2, Schedule 2, Page 2 of 3 and Smith Exhibit 2, Schedule 3, Page 2 of 3; the Line 1 description "NC Projected Billing Period MWH Sales" is revised to "NC Adjusted Test Period Sales". Also on Smith Exhibit 2, Schedule 2, Page 2 of 3, "Page 2 of 2" should have been "Page 2 of 3". The amounts originally shown on Smith Workpapers 13 and 13b for Docket E-7, Sub 1002 included the months of January 2011 through April of 2011. These months should not have been included as part of Docket E-7, Sub 1002 amounts since, as permitted by G.S. 62-133.2(d) and Commission Rule R8-55(d)(3), DEC had included these months in the EMF calculations in Docket E-7, Sub 982.

7 Comm
Culpepper
Green
Duffy
Conrad

Sincerely,

Brian L. Franklin

BLF:gf
Enclosures

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1033

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	**SUPPLEMENTAL TESTIMONY OF**
Pursuant to G.S. 62-133.2 and NCUC Rule	)	**ROBERT J. DUNCAN, II FOR**
R8-55 Relating to Fuel and Fuel-Related	)	**DUKE ENERGY CAROLINAS, LLC**
Charge Adjustments for Electric Utilities	)	

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Robert J. ("Bob") Duncan, II. My business address is 526 South Church Street, Charlotte, North Carolina.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes, on March 6, 2013, I caused to be pre-filed with the Commission my direct testimony and an exhibit.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?

A. The purpose of my supplemental testimony is to support the Stipulation entered into by Duke Energy Carolinas, LLC ("DEC") and the Public Staff-North Carolina Utilities Commission ("Public Staff") filed on June 3, 2013 in this Docket, and also elaborate on the factual aspects of the nuclear outages that are addressed in the Stipulation.

Q. CAN YOU EXPLAIN THE FOREIGN MATERIAL EXCLUSION PORTION OF THE MCGUIRE UNIT 2 OUTAGE EXTENSION?

A. Yes. The McGuire Unit 2 Fall 2012 refueling and maintenance outage involved a significant scope of work, including replacement of the main generator stator, exciter and support systems, upgrade of the high pressure turbine and modification of the turbine generator support systems. These generator-turbine projects increase the capacity and improve the reliability of the unit. Managing foreign material exclusion ("FME") during an outage is highly challenging across the nuclear industry. Loose metallic objects in the generator have potentially high adverse consequences, including damage to the generator, reactor trips and personnel injury.

Prior to a planned outage such as this one, DEC develops a detailed schedule for the outage and for the major tasks to be performed, including sub-schedules for particular activities. The Company aggressively attempts to meet its best overall outage time for each outage and measures itself against that schedule. Additionally, DEC performs detailed self-critical analyses of each outage project and applies any lessons learned to ensure continuous improvement.

As noted in my direct testimony, rework due to foreign material contributed to the outage extension at McGuire. Specifically, on October 14, 2012, a day-shift craft millwright raised a concern that a 5/16" nut and lockwasher were missing from a 1.5-ton lever-operated hoist as the hoist was being removed from the Unit's Foreign Material Exclusion Zone ("FMEZ"). After extensive inspections, including removal of the generator's rotor, the missing parts were not located. The removal of the rotor was a decision that prolonged the outage, but also elevated plant equipment reliability and personnel safety over economic concerns.

Even though DEC and its contractor had implemented FME control efforts prior to the outage, and FME technicians inspected tools, including the hoist, prior to entry into the FMEZ, the extensive searches were reasonable and appropriate to assure that the missing parts were not in the generator.

The Company talked to the craft laborer and the FME technician who inspected the hoist prior to its entry into the FMEZ. The FME technician who inspected the tool prior to entry into the FMEZ stated that he performed the inspection and that he understood his training and the FME procedures regarding checking tools for loose parts; however, he could not specifically recall whether the nut and lockwasher were missing when he logged the hoist. The technician could not recall whether the nut and lockwasher were present or missing when the hoist entered the FMEZ. Therefore, DEC could not rule out the possibility that the parts were in the FMEZ. Only in hindsight, after the search and the uneventful startup and operation of the generator, do we know that the missing parts may well have been missing prior to the hoist's entry into the FMEZ

Q. CAN YOU EXPLAIN THE FRAME FOOT LOADING EVENT THAT LEAD TO A FURTHER EXTENSION OF THE OUTAGE?

A. Yes. The outage extension was also affected by problems encountered by a qualified contractor in leveling the frame footing (e.g., "frame foot loading" or "FFL") for the large electric main generator. The Company held the expectation that the leveling process, referred to as "shimming," could be achieved in the time scheduled for the task.

A new main turbine generator was installed during this outage, making extensive alignment necessary. Excessive vibration during generator startup would require the Unit to shut down until the source of the vibration, which in and of itself could cause equipment damage, could be identified and eliminated, so achieving an adequate alignment was a high priority. During outage planning, DEC and the contractor considered aligning the generator using either FFL or step shimming. Step shimming is simpler and more straightforward than FFL, but is much less accurate and can be inconclusive until generator startup. FFL produces a more accurate alignment but takes more time, is more complex, and requires more shim movements with a higher level of assurance of low vibration at startup. Before recent technological advances made FFL easier to perform, FFL was reserved for problematic alignments where excessive vibration had been observed in the main turbine generator.

Prior to the performance of the FFL at McGuire, DEC's subject matter experts performed quality reviews of the contractor's work packages for FFL, including the contractor's proprietary documents that relate to FFL technique. The Company also developed procedures to govern DEC's oversight of the contractor. Further, during execution efforts, DEC remained engaged asking questions of the contractor. Only after the contractor's 16th move was DEC aware that the contractor, and the contractor's technique, might not achieve desired results. At this point, DEC applied oversight resources to the contractor's conduct of the work. While monitoring the contractor's performance of FFL from moves 16 to 25, DEC noted several shortcomings in the contractor's performance and brought these to the contractor's attention. Following DEC's decision to intervene, DEC achieved an acceptable alignment in approximately one (1) day.

Consistent with nuclear industry practice, DEC and its vendor actively engaged in a self-critical post-outage critique process and developed a project plan to incorporate lessons learned and guide a similar scope of work performed during the McGuire Unit 1 spring 2013 refueling outage.

Q. CAN YOU EXPLAIN THE CATAWBA UNIT 1 FORCED OUTAGE AND UNIT 2 OUTAGE EXTENSION?

A. Yes. In May-June 2011, during Unit 1's 19th refueling and maintenance outage, DEC upgraded the generator protective relay system for the Unit. This system is designed to detect faults and other off-normal conditions affecting the switchyard or the main turbine generator. The turbine under-frequency protection design change was implemented to address equipment obsolescence and eliminate vulnerability in generator asset protection. The preexisting electro-mechanical relay scheme providing turbine under-frequency protection required upgrade and additional protection with digital components for the generator to protect against catastrophic damage if a ground fault should occur. In implementing the project, DEC developed specifications for a qualified vendor. The scope specification did not specifically call out with particularity a design input for the complex relay scheme and led to the omission of a "block" of a protection feature that isolates the Unit from the grid when the generator circuit breakers are open following a generator trip.

The outage in question began on April 4, 2012, when Unit 1 tripped off-line following a trip of the "1D" reactor coolant pump. Shortly thereafter, a portion of the generator protective relay system unexpectedly actuated when it sensed the instantaneous under-frequency condition of the Unit. This actuation opened the switchyard circuit breakers, thereby isolating Unit 1 from the transmission grid which supplies backup power to the Unit. This condition is referred to as a "Loss of Offsite Power" or "LOOP". The two emergency standby diesel generators automatically started as designed and powered the Unit until, five and a half hours later, offsite power was restored. Both the loss of reactor coolant pump flow and resultant reactor trip and the LOOP are events analyzed for safety as part of the plant's original license submittal, and the Unit is designed to safely shut down from such events.

The Company evaluated the situation and concluded that the 1D reactor coolant pump trip was caused by thermal damage to insulation on a reactor coolant pump motor power cable associated with a historic event in 2000, as well as degradation over time of the cable. The thermal damage was undetected and, in 2000, not readily detectable by cost-effective non-destructive testing methods then available. In April 2012, the cable "faulted to ground" at the location of the thermal damage. The faulted reactor coolant pump motor cable was replaced.

The old protection scheme used a series of relays and timers in a stepped protective relay scheme at various settings at different frequencies. Because the blocking scheme was not fully incorporated into the revised design, when the Unit's main generator tripped, the Unit was isolated from the grid when, as intended, the upgraded design should have blocked the isolation.

The Company utilized its highest level of risk management for the design change. Prior to the design change, DEC held numerous meetings with the vendor and reviewed the vendor's efforts throughout the design change process. During this review process, DEC spent hundreds of hours in design review, including review of computer coding but not source code, which is proprietary to the vendor. This source code contains algorithms for "accumulating" time related to relay functions. Based on programming coding reviewed by DEC, the accumulating function appeared to be designed correctly.

The relay programming is proprietary to the vendor and represents the vehicle for ensuring relay logic and schemes are executed as designed. In their review of the relay programming, Duke personnel reviewed the coding language to ensure time accumulation functions were present in each of the four zones of protection designed. The Duke personnel were not aware, however, that while the code variable programmed for Zones 1, 2, and 3 would work as designed to accumulate minutes, it would not work in Zone 4 to accumulate milliseconds. Because the source code was proprietary, the time segmentation of these accumulation algorithms was not disclosed to Duke personnel. The error in the accumulation algorithm in the protection scheme is the source of the design error and was carried forward into the accept testing.

Q. IN LIGHT OF THE COMPANY'S EXPLANATION OF THE MCGUIRE AND CATAWBA OUTAGES, WHY DID DEC ENTER IN TO THE STIPULATION?

A. As explained in the testimony of Public Staff witness Ellis, the Public Staff's investigation into these outage extensions resulted in it concluding that certain nuclear outage time could have been avoided and that, therefore, the Company should forego recovery of those expenses. In my supplemental testimony, I have explained DEC's analysis of the Catawba and McGuire outages as they occurred in real time from DEC's perspective, and for the reasons set forth above, the Company disagrees with the Public Staff's conclusions on certain portions of those outages.

Both parties, however, recognized that the causes and lengths of nuclear outages, like nuclear operations in general, are complex and difficult to explain and, as alluded to in Public Staff witness Ellis' testimony, reasonable persons with knowledge and experience in nuclear operations can disagree as to the drivers of specific outage delays. As a result, the Parties agreed that the Company would agree to a stipulated adjustment of $5.3 million on a North Carolina retail basis, including interest to resolve the matter. In agreeing to this adjustment, however, DEC does not admit that any of the outage time in question was the result of imprudence, unreasonableness, inefficient management, or uneconomic operations of its nuclear generation fleet. Additionally, the capacity factors for McGuire Nuclear Station and Catawba Nuclear Station both exceeded the NERC five-year average nuclear capacity factor on a standalone basis. The Company also believes it is key to place each event in its proper context and focus attention on the facts and circumstances as they existed at the time of each incident without the benefit of hindsight, including key decisions leading up to these events.

Q. DOES THIS CONLUDE YOUR SUPPLEMENTAL TESTIMONY?

A. Yes.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Summary Comparison of Fuel and Fuel Related Cost Factors
Test Period Ended December 31, 2012
Billing Period September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Description	Reference	Residential cents/KWh	General cents/KWh	Industrial cents/KWh
	Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1002)				
1	Approved Fuel and Fuel Related Costs Factors	Input	2.2224	2.2463	2.2594
2	Current Merger Savings decrement cents/kWh (Docket E-7, Sub 986)*	Workpaper 2	(0.0707)	(0.0509)	(0.0379)
3	EMF Increment	Input	0.0360	0.0323	0.0318
4	Approved Net Fuel and Fuel Related Costs Factors	Sum	2.1877	2.2277	2.2533
	Fuel and Fuel Related Cost Factors Required by Rule R8-55				
5	Proposed Nuclear Capacity Factor of 92.84% and Adjusted Test Period Sales	Exh 2 Sch 2 pg 2	2.1512	2.1989	2.2314
6	NERC 5 Year Average Nuclear Capacity Factor of 89.79% and Adjusted Test Period Sales	Exh 2 Sch 3 pg 2	2.2615	2.2860	2.2975
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 92.84%				
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	2.2070	2.3355	2.3752
8	Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0253	0.0204	0.0200
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	2.2323	2.3559	2.3952
10	EMF Decrement cents/kWh	Exh 3 pg 2, 3, 4	(0.0382)	(0.1099)	(0.1216)
11	EMF Interest Decrement cents/kWh	Exh 3 pg 2, 3, 4	(0.0064)	(0.0183)	(0.0203)
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	2.1877	2.2277	2.2533

*excludes gross receipts tax and regulatory fee

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.84%
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Unit	Reference	MDC Rating (MW)	Hours in Year	Capacity Factor	Generation (MWH)	Unit Cost (cents/KWh)	Fuel Cost ($)
			A	B	D/(A*B)=C	D	E	D * E = F
1	Catawba 1	Workpaper 3	1,129	8,760	89.85%	8,885,994	0.6534	58,059,461
2	Catawba 2	Workpaper 3	1,129	8,760	92.01%	9,099,772	0.7078	64,408,351
3	McGuire 1	Workpaper 3	1,129	8,760	98.25%	9,717,272	0.6585	63,992,207
4	McGuire 2	Workpaper 3	1,129	8,760	93.26%	9,223,879	0.6627	61,127,783
5	Oconee 1	Workpaper 3	846	8,760	99.89%	7,402,727	0.6787	50,242,789
6	Oconee 2	Workpaper 3	846	8,760	84.02%	6,226,615	0.6964	43,360,558
7	Oconee 3	Workpaper 3	846	8,760	91.94%	6,813,773	0.6836	46,576,393
8	Total Nuclear	Workpaper 5 & 6	7,054		92.84%	57,370,032	0.6759	387,767,542
9	Coal	Workpaper 5 & 6				26,277,775	3.8023	999,170,804
10	Gas CT and CC	Workpaper 5 & 6				10,016,167	3.2554	326,064,809
11	Reagents	Workpaper 11				-		41,840,169
12	Total Fossil	Sum				36,293,942		1,367,075,782
13	Hydro	Workpaper 5				1,779,845		
14	Net Pumped Storage	Workpaper 5				(798,620)		
15	Total Hydro	Sum				981,225		
16	Total Generation	Line 8 + Line 12 + Line 15				94,645,199		1,754,843,324
17	Less Catawba Joint Owners	Workpaper 5				(13,929,209)		(94,148,372)
18	Net Generation	Sum				80,715,990		1,660,694,952
19	Purchases	Workpaper 5 & 6				9,448,043		336,257,185
20	JDA Savings Shared	Workpaper 7				-		8,791,208
21	Total Purchases					9,448,043		345,048,393
22	Total Generation and Purchases	Line 18 + Line 21				90,164,033		2,005,743,345
23	Adjustment to exclude cost of mitigation sales	Workpaper 5 & 7				(803,900)		(29,839,400)
24	Fuel expense recovered through intersystem sales	Workpaper 5 & 7				(1,683,858)		(66,967,909)
25	Line losses and Company use					(5,287,395)		-
26	System Fuel Expense for Fuel Factor	Lines 22 + 23 + 24						1,908,936,036
27	Projected System MWh Sales for Fuel Factor	Lines 22 + 23 + 24 + 25 and Workpaper 9				82,388,880		82,388,880
28	Fuel and Fuel Related Costs cents/kWh	Line 26/Line 27/10						2.3170

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.84%
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWH Sales	Workpaper 9	20,955,314	22,316,250	12,244,753	55,516,317
	Calculation of Renewable and Cogeneration Purchased Power Capacity Rate by Class					Amount
2	Renewable Purchased Power - Capacity	Workpaper 6				$ 6,918,584
3	Cogeneration Purchased Power - Capacity	Workpaper 6				10,211,640
4	Total of Renewable and Cogeneration Purchased Power Capacity	Line 2 + Line 3				$ 17,130,224
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				71.8170%
6	NC Renewable Purchased Power - Capacity	Line 4 * Line 5				$ 12,302,413
7	Production Plant Allocation Factors	Input	43.1736%	36.9466%	19.8798%	100.0000%
8	Renewable Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 5,311,395	$ 4,545,323	$ 2,445,695	$ 12,302,413
9	Renewable Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1	0.0253	0.0204	0.0200	0.0222
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Renewable Purchased Power and Cogeneration Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	2.2070	2.3355	2.3752	
11	Purchased Power - Capacity cents/kWh	Line 9	0.0253	0.0204	0.0200	
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.2323	2.3559	2.3952	
13	EMF Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0382)	(0.1099)	(0.1216)	
14	EMF Interest Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0064)	(0.0183)	(0.0203)	
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	2.1877	2.2277	2.2533	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.84%
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Rate Class	Projected Billing Period MWH Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Merger Savings decrement cents/kWh	Current Total Fuel Rate (including renewables and EMF) E-7, Sub 1002	Proposed Total Fuel Rate (including renewables and EMF)
		A	B	C	D	E	F	G	H
		Workpaper 9	Workpaper 10	Line 28 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Exhibit 7, Page 2 cents/kwh	Exhibit 1 Schedule 2c, page 2 cents/kwh	E + F + G = H
1	Residential	20,955,314	$ 2,128,247,266	$ 69,787	0.00%	-	(0.0707)	2.2584	2.1877
2	General Service/Lighting	22,316,250	1,756,843,269	57,609	0.00%	-	(0.0509)	2.2786	2.2277
3	Industrial	12,244,753	739,175,088	24,238	0.00%	-	(0.0379)	2.2912	2.2533
4	NC Retail	55,516,317	$ 4,624,265,623	$ 151,634					

Total Proposed Composite Fuel Rate:

5	System Total Fuel Costs	Exhibit 2 Sch 1, Page 1	$ 1,908,936,036
6	Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	17,130,224
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,891,805,812
8	Projected System MWh Sales for Fuel Factor	Workpaper 9	82,388,880
9	NC Retail Projected Billing Period MWH Sales	Line 4	55,516,317
10	Allocation %	Line 8 / Line 9	67.38%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,274,698,756
12	NC Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	12,302,413
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,287,001,169
14	NC Retail Projected Billing Period MWH Sales	Line 4	55,516,317
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14	2.3182
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	(0.0852)
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	(0.0142)
18	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	2.2188

Total Current Composite Fuel Rate - Docket E-7 Sub 1001:

19	Current composite Fuel Rate cents/kWh	Supp Mc Maneus Exh 6(c)	2.2404
22	Current composite Merger Savings decrement cents/kWh	Exhibit 7	(0.0555)
23	Current composite EMF Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0336
24	Current composite EMF Interest Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0000
25	Total Current Composite Fuel Rate	Sum	2.2185
26	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 20 - Line 24	0.0003
27	NC Retail Projected Billing Period MWH Sales	Line 4	55,516,317
28	Increase/(Decrease) in Fuel Costs	Line 26 * Line 27	$ 151,634

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.84% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Unit	Reference	MDC Rating (MW)	Hours In Year	Capacity Factor	Generation (MWH)	Unit Cost (cents/KWh)	Fuel Cost ($)
			A	B	D/(A*B)=C	D	E	D * E = F
1	Catawba 1	Workpaper 3	1,129	8,760	89.85%	8,885,994	0.6534	58,059,461
2	Catawba 2	Workpaper 3	1,129	8,760	92.01%	9,099,772	0.7078	64,408,351
3	McGuire 1	Workpaper 3	1,129	8,760	98.25%	9,717,272	0.6585	63,992,207
4	McGuire 2	Workpaper 3	1,129	8,760	93.26%	9,223,879	0.6627	61,127,783
5	Oconee 1	Workpaper 3	846	8,760	99.89%	7,402,727	0.6787	50,242,789
6	Oconee 2	Workpaper 3	846	8,760	84.02%	6,226,615	0.6964	43,360,558
7	Oconee 3	Workpaper 3	846	8,760	91.94%	6,813,773	0.6836	46,576,393
8	Total Nuclear		7,054		92.84%	57,370,032	0.6759	387,767,542
9	Coal	Calculated				25,005,603	3.8023	950,798,492
1	Gas CT	Workpaper 17				755,750	3.4520	26,088,479
10	Gas CC	Workpaper 5				9,456,110	3.1557	298,403,910
11	Reagents	Workpaper 11				-		41,840,169
12	Total Fossil	Sum				35,217,463		1,317,131,050
13	Hydro	Workpaper 15				1,704,500		
14	Net Pumped Storage	Workpaper 16				(734,509)		
15	Total Hydro	Sum				969,991		
16	Total Generation	Line 8 + Line 12 + Line 15				93,557,486		1,704,898,592
17	Less Catawba Joint Owners					(13,929,209)		(94,148,372)
18	Net Generation	Sum				79,628,277		1,610,750,219
19	Purchases	Workpaper 5 & 6				9,448,043		336,257,185
20	JDA Savings Shared	Workpaper 7				-		8,791,208
21	Total Purchases	Sum				9,448,043		345,048,393
22	Total Generation and Purchases	Line 18 + Line 21				89,076,320		1,955,798,612
23	Adjustment to exclude cost of mitigation sales	Workpaper 5 & 7				(803,900)		(29,839,400)
24	Fuel expense recovered through intersystem sales	Workpaper 5 & 7				(1,683,858)		(66,967,909)
25	Line losses and Company use	Workpaper 14				(5,294,981)		-
26	System Fuel Expense for Fuel Factor							1,858,991,303
27	Projected System MWh Sales for Fuel Factor	Lines 22 + 23 + 24 + 25 and Exhibit 4				81,293,582		81,293,582
28	Fuel and Fuel Related Costs cents/kWh	Line 26/Line 27/10						2.2868

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.84% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Adjusted Test Period Sales	Exhibit 4	21,143,695	22,112,646	12,278,269	55,534,611
	Calculation of Renewable Purchased Power Capacity Rate by Class					**Amount**
2	Renewable Purchased Power - Capacity	Workpaper 6				$ 6,918,584
3	Cogeneration Purchased Power - Capacity	Workpaper 6				10,211,640
4	Total of Renewable and Cogeneration Purchased Power Capacity	Line 2 + Line 3				$ 17,130,224
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				71.8170%
6	NC Renewable Purchased Power - Capacity	Line 4 * Line 5				$ 12,302,413
7	Production Plant Allocation Factors	Input	43.1736%	36.9466%	19.8798%	100.0000%
8	Renewable Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 5,311,395	$ 4,545,323	$ 2,445,695	$ 12,302,413
9	Renewable Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1	0.0251	0.0206	0.0199	0.0222
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Renewable Purchased Power and Cogeneration Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	2.1707	2.3065	2.3534	
11	Purchased Power - Renewable and Cogeneration Capacity cents/kWh	Line 9	0.0251	0.0206	0.0199	
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.1958	2.3271	2.3733	
13	EMF Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0382)	(0.1099)	(0.1216)	
14	EMF Interest Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0064)	(0.0183)	(0.0203)	
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 2 Page 3	2.1512	2.1989	2.2314	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.84% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Rate Class	Adjusted Test Period MWH Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Merger Savings decrement cents/kWh	Current Total Fuel Rate (including renewables and EMF) E-7, Sub 1002	Proposed Total Fuel Rate (including renewables and EMF)
		A	B	C	D	E	F	G	H
		Exhibit 4	Workpaper 10	Line 28 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Exhibit 7, Page 2 cents/kwh	Exhibit 1 Schedule 2c, page 2 cents/kwh	E + F + G = H
1	Residential	21,143,695	$ 2,128,247,266	$ (7,725,670)	-0.36%	(0.0365)	(0.0707)	2.2584	2.1512
2	General Service/Lighting	22,112,646	$ 1,756,843,269	(6,377,450)	-0.36%	(0.0288)	(0.0509)	2.2786	2.1989
3	Industrial	12,278,269	$ 739,175,088	(2,683,252)	-0.36%	(0.0219)	(0.0379)	2.2912	2.2314
4	NC Retail	55,534,611	$ 4,624,265,623	$ (16,786,372)					

Total Proposed Composite Fuel Rate:

5	System Total Fuel Costs	Exhibit 2 Sch 2, Page 1	$ 1,858,991,303
6	Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2	17,130,224
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,841,861,079
8	Adjusted Test Period System MWh Sales for Fuel Factor	Exhibit 4	81,293,582
9	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
10	Allocation %	Line 8 / Line 9	68.31%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,258,175,303
12	NC Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2	12,302,413
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,270,477,716
14	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14	2.2877
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	(0.0852)
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	(0.0142)
18	Total Proposed Composite Fuel Rate	Sum	2.1883

Total Current Composite Fuel Rate - Docket E-7 Sub 1001:

19	Current composite Fuel Rate cents/kWh	Supp Mc Maneus Exh 6(c)	2.2404
22	Current composite Merger Savings decrement cents/kWh	Exhibit 7	(0.0555)
23	Current composite EMF Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0336
24	Current composite EMF Interest Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0000
25	Total Current Composite Fuel Rate	Sum	2.2185
26	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 20 - Line 24	(0.0302)
27	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
28	Increase/(Decrease) in Fuel Costs	Line 26 * Line 27	$ (16,786,372)

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor of 89.79% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Unit	Reference	MDC Rating (MW)	Hours in Year	Capacity Factor	Generation (MWH)	Unit Cost (cents/KWh)	Fuel Cost ($)
			A	B	D/(A*B)=C	D	E	D * E = F
1	Catawba 1	Workpaper 4	1,129	8,760	90.25%	8,925,761	0.6534	58,319,292
2	Catawba 2	Workpaper 4	1,129	8,760	90.25%	8,925,761	0.7078	63,176,699
3	McGuire 1	Workpaper 4	1,129	8,760	90.25%	8,925,761	0.6585	58,779,784
4	McGuire 2	Workpaper 4	1,129	8,760	90.25%	8,925,761	0.6627	59,152,119
5	Oconee 1	Workpaper 4	846	8,760	88.97%	6,593,531	0.6787	44,750,724
6	Oconee 2	Workpaper 4	846	8,760	88.97%	6,593,531	0.6964	45,915,668
7	Oconee 3	Workpaper 4	846	8,760	88.97%	6,593,531	0.6836	45,070,902
8	Total Nuclear		7,054		89.79%	55,483,638	0.6762	375,165,188
9	Coal					27,376,108	3.8023	1,040,933,166
1	Gas CT					755,750	3.4520	26,088,479
10	Gas CC					9,456,110	3.1557	298,403,910
11	Reagents					-		41,840,169
12	Total Fossil	Sum				37,587,968		1,407,265,724
13	Hydro					1,704,500		
14	Net Pumped Storage					(734,509)		
15	Total Hydro	Sum				969,991		
16	Total Generation	Line 8 + Line 12 + Line 15				94,041,596		1,782,430,912
17	Less Catawba Joint Owners					(14,413,319)		(97,458,972)
18	Net Generation	Sum				79,628,277		1,684,971,940
19	Purchases					9,448,043		336,257,185
20	JDA Savings Shared					-		8,791,208
21	Total Purchases					9,448,043		345,048,393
22	Total Generation and Purchases	Line 18 + Line 21				89,076,320		2,030,020,333
23	Adjustment to exclude cost of mitigation sales					(803,900)		(29,839,400)
24	Fuel expense recovered through intersystem sales					(1,683,858)		(66,967,909)
25	Line losses and Company use					(5,294,981)		-
26	System Fuel Expense for Fuel Factor							1,933,213,024
27	Projected System MWh Sales for Fuel Factor					81,293,582		81,293,582
28	Fuel and Fuel Related Costs cents/kWh							2.3781

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
NERC 5 Year Average Nuclear Capacity Factor of 89.79% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Adjusted Test Period Sales	Exhibit 4	21,143,695	22,112,646	12,278,269	55,534,611
	Calculation of Renewable Purchased Power Capacity Rate by Class					Amount
2	Renewable Purchased Power - Capacity	Workpaper 6				$ 6,918,584
3	Cogeneration Purchased Power - Capacity	Workpaper 6				10,211,640
4	Total of Renewable and Cogeneration Purchased Power Capacity	Line 2 + Line 3				$ 17,130,224
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				71.8170%
6	NC Renewable Purchased Power - Capacity	Line 4 * Line 5				$ 12,302,413
7	Production Plant Allocation Factors	Input	43.1736%	36.9466%	19.8798%	100.0000%
8	Renewable Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 5,311,395	$ 4,545,323	$ 2,445,695	$ 12,302,413
9	Renewable Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1	0.0251	0.0206	0.0199	0.0222
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Renewable Purchased Power and Cogeneration Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	2.2810	2.3936	2.4195	
11	Purchased Power - Renewable and Cogeneration Capacity cents/kWh	Line 9	0.0251	0.0206	0.0199	
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.3061	2.4142	2.4394	
13	EMF Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0382)	(0.1099)	(0.1216)	
14	EMF Interest Increment cents/kWh	Exh 3 pg 2, 3, 4	(0.0064)	(0.0183)	(0.0203)	
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 3 Page 3	2.2615	2.2860	2.2975	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
NERC 5 Year Average Nuclear Capacity Factor of 89.79% and Adjusted Test Period Sales
Twelve Months September 2013 - August 2014
Docket E-7, Sub 1033

Line #	Rate Class	Adjusted Test Period MWH Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Merger Savings decrement cents/kWh	Current Total Fuel Rate (including renewables and EMF) E-7, Sub 1002	Proposed Total Fuel Rate (including renewables and EMF)
		A	B	C	C / B = D	E	F	G	H
		Exhibit 4	Workpaper 10	Line 28 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Exhibit 7, Page 2 cents/kwh	Exhibit 1 Schedule 2c, page 2 cents/kwh	E + F + G = H
1	Residential	21,143,695	$ 2,128,247,266	$ 15,609,653	0.73%	0.0738	(0.0707)	2.2584	2.2615
2	General Service/Lighting	22,112,646	$ 1,756,843,269	$ 12,885,586	0.73%	0.0583	(0.0509)	2.2786	2.2860
3	Industrial	12,278,269	$ 739,175,088	$ 5,421,488	0.73%	0.0442	(0.0379)	2.2912	2.2975
4	NC Retail	55,534,611	$ 4,624,265,623	$ 33,916,727					

Total Proposed Composite Fuel Rate:

5	System Total Fuel Costs	Exhibit 2 Sch 3, Page 1	$ 1,933,213,024
6	Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2	17,130,224
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,916,082,800
8	Adjusted Test Period System MWh Sales for Fuel Factor	Exhibit 4	81,293,582
9	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
10	Allocation %	Line 8 / Line 9	68.31%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,308,876,161
12	NC Cogen and Renewable Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2	12,302,413
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,321,178,574
14	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14	2.3790
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	(0.0852)
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	(0.0142)
18	Total Proposed Composite Fuel Rate	Sum	2.2796

Total Current Composite Fuel Rate - Docket E-7 Sub 1001:

19	Current composite Fuel Rate cents/kWh	Supp Mc Maneus Exh 6(c)	2.2404
22	Current composite Merger Savings decrement cents/kWh	Exhibit 7	(0.0555)
23	Current composite EMF Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0336
24	Current composite EMF Interest Rate cents/kWh	Supp Mc Maneus Exh 6(c)	0.0000
25	Total Current Composite Fuel Rate	Sum	2.2185
26	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 20 - Line 24	0.0611
27	NC Retail Adjusted Test Period MWH Sales	Exhibit 4	55,534,611
28	Increase/(Decrease) in Fuel Costs	Line 26 * Line 27	$ 33,916,727

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Proposed Composite
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line No.	Month	Fuel Cost Incurred ¢/kwh (a)	Fuel Cost Billed ¢/kwh (b)	NC Retail MWH Sales (c)	Reported Over (Under) Recovery (d)	Correction Renewables (e)	Merger Savings to be Shared with PEC (f)	Adjusted Over(Under) Recovery (g)
1	January 2012			4,696,133	$ 19,638,596	$ 187,794	$ (423,273)	$ 19,403,116
2	February			4,471,304	$ 23,655,484	$ 134,844	$ (469,468)	$ 23,320,859
3	March			4,225,513	$ 24,585,301	$ 175,285	$ (358,714)	$ 24,401,871
4	April			4,010,671	$ 14,125,769	$ 175,371	$ (347,558)	$ 13,953,582
5	May[1]			4,082,258	$ (3,744,786)	$ 156,140	$ (311,282)	$ (3,899,928)
6	June			4,696,516	$ 285,688	$ 155,267	$ (372,323)	$ 68,632
7	July			5,356,807	$ (19,666,451)	$ 119,793	$ -	$ (19,546,658)
8	August			5,440,542	$ 4,397,805	$ 115,271	$ -	$ 4,513,076
9	September			4,959,528	$ 15,743,742	$ 141,367	$ -	$ 15,885,109
10	October			4,052,001	$ (2,870,169)	$ 183,651	$ -	$ (2,686,518)
11	November			4,169,014	$ (25,945,880)	$ 143,654	$ -	$ (25,802,226)
12	December			4,395,620	$ (2,399,967)	$ 95,536	$ -	$ (2,304,431)
				54,555,907	$ 47,805,133	$ 1,783,970	$ (2,282,619)	$ 47,306,484
13	Booked Over (Under) Recovery	January 2012 through December 2012						$ 47,306,484
14	Adjusted Test Period MWH Sales			Exhibit 4				55,534,611
15	Experience Modification Increment (Decrement) cents/KWh							(0.0852)
16	Annual Interest Rate							10%
17	Monthly Interest Rate							0.83333%
18	Number of Months (July 2012 - February 2014)							20
19	Interest							$ 7,884,411
20	EMF Interest Increment (Decrement)							(0.0142)

Notes:

[1] Prior period corrections not included in rate incurred but are included in over/(under) recovery total

Totals may not foot due to rounding.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Residential
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line #	Month	Fuel Cost Incurred ¢/kwh (a)	Fuel Cost Billed ¢/kwh (b)	NC Retail MWH Sales (c)	Reported Over (Under) Recovery (d)	Correction Renewables (e)	Merger Savings to be Shared with PEC (f)	Adjusted Over(Under) Recovery (g)
1	January 2012	1.9757	2.3941	2,052,554	$ 8,587,317	$ 82,696	$ (185,001)	$ 8,485,012
2	February	1.8654	2.3941	1,785,443	$ 9,438,839	$ 55,007	$ (187,464)	$ 9,306,381
3	March	1.8137	2.3941	1,576,391	$ 9,149,599	$ 67,552	$ (133,824)	$ 9,083,328
4	April	2.0458	2.3941	1,252,705	$ 4,363,250	$ 58,610	$ (108,557)	$ 4,313,303
5	May(1)	2.4880	2.3941	1,320,093	$ (1,197,907)	$ 53,520	$ (100,660)	$ (1,245,048)
6	June	2.3891	2.3941	1,638,140	$ 81,288	$ 56,610	$ (129,866)	$ 8,032
7	July	2.7610	2.3941	2,159,210	$ (7,922,165)	$ 49,259	$ -	$ (7,872,906)
8	August	2.3132	2.3941	2,137,529	$ 1,730,239	$ 46,314	$ -	$ 1,776,553
9	September	2.0835	2.2944	1,773,808	$ 3,741,330	$ 52,198	$ -	$ 3,793,528
10	October	2.6980	2.1529	1,271,002	$ (6,927,371)	$ 61,013	$ -	$ (6,866,358)
11	November	3.0681	2.1517	1,428,843	$ (13,093,551)	$ 51,262	$ -	$ (13,042,289)
12	December	2.1338	2.1517	1,725,994	$ 309,292	$ 38,113	$ -	$ 347,404
13	Total Test Period			20,121,712	$ 8,260,159	$ 672,154	$ (845,373)	$ 8,086,940
14	Test Period Wtd Avg. ¢/kwh	2.2912	2.3321					

15	Booked Over (Under) Recovery January 2012 to December 2012		$ 8,086,940
16	Adjusted Test Period MWH Sales	Exhibit 4	21,143,695
17	Experience Modification Increment (Decrement) cents/KWh		(0.0382)
16	Annual Interest Rate		10%
17	Monthly Interest Rate		0.83333%
18	Number of Months (July 2012 - February 2014)		20
19	Interest		$ 1,347,823
20	EMF Interest Increment (Decrement)		(0.0064)

Notes:
(1) Prior period corrections not included in rate incurred but are included in over/(under) recovery total

Totals may not foot due to rounding.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - GS/Lighting
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line #	Month	Fuel Cost Incurred ¢/kwh (a)	Fuel Cost Billed ¢/kwh (b)	NC Retail MWH Sales (c)	Reported Over (Under) Recovery (d)	Correction Renewables (e)	Merger Savings to be Shared with PEC (f)	Adjusted Over(Under) Recovery (g)
1	January 2012	1.9752	2.3931	1,772,833	$ 7,408,542	$ 70,835	$ (159,790)	$ 7,319,588
2	February	1.8643	2.3931	1,698,008	$ 8,979,856	$ 51,123	$ (178,284)	$ 8,852,696
3	March	1.8110	2.3931	1,673,313	$ 9,739,578	$ 68,901	$ (142,052)	$ 9,666,427
4	April	2.0398	2.3931	1,736,780	$ 6,136,815	$ 74,447	$ (150,506)	$ 6,060,756
5	May(1)	2.4841	2.3931	1,734,967	$ (1,586,902)	$ 65,261	$ (132,295)	$ (1,653,936)
6	June	2.3866	2.3931	1,957,034	$ 127,816	$ 63,790	$ (155,147)	$ 36,459
7	July	2.7603	2.3931	2,108,480	$ (7,742,783)	$ 46,840	$ -	$ (7,695,942)
8	August	2.3123	2.3931	2,162,678	$ 1,747,384	$ 45,484	$ -	$ 1,792,868
9	September	1.8993	2.3118	2,080,164	$ 8,581,691	$ 58,447	$ -	$ 8,640,139
10	October	2.0850	2.1964	1,757,762	$ 1,957,749	$ 78,146	$ -	$ 2,035,896
11	November	2.7306	2.1954	1,716,585	$ (9,186,739)	$ 58,448	$ -	$ (9,128,290)
12	December	2.2927	2.1954	1,717,661	$ (1,671,731)	$ 37,181	$ -	$ (1,634,551)
13	Total Test Period			22,116,267	$ 24,491,277	$ 718,904	$ (918,074)	$ 24,292,108
14	Test Period Wtd Avg. ¢/kwh	2.2283	2.3391					
15	Booked Over (Under) Recovery January 2012 to December 2012							$ 24,292,108
16	Adjusted Test Period MWH Sales			Exhibit 4				22,112,646
17	Experience Modification Increment (Decrement) cents/KWh							(0.1099)
16	Annual Interest Rate							10%
17	Monthly Interest Rate							0.83333%
18	Number of Months (July 2012 - February 2014)							20
19	Interest							$ 4,048,683
20	EMF Interest Increment (Decrement)							(0.0183)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Industrial
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line #	Month	Fuel Cost Incurred ¢/kwh (a)	Fuel Cost Billed ¢/kwh (b)	NC Retail MWH Sales (c)	Reported Over (Under) Recovery (d)	Correction Renewables (e)	Merger Savings to be Shared with PEC (f)	Adjusted Over(Under) Recovery (g)
1	January 2012	1.9743	2.3926	870,747	$ 3,642,737	$ 34,263	$ (78,482)	$ 3,598,517
2	February	1.8625	2.3926	987,853	$ 5,236,789	$ 28,714	$ (103,720)	$ 5,161,782
3	March	1.8089	2.3926	975,808	$ 5,696,124	$ 38,831	$ (82,839)	$ 5,652,116
4	April	2.0376	2.3926	1,021,186	$ 3,625,704	$ 42,313	$ (88,494)	$ 3,579,523
5	May(1)	2.4827	2.3926	1,027,197	$ (959,977)	$ 37,359	$ (78,326)	$ (1,000,944)
6	June	2.3856	2.3926	1,101,342	$ 76,585	$ 34,867	$ (87,311)	$ 24,142
7	July	2.7600	2.3926	1,089,116	$ (4,001,503)	$ 23,693	$ -	$ (3,977,810)
8	August	2.3119	2.3926	1,140,335	$ 920,182	$ 23,472	$ -	$ 943,654
9	September	2.0128	2.3223	1,105,555	$ 3,420,721	$ 30,722	$ -	$ 3,451,443
10	October	2.0172	2.2224	1,023,236	$ 2,099,453	$ 44,491	$ -	$ 2,143,944
11	November	2.5796	2.2215	1,023,586	$ (3,665,590)	$ 33,944	$ -	$ (3,631,646)
12	December	2.3305	2.2215	951,965	$ (1,037,527)	$ 20,243	$ -	$ (1,017,284)
13	Total Test Period			12,317,928	$ 15,053,696	$ 392,912	$ (519,173)	$ 14,927,436
14	Test Period Wtd Avg. ¢/kwh	2.2222	2.3447					

15	Booked Over (Under) Recovery January 2012 to December 2012		$ 14,927,436
16	Adjusted Test Period MWH Sales	Exhibit 4	12,278,269
17	Experience Modification Increment (Decrement) cents/KWh		(0.1216)
16	Annual Interest Rate		10%
17	Monthly Interest Rate		0.83333%
18	Number of Months (July 2012 - February 2014)		20
19	Interest		$ 2,487,905
20	EMF Interest Increment (Decrement)		(0.0203)

DUKE ENERGY CAROLINAS **Smith Exhibit 4**

North Carolina Annual Fuel and Fuel Related Expense
Sales, Fuel Revenue, Fuel Expense and System Peak
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line #	Description	Reference	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWH Sales (excluding inter system sales)	Workpaper 19	79,868,568	54,555,907	20,121,712	22,116,267	12,317,928
2	Customer Growth MWH Adjustment	Workpaper 21	(30,932)	(47,556)	46,063	(76,154)	(17,466)
3	Weather MWH Adjustment	Workpaper 20	1,455,945	1,026,260	975,920	72,533	(22,193)
4	Total Adjusted MWH Sales	Sum	81,293,582	55,534,611	21,143,695	22,112,646	12,278,269
5	Test Period Fuel and Fuel Related Revenue *		$ 1,872,319,831	$ 1,275,399,739			
6	Test Period Fuel and Fuel Related Expense *		$ 1,757,881,194	$ 1,227,594,608			
7	Test Period Unadjusted Over/(Under) Recovery		$ 114,438,637	$ 47,805,131			

Line #	Description	Summer Coincidental Peak (CP) KW
8	Total System Peak	17,051,270
9	NC Retail	11,985,789
10	NC Residential Peak	5,588,503
11	NC General Service/Lighting Peak	4,371,590
12	NC Industrial Peak	2,025,696

* Total Company Fuel and Fuel Related Revenue and Fuel and Fuel Related Expense are determined based upon the fuel and fuel related cost recovery mechanisms in each of the company's jurisdictions.

DUKE ENERGY CAROLINAS **Smith Exhibit 5**
North Carolina Annual Fuel and Fuel Related Expense
Nuclear Capacity Ratings
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Unit	Rate Case Docket E-7, Sub 989	Fuel Docket E-7, Sub 1002	Proposed Capacity Rating MW
Oconee Unit 1	846	846	846
Oconee Unit 2	846	846	846
Oconee Unit 3	846	846	846
McGuire Unit 1 [1]	1,100	1,100	1,129
McGuire Unit 2 [1]	1,100	1,100	1,129
Catawba Unit 1	1,129	1,129	1,129
Catawba Unit 2	1,129	1,129	1,129
Total Company	6,996	6,996	7,054

[1] As of 12/31/2012 – includes capacity increases associated to low pressure turbine upgrades.

Duke Energy.
Carolinas

Brian L. Franklin
Associate General Counsel

Duke Energy Carolinas, LLC
550 South Tryon Street
Charlotte, NC 28202

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Fax 980.373.8534
brian.franklin@duke-energy.com

February 11, 2013

Sent Via Overnight Mail (UPS)

Ms. Gail L. Mount
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury
Raleigh, NC 27699-4325

RE: **Docket No. E-7, Sub 1003**

Dear Ms. Mount:

Commission Rule R8-52 requires that on or before the 15th day of each month, each public utility that uses fossil and/or nuclear fuel in the generation of electric power for providing North Carolina retail electric service shall file a fuel report for the second preceding month for review by the Commission, the Public Staff and any other interested party. Enclosed for filing with the Commission please find the original and 15 copies of Duke Energy Carolinas, LLC's monthly fuel report pursuant to NCUC Rule R8-52 for the month of December 2012.

Should you have any questions or need further assistance, please contact me.

Sincerely,

Brian L. Franklin

BLF:gf
Enclosures

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT
NCUC R8-52

Docket No. E-7, Sub 1003

Line No.	Fuel Expenses:	December 2012	12 Months Ended December 2012
1	Fuel and fuel-related costs	$ 154,308,247	$ 1,836,815,457
2	Less fuel expenses (in line 1) recovered through intersystem sales (a)	10,131,389	39,092,889
3	Total fuel and fuel-related costs (line 1 minus line 2)	$ 144,176,858	$ 1,797,722,568
	MWH sales:		
4	Total system sales	6,738,544	81,010,541
5	Less intersystem sales	295,729	1,141,973
6	Total sales less intersystem sales	6,442,815	79,868,568
7	Total fuel and fuel-related costs (¢/KWH) (line 3/line 6)	2.2378	2.2509
8	Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 2c Total)	2.1839	
	Generation Mix (MWH):		
	Fossil (by primary fuel type):		
9	Coal	2,576,425	27,969,376
10	Biomass	126	1,365
11	Fuel Oil	(12)	6,865
12	Natural Gas - Combustion Turbine	6,646	916,328
13	Natural Gas - Combined Cycle	569,988	4,418,878
14	Total fossil	3,153,173	33,312,812
15	Nuclear 100%	4,491,871	56,444,931
16	Hydro - Conventional	83,306	1,400,604
17	Hydro - Pumped storage	(61,666)	(641,599)
18	Total hydro	21,640	759,005
19	Solar Distributed Generation	643	10,479
20	Total MWH generation	7,667,327	90,527,227
21	Less joint owners' portion	742,049	14,441,479
22	Adjusted total MWH generation	6,925,278	76,085,748
	(a) Line 2 includes:		
	Fuel from intersystem sales (Schedule 3)	$ 10,120,906	$ 38,950,061
	Fuel-related costs recovered in off-system sales	-	11,579
	Fuel in loss compensation	10,483	131,249
	Total fuel recovered from intersystem sales	$ 10,131,389	$ 39,092,889

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS
NCUC R8-52

Docket No. E-7, Sub 1003

Fuel and fuel-related costs:	December 2012	12 Months Ended December 2012
Steam Generation - FERC Account 501		
0501016 coal blending merger savings	$ 1,260,522	$ 6,009,615
0501016 coal procurement merger savings	(217,188)	(774,414)
0501016 transportation merger savings	6,683	16,030
0501110 coal consumed - steam	89,547,048	1,054,162,590
0501222-0501223 biomass/test fuel consumed	6,885	74,783
0501310 fuel oil consumed - steam	1,728,401	21,523,259
0501330 fuel oil light-off - steam	1,252,714	21,726,282
Total Steam Generation - Account 501	93,585,065	1,102,738,145
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	3,340,371	24,947,678
0502160 reagent procurement merger savings	(32,242)	(110,273)
Net proceeds from sale of by-products	465,849	4,185,977
Nuclear Generation - FERC Account 518		
0518100 burnup of owned fuel	22,319,965	270,643,815
0518600 nuclear fuel disposal cost	4,224,676	53,141,510
Total Nuclear Generation - 100%	26,544,641	323,785,325
Less joint owners' portion	4,427,286	80,745,553
Total Nuclear Generation - Account 518	22,117,355	243,039,772
Other Generation - FERC Account 547		
0547100 natural gas consumed - Combustion Turbine	394,641	29,840,791
0547101 natural gas consumed - Combined Cycle	17,388,713	112,152,561
0547123 gas capacity merger savings	·826,518	1,946,781
0547200 fuel oil consumed - Combustion Turbine	2,673	1,625,100
Total Other Generation - Account 547	18,612,545	145,565,233
Total fossil and nuclear fuel expenses included in base fuel component	138,088,743	1,520,366,532
Fuel component of purchased and interchange power	9,126,282	179,883,461
Fuel related component of purchased power (economic)	4,495,772	93,984,366
Fuel related component of purchased power (renewables)	2,597,450	42,581,098
Total fuel and fuel-related costs	$ 154,308,247	$ 1,836,815,457

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS
NCUC R8-52

Docket No. E-7, Sub 1003

Other fuel expenses not included in fuel and fuel-related costs:	December 2012	12 Months Ended December 2012
0501223 biomass excess above avoided cost	$ 1,124	$ 19,429
0501224 North Carolina incremental renewable fuel	(3,380)	(18,267)
0509000, 0557451 emissions allowance expense	2,557	51,729
0509213 RECs consumption expense	-	955,996
0518810 spent fuel canisters-accrual	-	2,348,911
0518620 canister design expense	67,234	590,812
0518700 fuel cycle study costs	-	235,865
0547127 gas desk merger savings	13,802	88,165
0411822, 0411832, 0411875 emission allowance gains	(986,432)	(11,105,504)
Purchased and interchanged power not included in fuel and fuel-related costs	2,710,622	49,254,175
Total other fuel expenses not included in fuel and fuel-related costs:	$ 1,805,527	$ 42,421,331
Total FERC Account 501 - Total Steam Generation	93,582,809	1,102,739,307
Total FERC Account 518 - Total Nuclear Generation	22,184,589	248,215,360
Total FERC Account 547 - Other Generation	18,612,545	145,565,233
Total RECs consumption expense	-	955,996
Total Reagents Expense	3,308,129	24,837,405
Total Gain/Loss from Sale of By-Products	465,649	4,185,977
Total Emission Allowance Expense	2,557	51,729
Total Gain/Loss from Sale of Emission Allowances	(986,432)	(11,105,504)
Total Purchased and Interchanged Power Expenses	18,930,126	365,703,100
Total Merger Savings Excluded from Fuel Recovery	13,802	88,165
Total Fuel, Fuel Related and Purchased Power Expenses	$ 156,113,774	$ 1,879,236,768

Note: Detail amounts may not add to totals shown due to rounding.

Purchased Power Economic	Total $	Capacity MW	Capacity $	Non-capacity MWH	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Alcoa Power Generating Inc.	$ 39,980	-	-	1,380	$ 24,276	$ 15,664	
Blue Ridge Electric Membership Corp - Economic	534,617	19	$ 184,350	11,012	207,686	132,782	
Cherokee County Cogeneration Partners	4,047,044	-	1,110,788	55,252	2,004,517	931,738	
City of Kings Mtn	8,979	3	8,979	-	-	-	
Constellation	10,502	-	-	525	6,406	4,096	
DE Progress - Native Load Transfer	5,764,001	-	-	204,090	4,161,618	1,607,008	$ (4,625)
DE Progress - Native Load Transfer Savings	420,611	-	-	-	420,611	-	
EDF Trading North America, LLC	1,372	-	-	49	837	535	
Haywood Electric - Economic	95,782	8	52,220	1,391	26,573	16,989	
Lockhart Power Co.	19,272	7	19,272	-	-	-	
NCEMC - Economic	-	-	-	-	(12)	12	
NCMPA - Economic	125,925	-	-	6,370	72,302	53,623	
NCMPA Load Following - Economic	1,347,046	-	-	44,853	775,542	571,504	
Piedmont Electric Membership Corp - Economic	333,651	12	115,430	7,076	133,115	85,106	
PJM Interconnection LLC	2,479,230	-	-	88,321	1,512,330	966,900	
Rutherford Electric Membership Corp. - Economic	460,199	-	-	15,656	408,837	51,362	
Southern	(6,776)	-	-	343	(4,133)	(2,643)	
Town of Dallas	584	-	584	-	-	-	
Town of Forest City	19,856	7	19,856	-	-	-	
TVA	156,860	-	-	5,560	95,685	61,176	
	$ 15,848,918	56	$ 1,511,479	433,684	$ 9,544,359	$ 4,488,772	$ (4,625)

Purchased Power Renewables	Total $	Capacity MW	Capacity $	Non-capacity MWH	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Cargill Power Marketing	$ 1,513,396			25,870		$ 1,513,396	
City of Charlotte	1,893			24		1,893	
Concord Energy, LLC	211,637			2,981		211,637	
Davidson Gas Producers, LLC	79,866			1,148		79,866	
Dixon Dairy Road, LLC	38,953			612		38,953	
Durham Landfill Electricity, LLC	102,061			1,760		102,061	
Gas Recovery Systems, LLC	123,271			1,805		123,271	
Gaston County	122,850			1,969		122,850	
Greenville Gas Producer, LLC	80,213			1,643		80,213	
Lockhart - Lower Pacolet Hydro	15,020			221		15,020	
Lockhart Power Company	67,140			1,048		67,140	
Lynwood Solar, LLC	823			13		823	
Nypro, Inc.	1,058			21		1,058	
Ronnie B. Powers	1,134			22		1,134	
Sun Edison, LLC	120,189			1,861		120,189	
Tencarva Machinery Company	861			16		861	
WM Renewable Energy, LLC	111,506			1,860		111,506	
	$ 2,587,480	-	$ -	42,889	$ -	$ 2,587,480	$ -

Purchased Power Other	Total $	Capacity MW	Capacity $	Non-capacity MWH	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Blue Ridge Electric Membership Corp	$ 1,432,308	46	$ 698,277	29,995	$ 446,979		$ 287,052
City of Concord	2,227	-	233	44	-		1,994
Haywood Electric	378,406	12	148,435	7,433	138,452		88,519
Piedmont Electric Membership Corp	700,165	20	326,101	14,880	228,179		145,885
DE Progress - Fees	83,533	-	-	-	-		83,533
Generation Imbalance	254,222	-	-	8,040	150,683		103,539
Energy Imbalance - Purchases	170,737	-	-	(3,304)	104,150		66,587
Energy Imbalance - Sales	(235,692)	-	-	-	(182,377)		(53,315)
Other Qualifying Facilities	668,892	-	-	13,596			668,892
	$ 3,431,798	78	$ 1,171,046	70,684	$ 886,066	$ -	$ 1,372,886
TOTAL PURCHASED POWER	$ 21,878,193	134	$ 2,682,525	563,003	$ 10,734,358	$ 7,093,222	$ 1,368,061
INTERCHANGES IN							
Other Catawba Joint Owners	4,144,278	-	-	367,513	2,113,025		2,031,253
Total Interchanges In	4,144,278	-	-	367,513	2,113,025		2,031,253
INTERCHANGES OUT							
Other Catawba Joint Owners	(6,861,588)	(866)	(134,209)	(638,867)	(3,530,914)		(3,196,465)
Catawba- Net Negative Generation	(230,727)	-	-	(8,770)	(190,184)		(40,543)
Total Interchanges Out	(7,092,316)	(866)	(134,209)	(647,637)	(3,721,098)		(3,237,008)
Net Purchases and Interchange Power	$ 18,930,126	(732)	$ 2,548,316	282,879	$ 9,126,282	$ 7,093,222	$ 162,306

NOTE Detail amounts may not add to totals shown due to rounding
As of December 2012, non-fuel costs related to mitigation losses and sharing of mitigation loss margins are no longer presented on this report.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
NCUC-R8-52

DECEMBER 2012

	Total	Capacity		Non-capacity		
SALES	$	MW	$	MWH	Fuel $	Non-fuel $
Market Based:						
Constellation Power Sources	$ 2,100	-	-	50	$ 1,862	$ 238
NCMPA	133,891	50	$ 87,500	1,030	31,953	14,438
PJM Interconnection LLC	40,171	-	-	829	30,482	9,689
Southern	-	-	-	-	(223)	223
The Energy Authority	70,760	-	-	995	41,942	28,818
Other:						
Cargill-Alliant, LLC - Mitigation sales	1,996,312	-	(695,000)	103,400	3,360,218	(688,906)
DE Progress - Native Load Transfer Savings	408,814	-	-	-	408,814	-
DE Progress - Native Load Transfer	6,444,056	-	-	182,222	6,045,532	398,524
DE Progress - Off System Sales/PJM Share	1,728	-	-	11	424	1,304
DE Progress - Purchases	137,642	-	-	5,722	137,642	-
Generation Imbalance	64,353	-	-	1,470	44,060	20,293
BPM Transmission	(13,778)	-	-			(13,778)
Total Intersystem Sales	$ 9,286,249	50	$ (607,500)	295,729	$ 10,120,906	$ (227,167)

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Purchased Power Economic	Total $	Capacity MW	Capacity $	Non-capacity MWH	Non-capacity Fuel $	Non-capacity Fuel-related $	Not Fuel $ Not Fuel-related $
Alcoa Power Generating Inc.	$ 6,279,584	-	-	224,364	$ 3,830,548	$ 2,449,036	
American Electric Power Serv Corp	18,900	-	-	300	11,528	7,371	
Associated Electric Cooperative Inc	693,180	-	-	26,940	422,840	270,340	
Blue Ridge Electric Membership Corp - Economic	5,462,262	19	$ 2,212,200	120,968	1,962,532	1,287,520	
Calpine Power Services Marketing	1,176,376	-	-	45,488	717,588	458,786	
Cargill Power Markets LLC	3,258,311	-	-	118,069	1,987,569	1,270,742	
Cherokee County Cogeneration Partners	47,798,839	-	11,213,606	685,939	15,676,745	20,808,486	
Citigroup Energy	21,200	-	-	800	12,932	8,268	
City of Kings Mtn	107,748	3	107,748	-	-	-	
Constellation	28,704,413	-	-	1,080,322	17,508,691	11,194,722	
DE Progress - Native Load Transfer	77,576,947	-	-	2,198,084	60,067,187	12,880,499	$ 4,628,261
DE Progress - Native Load Transfer- prior period correcti	-	-	-	-	-	3,156,686	(3,156,686)
DE Progress - Native Load Transfer Savings	3,558,502	-	-	-	3,558,502	-	
Eagle Energy Partners	267,184	-	-	8,686	162,982	104,202	
EDF Trading North America, LLC	3,191,081	-	-	116,976	1,946,561	1,244,520	
Haywood Electric - Economic	1,208,931	8	604,563	21,068	368,664	236,704	
J Aron & Company	2,716,403	-	-	100,383	1,657,006	1,059,397	
Lockhart Power Co	231,264	7	231,264	-	-	-	
MISO	299	-	-	-	183	116	
Morgan Stanley Capital Group	3,127,609	-	-	118,620	1,907,983	1,219,646	
NCEMC	867,136	-	-	33,380	467,094	390,042	
NCMPA	7,947,204	-	-	368,610	4,366,382	3,580,822	
NCMPA Load Following	19,192,762	-	-	565,099	10,633,959	8,558,803	
Oglethorpe Power	44,350	-	-	2,610	27,063	17,287	
Piedmont Electric Membership Corp. - Economic	3,458,974	12	1,385,160	77,245	1,265,026	808,788	
PJM Interconnection LLC	48,734,951	-	-	1,686,482	29,508,320	19,226,631	
Rutherford Electric Membership Corp - Economic	3,266,653	-	-	123,700	2,781,219	915,434	
Southern	3,536,607	-	-	122,018	2,161,231	1,375,376	
The Energy Authority	3,247,822	-	-	123,488	1,961,171	1,286,651	
Town of Dallas	7,008	-	7,008	-	-	-	
Town of Forest City	230,272	7	230,272	-	-	-	
TVA	4,485,410	-	-	215,739	2,736,099	1,749,311	
Westar Energy, Inc.	46,299	-	-	2,186	29,243	19,069	
	$ [illegible]	[illegible]	$ [illegible]	[illegible]	$ [illegible]	$ [illegible]	$ 1,472,583

Purchased Power Renewables	Total $	Capacity MW	Capacity $	Non-capacity MWH	Non-capacity Fuel $	Non-capacity Fuel-related $	Not Fuel $ Not Fuel-related $
Active Concepts, LLC	$ 8,722			109		$ 8,722	
Cargill Power Marketing	29,457,443			503,546		29,457,443	
City of Charlotte	28,213			405		28,213	
Concord Energy, LLC	1,813,739			25,540		1,813,739	
Davidson Gas Producers, LLC	824,629			13,297		824,629	
Dixon Dairy Road, LLC	561,515			7,059		561,515	
Durham Landfill Electricity, LLC	1,214,902			20,848		1,214,902	
Gas Recovery Systems, LLC	1,937,495			28,428		1,937,495	
Gaston County	1,357,325			21,718		1,357,325	
Greenville Gas Producer, LLC	1,129,520			20,695		1,129,520	
Lockhart - Lower Pacolet Hydro	27,994			412		27,994	
Lockhart Power Company	656,603			10,214		656,603	
Lynwood Solar, LLC	4,539			68		4,539	
Nypro, Inc.	18,980			303		18,980	
Ronnie B. Powers	45,380			742		45,380	
Sun Edison, LLC	2,062,418			30,418		2,062,418	
Tencarva Machinery Company	15,163			233		15,163	
WM Renewable Energy, LLC	1,319,381			19,551		1,319,381	
	$ 42,881,069	-	$ -	703,081	$ -	$ 42,881,069	$ -

Purchased Power Other	Total $	Capacity MW	Capacity $	Non-capacity MWH	Non-capacity Fuel $	Non-capacity Fuel-related $	Not Fuel $ Not Fuel-related $
SC Public Service Authority - Emergency	$ 5,181	-	-	100	$ 3,161		$ 2,020
Blue Ridge Electric Membership Corp	17,000,744	46	$ 7,722,631	353,818	5,669,711		3,618,602
City of Concord	67,748	-	19,468	1,080	-		48,280
Haywood Electric	4,349,332	12	1,772,247	80,464	1,572,021		1,005,064
NCEMC Load Following	-	-	-	-	(442)		442
Piedmont Electric Membership Corp	8,330,008	20	3,683,876	175,488	2,834,141		1,811,991
DE Progress - Fees	158,530	-	-	-	-		158,530
Generation Imbalance	3,118,938	-	-	88,633	1,826,711		1,291,227
Energy Imbalance - Purchases	2,210,031	-	-	28,681	1,346,120		861,911
Energy Imbalance - Sales	(1,124,888)	-	-	-	(648,846)		(476,042)
Other Qualifying Facilities	9,458,514			171,641	-	-	9,458,514
	$ 43,873,186	78	$ 13,198,130	897,582	$ 12,903,977	$ -	$ 17,779,423

	Total $	Capacity MW	Capacity $	Non-capacity MWH	Non-capacity Fuel $	Non-capacity Fuel-related $	Not Fuel $ Not Fuel-related $
TOTAL PURCHASED POWER	$ 394,897,868	134	$ 29,197,943	9,704,831	$ 179,882,906	$ 133,883,484	$ 19,262,102
INTERCHANGES IN							
Other Catawba Joint Owners	70,802,047	-	-	7,267,229	31,088,866		39,538,482
Total Interchanges In	70,802,047	-	-	7,267,229	31,088,866	-	39,538,482
INTERCHANGES OUT							
Other Catawba Joint Owners	(68,891,880)	(856)	(1,594,534)	(7,037,186)	(30,274,651)		(37,032,605)
Catawba- Net Negative Generation	(576,182)	-	-	(26,498)	(460,949)		(114,217)
Total Interchanges Out	(69,468,062)	(856)	(1,594,534)	(7,063,684)	(30,735,600)	-	(37,146,818)
Net Purchases and Interchange Power	$ 396,703,100	(722)	$ 27,613,409	9,927,896	$ 179,233,481	$ 133,883,484	$ 21,640,796

NOTES Detail amounts may not add to totals shown due to rounding.
Capacity MW amounts varied across the range of time indicated
The amounts shown represent the capacity effective as of the period end date.
As of December 2012, non-fuel costs related to mitigation losses and sharing of mitigation loss margins are no longer presented on this report.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
NCUC-R8-52

Twelve Months Ended
DECEMBER 2012

	Total	Capacity		Non-capacity		
SALES	$	MW	$	MWH	Fuel $	Non-fuel $
Utilities:						
Progress Energy Carolinas - Emergency	$ 11,711	-	-	320	$ 10,971	$ 740
SC Public Service Authority - Emergency	130,644	-	-	2,758	102,834	27,810
SC Electric & Gas - Emergency	25,183	-	-	417	15,424	9,759
Market Based:						
American Electric Power Services Corp.	5,625	-	-	75	2,989	2,636
Cargill-Alliant, LLC	30,506	-	-	542	24,079	6,427
Cobb Electric Membership Corp	-	-	-	-	(9,268)	9,268
Constellation Power Sources	(289,039)	-	-	(7,914)	6,009	(295,048)
EDF Trading North America, LLC	27,465	-	-	454	25,181	2,284
MISO	77,032	-	-	1,200	121,897	(44,865)
Morgan Stanley	29,211	-	-	544	22,999	6,212
NCEMC (Generator/Instantaneous)	11,250	-	-	150	5,241	6,009
NCMPA #1	1,510,541	50	$ 1,038,380	9,868	388,702	83,459
Oglethorpe	11,666	-	-	222	8,325	3,341
PJM Interconnection LLC	10,613,635	-	-	176,779	6,987,112	3,626,523
SC Electric & Gas Market based	1,173,615	-	-	14,538	613,203	560,412
Southern	92,780	-	-	1,455	71,347	21,433
The Energy Authority	937,435	-	-	15,180	643,302	294,133
TVA	257,180	-	-	4,361	191,211	65,969
Other:						
Cargill-Alliant, LLC - Mitigation sales	10,193,130	-	(16,935)	421,592	13,915,967	(3,705,902)
DE Progress - Native Load Transfer Savings	546,583	-	-	-	546,583	-
DE Progress - Native Load Transfer	10,177,437	-	-	282,350	9,588,985	588,452
DE Progress - Off System Sales/PJM Share	2,089,921	-	-	125	6,148	2,083,773
DE Progress - Purchases	5,334,092	-	-	207,457	5,334,092	-
Generation Imbalance	430,731	-	-	9,502	326,728	104,003
BPM Transmission	(1,489,018)	-	-		-	(1,489,018)
Total Intersystem Sales	$ 41,939,316	50	$ 1,021,445	1,141,973	$ 38,950,061	$ 1,967,810

* Sales for resale other than native load priority.

NOTES: Detail amounts may not add to totals shown due to rounding.
Capacity MW amounts varied across the range of time indicated.
The amounts shown represent the capacity effective December 31, 2012.

Schedule 4

Duke Energy Carolinas
Over / (Under) Recovery of Fuel Costs
December 2012
NCUC R8-52

Line No.			Residential	Commercial	Industrial	Total
1	N.C. Retail kWh sales	Input	1,725,993,659	1,717,681,336	951,965,307	4,395,620,302
2	Approved fuel and fuel related rates (¢/kWh)					
	2a Billed rates by class (¢/kWh)	Input	2.2224	2.2463	2.2594	
	2b Merger fuel savings decrement	Input	(0.0707)	(0.0509)	(0.0379)	
	2c Net billed rates by class (¢/kWh)	L2a + L2b	2.1517	2.1954	2.2215	2.1839
	2d Billed fuel expense	L1 * L2c / 100	$37,138,208	$37,709,537	$21,147,909	$95,995,652
3	Total system kWh sales	Input				6,442,815,299
4	NC kWh sales %	L1 T / L3				68.23%
5	Incurred base fuel and fuel related (¢/kWh) (less renewable purchased power capacity)					
	5a Docket E-7, Sub 1002 allocation factor	Input	37.41%	40.03%	22.56%	100.00%
	5b System incurred expense	Input				$143,795,965
	5c Incurred base fuel rates (¢/kWh)	(L4 * L5b) * L5a / L1 * 100	2.1265	2.2863	2.3248	2.2319
	5d NC Incurred expense by class	L5c * L1 / 100	$36,703,134	$39,270,666	$22,131,211	$98,105,011
6	Incurred renewable purchased power capacity rates (¢/kWh)					
	6a NC retail production plant %	Input				76.30%
	6b Production plant allocation factors	Input	43.26%	38.06%	18.68%	100.00%
	6c System incurred expense	Input				$380,893
	6d Incurred renewable capacity rates (¢/kWh)	(L6a * L6c) * L6b / L1 * 100	0.0073	0.0064	0.0057	0.0066
	6e NC incurred renewable capacity expense	L6d * L1 / 100	$125,760	$110,602	$54,226	$290,608
7	Total Incurred rates by class (¢/kWh)	L5c + 6d	2.1338	2.2927	2.3305	2.2385
8	Difference in ¢/kWh (billed - incurred)	L2c - L7	0.0179	(0.0973)	(0.1090)	(0.0546)
9	Over / (under) recovery	L8 * L1 / 100	$309,292	($1,671,731)	($1,037,528)	($2,399,967)
10	Prior period adjustments	Input				
11	Total over / (under) recovery	L9 + L10	$309,292	($1,671,731)	($1,037,928)	($2,399,967)
12	Total system incurred expense	L5b + L6c				$144,176,858
13	Over / (under) recovery for each month of the current calendar year					

		Over / (Under) Recovery				
	Year 2012	Total To Date	Residential	Commercial	Industrial	Total Company
	January	$19,638,597	$8,587,318	$7,408,542	$3,642,737	$19,638,597
	February	43,294,079	9,438,838	8,979,858	5,236,766	23,655,462
	March	67,879,379	9,149,599	9,739,577	5,698,124	24,585,300
	April	82,005,147	4,363,250	6,136,814	3,626,704	14,125,766
_/1	May	78,260,361	(1,197,907)	(1,586,902)	(959,977)	(3,744,786)
	June	78,546,051	81,289	127,818	76,586	285,690
	July	58,679,600	(7,922,165)	(7,742,763)	(4,001,503)	(19,666,451)
	August	63,277,405	1,730,239	1,747,384	920,182	4,397,805
_/2	September	79,021,147	3,741,329	8,581,691	3,420,722	15,743,742
_/2	October	76,150,978	(6,927,371)	1,957,749	2,099,453	(2,870,169)
	November	50,205,097	(13,093,551)	(9,186,739)	(3,665,591)	(25,945,881)
	December	$47,805,130	$309,292	($1,671,731)	($1,037,528)	($2,399,967)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

_/1 Includes prior period adjustments.

_/2 Reflects a prorated rate for periods in which the approved rates change.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
December 2012

Description	Allen Steam	Belews Creek Steam	(G) Buck Steam/CT	Buck Gas/CC	Catawba Nuclear	(H) Cliffside Steam	(G, I) Dan River Gas/CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	(G) Riverbend Steam/CT	Rockingham CT	Current Month	Total 12 ME December 2012
Cost of Fuel Received																	
Coal (A)	$8,716,385	$33,230,408	-			$7,787,232	$ (388,873)	$0		$32,196,765				$0		$87,573,915	$1,138,313,810
Biomass	-	-	-			-		-		-				-		-	4,308
Fuel Oil	238,479	401,781	145,176.81			2,537,825		305,455	-	544,843		-		96,878	-	4,320,030	88,186,828
Gas - CT			$330					33,768	$18,113			369,027		-	$278,343	384,641	29,840,791
Gas - CC				$13,008,548			$4,380,167									17,388,713	172,182,881
Total	$8,954,863	$33,872,109	$145,506	$13,008,548		$10,324,857	$3,991,294	$339,222	$18,113	$32,743,408		$369,027		$96,878	$278,343	$109,627,317	$1,338,367,897
Received ($/MBTU) Avg																	
Coal (A)	400.29	388.10				401.11				404.48						411.83	408.87
Biomass	-	-	-			-		-	-	-		-		-	-	-	614.32
Fuel Oil	2,316.80	2,336.31	2,289.85			2,273.41		2,481.07	-	2,407.38		-		2,385.11	-	2,314.63	2,288.57
Gas - CT			-					869.19	817.88			522.30		-	380.73	384.47	383.13
Gas - CC				416.14			380.88									416.14	380.48
Weighted Average	500.71	402.88	2,308.82	416.14		673.48	346.27	2,108.84	817.88	416.10		522.30		2,385.11	380.73	424.80	410.87
Cost of Fuel Burned(B) (C)																	
Coal (D)	$2,380,373	$46,630,770	$612,891			$4,916,836	($388,873)	$0		$32,226,069				$867,285		$89,347,043	$1,054,162,880
Biomass (E)	-	-	8,009			-		-		-				-		8,009	84,212
Fuel Oil (F)	223,899	397,219	72,876			2,083,889		2,008	$684	168,771		-		64,565	-	2,883,769	44,874,841
Gas - CT			380					33,769	15,113			369,027		-	$278,343	384,641	29,840,791
Gas - CC				$13,008,548			$4,380,167									17,388,713	112,182,881
Nuclear					$6,482,435						$9,873,384		$11,888,823			28,544,641	323,788,325
Total	$2,614,272	$46,027,388	$694,023	$13,008,548	$6,482,435	$6,972,924	$3,991,294	$35,777	$15,777	$32,384,837	$9,873,384	$369,027	$11,888,823	$1,031,770	$278,343	$138,356,948	$1,564,910,117
Burned ($/MBTU) Avg																	
Coal	401.07	400.33	426.72			323.87		-		343.73				415.31		372.77	387.31
Biomass	-	-	516.81			-		-		-				-		516.01	848.57
Fuel Oil	2,288.42	2,325.40	2,146.84			2,391.59		2,033.08	1,070.35	2,347.80		-		2,302.09	-	2,235.50	2,183.43
Gas - CT			-					868.11	617.88			522.30		-	380.73	384.47	383.13
Gas - CC			-	416.14			380.88									416.14	330.48
Nuclear					66.76						56.09		61.47			66.68	58.70
Weighted Average	485.37	403.53	487.39	416.14	66.76	433.87	346.37	668.88	659.07	345.25	56.09	522.30	61.41	437.53	380.73	185.33	177.84
Generated (¢/kWh) Avg																	
Coal	4.88	3.85	4.74			2.87	DIV	(B)		3.38				4.82		3.48	3.77
Biomass	-	-	6.37			-	-	-		-				-		6.37	6.60
Fuel Oil	-	-	-			-	-	33.40	(B)	-		-		-	-	(B)	653.87
Gas - CT			-					13.35	(B)			8.32		-	4.35	5.84	3.29
Gas - CC			-	2.87			3.31									3.86	2.54
Nuclear					0.80						0.56		0.62			0.66	0.67
Weighted Average	4.88	3.53	5.32	2.87	0.80	4.22	3.01	(B)	(B)	3.38	0.56	8.32	0.62	5.14	4.35	1.78	1.73
Burned MBTU's																	
Coal	654,925	12,107,870	143,672			1,517,886		-		9,375,858		-		232,886		24,022,306	288,322,470
Biomass	-	-	1,562					-		-				-		1,562	17,237
Fuel Oil	9,784	17,081	3,395			60,080		99	87	7,103		-		2,932	-	130,553	2,045,887
Gas - CT			-					3,886	2,446			13,216		-	72,983	92,136	10,638,871
Gas - CC				3,128,888			1,140,778									4,276,774	31,898,871
Nuclear					9,330,788						16,468,591		19,605,058			45,304,445	571,043,910
Total	664,709	12,314,151	148,829	3,128,888	9,330,788	1,607,766	1,140,778	3,981	2,508	9,382,961	16,468,591	13,216	19,605,058	235,817	72,983	73,828,660	960,966,366
Net Generation (mWh)																	
Coal	52,384	1,337,859	12,916			168,312		(791)		888,882				20,083		2,579,425	27,583,376
Biomass	-	-	126			-		-		-				-		126	1,285
Fuel Oil	-	-	-			-	-	6	(18)	-		-		-	-	(12)	6,863
Gas - CT			-					253	(706)			741		-	6,356	6,648	916,329
Gas - CC				437,348			132,240									569,588	4,418,879
Nuclear 100%					918,801						1,632,770		1,840,300			4,491,871	88,444,831
Hydro (Total System)																21,840	789,006
Solar (Total System)																643	19,479
Total	52,384	1,337,859	13,042	437,348	918,801	168,312	132,240	(532)	(724)	888,882	1,632,770	741	1,840,300	20,083	6,356	7,867,327	93,527,227
Cost of Reagents Consumed (S)																	
Ammonia	-	$1,293,269	-	$15,548		$0				-				-		$1,308,817	$8,745,143
Limestone (D)	$188,018	712,456	-	-		161,455				$388,440				-		1,637,369	14,222,821
Lime	82,377	-	-	-		-				313,276				-		395,653	3,714,744
Organic Acid	-	-	-	-		-								-		-	-
Sorbents	28,634	-	-	-		-				-				-		28,634	285,171
Total	$349,029	$2,005,724	-	$15,548		$161,455				$808,716				-		$3,348,371	$24,947,878

(A) Coal receipts exclude 6,412 tons and $387,729 associated with terminals for the current month.
(A) Cost of coal received includes a transfer of inventory from Dan River to Belews Creek valued at $388,873 in the current month and $8,706,486 for the twelve months ended.
(A) Cost of the coal inventory transfer between Dan River to Belews Creek nets to zero in the current month with the exception of the $61,000 cost of freight reported in cost of coal received at Belews Creek.
(B) Cents/kWh not computed when costs and/or net generation is negative.
(C) Cost of fuel burned excludes $2,857 associated with emission allowance expense for the month and $51,729 for the twelve months ended.
(C) The current month and twelve months ended data include an annual coal survey adjustment recorded in Dec 2012.
(D) Cost of coal burned includes a $388,873 reduction in consumption expense at Dan River Station following a true-up to physical inventory.
(E) Cost of biomass burned is reported at book cost prior to the reclassification of fuel expense applicable to NC renewable energy which is -43,360 for the month and -416,237 for the twelve months ended.
(F) Cost of fuel oil burned includes $6,000 in diesel fuel costs for on-site standby generators for the month and $24,365 for the twelve months ended.
(G) The following CT units were retired October 1, 2012: Buck units 7, 8, & 9; Dan River units 4, 5, & 6; Riverbend units 8, 9, 10, & 11; and Buzzard Roost units 6, 7, 8, 9, 10, 11, 12, 13, 14, & 15.
(H) Cliffside unit 6 was placed in service December 30, 2012.
(I) Dan River coal units 1, 2, & 3 were retired April 1, 2012. Dan River combined cycle plant was placed in service December 10, 2012.
Notes:
Detail amounts may not add to totals shown due to rounding.
Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Progress Energy Carolinas.
Fuel costs based on ownership unless otherwise noted. Data reflected at 100% ownership.

Schedule 6

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
December 2012

Description	Allen Steam	Belews Creek Steam	(G) Buck Steam/CT	Buck Gas/CC	(H) Cliffside Steam	(G), (I) Dan River Gas/CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	(G) Riverbend Steam/CT	Rockingham CT	Current Month	Total 12 ME December 2012
Coal Data:														
Beginning balance	790,008	1,845,337	63,282		501,147	-	130,167		1,281,388		166,580		4,767,889	4,139,259
Tons received during period	80,839	395,278	-		79,178	-	-		325,533		-		880,828	11,336,488
Inventory adjustments (A)	128	985	204		1,160	-	-		(3,348)		-		(872)	(30,216)
Tons burned during period (B)	23,723	400,948	6,082		49,636	-	-		322,476		9,497		802,371	10,700,138
Ending balance (C)	837,250	1,750,852	57,394		531,848	-	130,167		1,281,100		157,083		4,745,471	4,745,471
MBTUs per ton burned	23.37	24.85	23.57		30.58	-	-		29.07		24.52		26.62	24.80
Cost of ending inventory ($/ton) (C)	100.75	99.63	100.21		102.41	-	89.90		100.21		101.85		100.36	100.36
Biomass/Test Fuel Data:														
Beginning balance			283				-						283	2,222
Tons received during period			-				-						-	95
Inventory adjustments			-				-						-	2
Tons burned during period			195				-						195	2,251
Ending balance			68				-						68	68
Cost of ending inventory ($/ton)			41.07				-						41.07	41.07
Fuel Oil Data:														
Beginning balance	96,192	228,500	280,942		34,370	92,507	486,036	9,818,408	205,745	3,984,188	128,412	2,968,580	18,324,854	15,333,863
Gallons received during period	74,898	140,848	45,836		803,672	-	89,816	-	164,380	-	30,887	-	1,350,148	18,718,498
Miscellaneous usage, transfers and adjustments	(5,909)	(8,546)	(1,017)		(3,630)	(1)	(2,589)	-	(28,586)	-	(222)	-	(51,057)	(518,864)
Gallons burned during period (D)	71,279	124,258	24,658		650,673	-	704	444	51,881	-	21,316	-	845,854	14,853,318
Ending balance	93,902	237,344	301,103		183,339	92,506	572,657	9,817,961	289,089	3,984,188	137,462	2,968,580	18,678,089	18,678,089
Cost of ending inventory ($/gal)	3.14	3.20	2.86		3.14	3.06	2.85	1.49	3.23	2.99	3.03	2.47	2.13	2.13
Gas Data: (E)														
Beginning balance														
MCF received during period (F)			-	3,075,746		1,130,936	3,817	2,407		13,033	-	71,361	4,297,300	41,958,759
MCF burned during period (F)			-	3,075,746		1,130,936	3,817	2,407		13,033	-	71,361	4,297,300	41,958,759
Ending balance														
Cost of ending inventory ($/mcf)														
Limestone Data:														
Beginning balance	26,579	47,943			25,304				52,957				151,783	215,549
Tons received during period	-	6,851			-				13,138				18,988	338,745
Tons consumed during period (B)	4,673	22,989			5,185				18,552				52,389	434,918
Ending balance	20,906	31,805			20,119				46,540				118,370	118,370
Cost of ending inventory ($/ton)	35.77	31.02			30.85				30.51				31.59	31.59

(A) Coal inventory adjustments include a transfer from Dan River to Belews Creek of 3,909 tons in the current month and 86,903 tons for the twelve months ended. The tons transferred between the stations net to zero.
(A) Coal inventory adjustments include a 3,909 ton increase at Dan River Station following a true-up to physical inventory.
(B) The current month and twelve months ended data include an annual aerial survey adjustment recorded in Dec 2012.
(C) Coal Inventory Ending Balance excludes 6,412 tons and $367,728 associated with terminals for the current month
(D) Total gallons of fuel oil burned includes 642 gallons of diesel fuel oil for on-site standby generators for the month and -6,887 for the twelve months ended. Monthly consumption is reported on a month lag due to timing of data availability.
Offsetting activity for the on-site standby generator consumption is reported as miscellaneous usage, transfers and adjustments
(E) Gas is burned as received; therefore, inventory balances are not maintained.
(F) Twelve months ended Gas MCF received and burned includes 31,883,486 attributable to combined cycle plant activity.
(G) The following CT units were retired October 1, 2012: Buck units 7, 8, & 9; Dan River units 4, 5, & 6; Riverbend units 8, 9, 10, & 11; and Buzzard Roost units 6, 7, 8, 9, 10, 11, 12, 13, 14, & 15
(H) Cliffside unit 6 was placed in service December 30, 2012.
(I) Dan River coal units 1, 2, & 3 were retired April 1, 2012. Dan River combined cycle plant was placed in service December 10, 2012.

Notes:
Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
ANALYSIS OF COAL PURCHASES
December 2012

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	-	-	-
	CONTRACT	80,839	$ 8,000,372.60	$ 98.97
	ADJUSTMENTS	-	716,012.16	-
	TOTAL	80,839	8,716,384.76	107.82
BELEWS CREEK	SPOT	-	-	-
	CONTRACT	395,278	36,360,329.11	91.99
	ADJUSTMENTS (A)	3,909	2,860,078.67	731.74
	TOTAL	399,186	39,220,407.78	98.25
CLIFFSIDE	SPOT	-	-	-
	CONTRACT	79,176	7,226,032.40	91.27
	ADJUSTMENTS	-	561,199.28	-
	TOTAL	79,176	7,787,231.68	98.35
DAN RIVER	SPOT	-	-	-
	CONTRACT	-	-	-
	ADJUSTMENTS (A)	(3,909)	(398,872.65)	102.05
	TOTAL	(3,909)	(398,872.65)	102.05
MARSHALL	SPOT	-	-	-
	CONTRACT	325,533	31,191,548.61	95.82
	ADJUSTMENTS	-	1,007,215.95	-
	TOTAL	325,533	32,198,764.56	98.91
ALL PLANTS	SPOT	-	-	-
	CONTRACT	880,826	82,778,282.72	93.98
	ADJUSTMENTS	-	4,745,633.41	-
	TOTAL	880,826	$ 87,523,916.13	$ 99.37

(A) 3,908.60 coal tons were transferred from Dan River station to Belews Creek station.
The book cost of coal tons transferred was $398,872.65 plus the $51,000.00 cost of freight.

Duke Energy Carolinas
Analysis of Quality of Coal Received
December 2012

Station	Percent Moisture	Percent Ash	Heat Value	Percent Sulfur
Allen	16.01	7.10	10,998	3.47
Belews Creek	6.86	10.31	12,428	1.35
Cliffside	7.72	19.76	10,665	1.34
Marshall	6.61	11.74	12,227	1.41

Duke Energy Carolinas
Analysis of Cost of Oil Purchases
December 2012

Station	Allen	Belews Creek	Buck	Cliffside	Lee	Marshall	Riverbend
Vendor		HighTowers	HighTowers	HighTowers	HighTowers	High Towers	High Towers
Spot / Contract	Contract	Contract	Contract	Contract	Contract	Contract	Contract
Sulfur Content %	0	0	0	0	0	0	0
Gallons Received	74,898	140,648	45,836	803,672	89,915	164,590	30,587
Total Delivered Cost	$ 238,478.54	$ 451,701.49	$ 145,176.81	$ 2,537,625.23	$ 305,454.77	$ 544,643.39	$ 96,976.08
Delivered Cost/Gal	$ 3.18	$ 3.21	$ 3.17	$ 3.16	$ 3.40	$ 3.31	$ 3.17
BTU/Gallon	137,264	137,467	137,723	138,890	136,374	137,446	137,538

Note A: Total delivered cost for receipts from HighTowers Petroleum.

DUKE ENERGY CAROLINAS
POWER PLANT PERFORMANCE DATA
TWELVE MONTHS SUMMARY
January, 2012 - December, 2012

Plant Name	Generation MWH	Capacity Rating MW	Capacity Factor %	Net Equivalent Availability %
Oconee	20,647,480	2,538	92.62	91.26
McGuire	17,968,152	2,200	92.98	89.04
Catawba	17,829,299	2,258	89.89	87.89

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January 2012 through December 2012
Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	7,685,065	1,110	78.82	90.70
Belews Creek 2	6,305,060	1,110	64.67	85.20

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January 2012 through December 2012
Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 5	1,144,368	555	23.49	89.57
Marshall 1	1,078,626	380	32.31	84.84
Marshall 2	1,370,510	380	41.06	87.87
Marshall 3	3,263,260	658	56.46	88.39
Marshall 4	3,902,223	660	67.31	87.65

Note: This report is limited to capturing data beginning the first full month a unit is in commercial operation.

Cliffside unit 6 began pre-commercial operation in June 2012 and commercial operation on December 30, 2012. Cliffside unit 6 net generation (mWh) within the twelve month period was as follows:

June 2012:	1,496 mWh; pre-commercial
July 2012:	77,787 mWh; pre-commercial
August 2012:	212,376 mWh; pre-commercial
September 2012:	139,874 mWh; pre-commercial
October 2012:	(1,302) mWh; pre-commercial (auxiliaries only)
November 2012:	170,464 mWh; pre-commercial
December 2012:	168,280 mWh; pre-commercial & commercial combined

Duke Energy Carolinas
Power Plant Performance Data

Twelve Month Summary
January 2012 through December 2012
Other Cycling Coal Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen 1	100,069	162	7.03	88.77
Allen 2	78,152	162	5.49	89.76
Allen 3	606,229	261	26.44	92.76
Allen 4	777,282	276	32.06	95.97
Allen 5	386,992	266	16.56	86.90
Buck 5	146,714	128	13.05	98.94
Buck 6	73,215	128	6.51	99.53
Dan River 1	-1,373	67	0.00	100.00
Dan River 2	-166	67	0.00	100.00
Dan River 3	-396	142	0.00	100.00
Lee 1	19,113	100	2.18	99.86
Lee 2	29,392	100	3.35	97.96
Lee 3	80,920	170	5.42	99.24
Riverbend 4	26,139	94	3.17	99.31
Riverbend 5	23,562	94	2.85	99.57
Riverbend 6	45,321	133	3.88	98.84
Riverbend 7	61,489	133	5.26	99.15

Note:

Dan River units 1, 2, & 3 were retired April 1, 2012.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January,2012 through December,2012
Combustion Turbines

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Buck CT	-180	47	66.67
Buzzard Roost CT	-868	132	89.99
Dan River CT	-153	36	87.48
Lee CT	55,780	82	98.88
Lincoln CT	28,506	1,264	94.26
Mill Creek CT	125,402	592	91.10
Riverbend CT	-725	48	100.00
Rockingham CT	715,431	825	56.55

Note:

The following units were retired October 1, 2012:

Buck CT units 7, 8, & 9
Buzzard Roost CT units 6, 7, 8, 9, 10, 11, 12, 13, 14, & 15.
Dan River CT units 4, 5, & 6
Riverbend CT units 8, 9, 10, & 11.

Duke Energy Carolinas
Power Plant Performance
12 Months Ended December 2012

Name of Plant	Generation (MWH)	Capacity Rating (MW)	Operating Availability (%)
Conventional Hydro Plants:			
Bridgewater	41,458	31.500	91.45
Cedar Creek	93,606	45.000	98.80
Cowans Ford	100,905	325.200	95.61
Dearborn	104,232	42.000	76.44
Fishing Creek	91,594	49.000	99.77
Gaston Shoals	16,221	2.000	42.52
Great Falls	7,948	12.000	98.38
Keowee	41,997	152.000	99.35
Lookout Shoals	67,912	27.900	81.28
Mountain Island	71,839	62.000	98.51
Ninety Nine Island	49,577	6.400	98.54
Oxford	77,315	40.000	79.75
Rhodhiss	46,476	30.000	91.65
Rocky Creek	(191)	-	-
Tuxedo	19,953	6.400	72.67
Wateree	125,831	85.000	92.02
Wylie	85,879	72.000	92.34
Nantahala	206,704	50.000	97.25
Queens Creek	2,618	1.440	94.60
Thorpe	69,509	19.700	83.02
Tuckasegee	5,988	2.500	84.40
Tennessee Creek	26,421	9.800	92.95
Bear Creek	24,861	9.450	99.96
Cedar Cliff	17,699	6.400	93.54
Mission	1,557	0.600	86.46
Franklin	1,489	0.600	74.58
Bryson	1,208	0.480	99.86
Total Conventional	1,400,604		
Pumped Storage Plants:			
Jocassee	928,617	780.000	91.64
Bad Creek	1,752,364	1,360.000	95.79
Subtotal	2,680,981		
Energy for Pumping:			
Jocassee	(1,103,984)		
Bad Creek	(2,218,596)		
Subtotal	(3,322,580)		
Generation less Energy for Pumping			
Jocassee	(175,367)		
Bad Creek	(466,232)		
Total Pumped Storage	(641,599)		

NOTE(S):
Capacity MW amounts varied across the range of time indicated.
The amounts shown represent the capacity effective as of the period end date.

Duke Energy Carolinas
Power Plant Performance Data

Twelve Month Summary
January 2012 through December 2012
Combined Cycle Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Buck CC 10	4,167,226	620	76.52	89.93

Note: This report is limited to capturing data beginning the first full month a station is in commercial operation.

Dan River CC began pre-commercial operation in July 2012 and commercial operation on December 10, 2012. Dan River CC net generation (mWh) within the twelve month period was as follows:

July 2012:	935 mWh; pre-commercial
August 2012:	3,526 mWh; pre-commercial
September 2012:	2,209 mWh; pre-commercial
October 2012:	8,488 mWh; pre-commercial
November 2012:	104,254 mWh; pre-commercial
December 2012:	1,986 mWh; pre-commercial
December 2012:	135,081 mWh; commercial

Duke Energy Carolinas
Month Ending: December 2012
Dollars reported in ($)

		Gross Savings			Allocated Savings		DE Carolinas
		DE Carolinas	DE Progress	Combined	DE Carolinas	DE Progress	NC Retail portion
1	Joint Dispatch	$ 1,301,356	$ 800,756	$ 2,102,112	$ 1,287,559	$ 814,553	$ 878,439
2	Coal Blending	3,283,962	-	3,283,962	2,023,440	1,260,522	1,380,495
3	Coal Procurement	113,682	428,992	542,674	330,870	211,804	225,737
4	Coal Transportation	608,727	370,382	979,109	602,044	377,065	410,745
5	Reagent Procurement & Transportation	49,572	83,138	132,710	81,814	50,896	55,818
6	Natural Gas Capacity	2,159,479	-	2,159,479	1,332,961	826,518	909,414
7	Natural Gas Trading	35,954	-	35,954	22,152	13,802	15,113
		$ 7,552,732	$ 1,683,268	$ 9,236,000	$ 5,680,839	$ 3,555,161	$ 3,875,761
	Resource ratio %	61.25%	38.75%	100.00%			
	Billed Sales (MWH)				6,442,815		4,395,620
	Sales allocation %						68.23%

Twelve Months Ending: December 2012

		Gross Savings			Allocated Savings		DE Carolinas
		DE Carolinas	DE Progress	Combined	DE Carolinas	DE Progress	NC Retail portion
1	Joint Dispatch	$ 11,328,001	$ 2,820,298	$ 14,148,300	$ 8,316,083	$ 5,832,217	$ 5,683,604
2	Coal Blending (a)	23,524,131	-	23,524,131	17,514,516	6,009,615	11,944,691
3	Coal Procurement (a)	1,624,630	2,475,010	4,099,640	2,399,044	1,700,596	1,638,917
4	Coal Transportation (a)	2,181,451	1,805,939	3,987,390	2,165,421	1,821,969	1,475,238
5	Reagent Procurement & Transportation	450,300	689,849	1,140,149	560,574	579,575	382,795
6	Natural Gas Capacity	4,754,353	-	4,754,353	2,807,572	1,946,781	1,907,678
7	Natural Gas Trading	215,724	-	215,724	127,540	88,185	87,260
		$ 44,078,581	$ 7,791,096	$ 51,869,687	$ 33,890,749	$ 17,978,938	$ 23,120,183

Total-to-date: December 2012

		Target	Gross Savings			Allocated Savings		DE Carolinas
			DE Carolinas	DE Progress	Combined	DE Carolinas	DE Progress	NC Retail portion
1	Joint Dispatch	$ 318,955,000	$ 11,328,001	$ 2,820,298	$ 14,148,300	$ 8,316,083	$ 5,832,217	$ 5,683,604
2	Coal Blending (a)	259,800,000	23,524,131	-	23,524,131	17,514,516	6,009,615	11,944,691
3	Coal Procurement (a)	45,950,000	1,624,630	2,475,010	4,099,640	2,399,044	1,700,596	1,638,917
4	Coal Transportation (a)	30,395,000	2,181,451	1,805,939	3,987,390	2,165,421	1,821,969	1,475,238
5	Reagent Procurement & Transportation	12,800,000	450,300	689,849	1,140,149	560,574	579,575	382,795
6	Natural Gas Capacity	16,900,000	4,754,353	-	4,754,353	2,807,572	1,946,781	1,907,678
7	Natural Gas Trading	2,000,000	215,724	-	215,724	127,540	88,185	87,260
		$ 686,800,000	$ 44,078,581	$ 7,791,096	$ 51,869,687	$ 33,890,749	$ 17,978,938	$ 23,120,183

(a) includes January – June 2012 savings associated with fuel-related savings guarantee, retained by the originating company

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (b)

PERIOD: December, 2012

PLANT	UNIT	DATE OF OUTAGE	DURATION OF OUTAGE	SCHEDULED / UNSCHEDULED	CAUSE OF OUTAGE	REASON OUTAGE OCCURRED	REMEDIAL ACTION TAKEN
Oconee	1	None					
	2	None					
	3	None					
McGuire	1	None					
	2	12/01/2012 - 12/02/2012	23.65	UNSCHEDULED	TURBINE TRIP DUE TO INCORRECT TURBINE INLET PRESSURE SETPOINT	ENGINEERING MODIFICATION SETPOINT ERROR	DEVELOPED NEW SETPOINTS
Catawba	1	11/24/2012 - 12/20/2012	460.42	SCHEDULED	END-OF-CYCLE 20 REFUELING OUTAGE	REFUEL AND MAINTENANCE	REFUEL AND MAINTENANCE
	1	12/20/2012 - 12/20/2012	8.00	UNSCHEDULED	OUTAGE DELAYED 0.33 DAYS DUE TO REFUELING EQUIPMENT PERFORMANCE DEFICIENCIES	REFUELING EQUIPMENT FAILURES	REPAIRED REFUELING EQUIPMENT

DUKE ENERGY CAROLINAS

BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

NCUC RULE R8-53 (b)

PERIOD: December, 2012

PLANT	UNIT	DATE OF OUTAGE	DURATION OF OUTAGE	SCHEDULED / UNSCHEDULED	CAUSE OF OUTAGE	REASON OUTAGE OCCURRED	REMEDIAL ACTION TAKEN
	1	12/20/2012 - 12/24/2012	93.00	UNSCHEDULED	OUTAGE DELAYED 3.88 DAYS DUE TO REACTOR COOLANT PUMP SEAL INJECTION CHECK VALVE FAILURE	REACTOR COOLANT PUMP SEAL CHECK VALVE FAILURE	REPAIR REACTOR COOLANT PUMP SEAL CHECK VALVE
	1	12/24/2012 - 12/28/2012	94.62	UNSCHEDULED	OUTAGE DELAYED 3.94 DAYS DUE TO AUXILIARY FEEDWATER PUMP TURBINE FAILURE DURING TESTING	AUXILIARY FEEDWATER PUMP TURBINE FAILURE	REPAIR AUXILIARY FEEDWATER PUMP
	1	12/28/2012 - 12/28/2012	3.70	SCHEDULED	MAIN TURBINE OVERSPEED TRIP TEST	SCHEDULED OVERSPEED TEST	COMPLETED SCHEDULED OVERSPEED TEST
	2	None					

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (B)

December 2012

Belews Creek Steam Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
02	12/2/2012 10:02:00 PM To 12/3/2012 11:05:00 PM	Unsch	1050	Second Superheater Leaks	BOILER TUBE LEAK,SSH.	

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
01	12/14/2012 1:58:00 PM To 12/17/2012 7:03:00 AM	Unsch	1050	Second Superheater Leaks	BOILER TUBE LEAK,SSH.	

Duke Energy Carolinas
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
December 2012
Oconee Nuclear Station

	Unit 1		Unit 2		Unit 3	
(A) MDC (MW)	846		846		846	
(B) Period Hours	744		744		744	
(C1) Net Gen (MWH) and Capacity Factor	640302	101.73	647687	102.90	652211	103.62
(D1) Net MWH Not Gen Due To Full Schedule Outages	0	0.00	0	0.00	0	0.00
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	1826	0.29	0	0.00	213	0.03
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	0	0.00	0	0.00
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-12704	-2.02	-18263	-2.90	-23000	-3.65
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00	0	0.00
(H) Net MWH Possible In Period	629424	100.00%	629424	100.00%	629424	100.00%
(I) Equivalent Availability		99.71		100.00		99.97
(J) Output Factor		101.73		102.90		103.62
(K) Heat Rate		10,132		10,052		9,976

* Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

Duke Energy Carolinas
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
December 2012
McGuire Nuclear Station

	Unit 1		Unit 2	
(A) MDC (MW)	1100		1100	
(B) Period Hours	744		744	
(C1) Net Gen (MWH) and Capacity Factor	861255	105.24	771515	94.27
(D1) Net MWH Not Gen Due To Full Schedule Outages	0	0.00	0	0.00
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	0	0.00	53512	6.54
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	26015	3.18
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-42855	-5.24	-32642	-3.99
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00
(H) Net MWH Possible In Period	818400	100.00%	818400	100.00%
(I) Equivalent Availability		100.00		89.60
(J) Output Factor		105.24		97.37
(K) Heat Rate		10,040		10,138

* Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

Duke Energy Carolinas
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
December 2012
Catawba Nuclear Station

	Unit 1		Unit 2	
(A) MDC (MW)	1129		1129	
(B) Period Hours	744		744	
(C1) Net Gen (MWH) and Capacity Factor	54805	6.52	864096	102.87
(D1) Net MWH Not Gen Due To Full Schedule Outages	523991	62.38	0	0.00
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	34934	4.16	0	0.00
(E1) Net MWH Not Gen Due To Full Forced Outages	220855	26.29	0	0.00
* (E2) Net MWH Not Gen Due To Partial Forced Outages	5391	0.65	-24120	-2.87
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00
(H) Net MWH Possible In Period	839976	100.00%	839976	100.00%
(I) Equivalent Availability		7.78		100.00
(J) Output Factor		57.60		102.87
(K) Heat Rate		13,140		9,965

* Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2) (3)

December 2012

Belews Creek Steam Station

	Unit 1	Unit 2
(A) MDC (mw)	1,110	1,110
(B) Period Hrs	744	744
(C1) Net Generation (mWh)	686,947	650,712
(C1) Capacity Factor	83.18	78.79
(D1) Net mWh Not Generated due to Full Scheduled Outages	0	0
(D1) Scheduled Outages: percent of Period Hrs	0.00	0.00
(D2) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(D2) Scheduled Derates: percent of Period Hrs	0.00	0.00
(E1) Net mWh Not Generated due to Full Forced Outages	72,243	27,805
(E1) Forced Outages: percent of Period Hrs	8.75	3.37
(E2) Net mWh Not Generated due to Partial Forced Outages	0	11
(E2) Forced Derates: percent of Period Hrs	0.00	0.00
(F) Net mWh Not Generated due to Economic Dispatch	66,650	147,311
(F) Economic Dispatch: percent of Period Hrs	8.07	17.84
(G) Net mWh Possible in Period	825,840	825,840
(H) Equivalent Availability	91.25	96.63
(I) Output Factor (%)	91.16	85.25
(J) Heat Rate (BTU/NkWh)	9,056	9,211

*Estimated

Footnote: (J) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2)

December 2012

Marshall Steam Station

	Marshall 1	Marshall 2	Marshall 3	Marshall 4
(A) MDC (mWh)	380	380	658	660
(B) Period Hrs	744	744	744	744
(C1) Net Generation (mWh)	76,799	159,950	365,452	386,661
(D) Net mWh Possible in Period	282,720	282,720	489,552	491,040
(E) Equivalent Availability	90.31	98.75	94.71	99.56
(F) Output Factor (%)	58.54	61.57	78.70	78.74
(G) Capacity Factor	27.16	56.58	74.65	78.74

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2)

December 2012

Cliffside Steam Station

		Cliffside 5
(A)	MDC (mWh)	556
(B)	Period Hrs	744
(C1)	Net Generation (mWh)	-2,968
(D)	Net mWh Possible in Period	413,664
(E)	Equivalent Availability	57.46
(F)	Output Factor (%)	0.00
(G)	Capacity Factor	0.00

Note:

This report is limited to capturing units in full months of commercial operation. Cliffside unit 6 was placed into service on December 30, 2012. During the month of December 2012, Cliffside unit 6 produced 168,280 mWh of pre-commercial and commercial generation combined.

DUKE ENERGY CAROLINAS
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
January 2012 - December 2012
Oconee Nuclear Station

	UNIT 1		UNIT 2		UNIT 3	
(A) MDC (MW)	846		846		846	
(B) Period Hours	8784		8784		8784	
(C1) Net Gen (MWH) and Capacity Factor	6701974	90.19	7537005	101.42	6408501	86.24
(D1) Net MWH Not Gen Due To Full Scheduled Outages	589282	7.93	0	0.00	1111221	14.95
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	19514	0.26	1082	0.01	52836	0.71
(E1) Net MWH Not Gen Due To Full Forced Outages	155672	2.09	22994	0.31	0	0.00
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-35178	-0.47	-129817	-1.74	-141294	-1.90
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00	0	0.00
(H) Net MWH Possible In Period	7431264	100.00%	7431264	100.00%	7431264	100.00%
(I) Equivalent Availability		89.31		99.57		84.90
(J) Output Factor		100.23		101.74		101.40
(K) Heat Rate		10,256		10,158		10,025

*Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

DUKE ENERGY CAROLINAS
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
January 2012 - December 2012
McGuire Nuclear Station

	UNIT 1		UNIT 2	
(A) MDC (MW)	1100		1100	
(B) Period Hours	8784		8784	
(C1) Net Gen (MWH) and Capacity Factor	10114042	104.67	7854110	81.29
(D1) Net MWH Not Gen Due To Full Scheduled Outages	0	0.00	1003200	10.38
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	1143	0.01	67742	0.70
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	1042690	10.79
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-452785	-4.68	-305342	-3.16
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conversion	0	0.00	0	0.00
(H) Net MWH Possible In Period	9662400	100.00%	9662400	100.00%
(I) Equivalent Availability		99.99		78.08
(J) Output Factor		104.67		103.12
(K) Heat Rate		10,097		10,126

*Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

DUKE ENERGY CAROLINAS
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN
NCUC RULE R8-53 (c) (2) (3)
January 2012 - December 2012
Catawba Nuclear Station

	UNIT 1		UNIT 2	
(A) MDC (MW)	1129		1129	
(B) Period Hours	8784		8784	
(C1) Net Gen (MWH) and Capacity Factor	8767327	88.41	9061972	91.38
(D1) Net MWH Not Gen Due To Full Scheduled Outages	708673	7.15	734449	7.41
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	27712	0.28	30272	0.31
(E1) Net MWH Not Gen Due To Full Forced Outages	556247	5.61	314347	3.17
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-142823	-1.45	-223904	-2.27
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conversion	0	0.00	0	0.00
(H) Net MWH Possible In Period	9917136	100.00%	9917136	100.00%
(I) Equivalent Availability		86.68		89.10
(J) Output Factor		101.33		102.18
(K) Heat Rate		10,094		10,022

*Estimate
FOOTNOTE: D1 and E1 Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2) (3)

January 2012 through December 2012

Belews Creek Steam Station

	Unit 1	Unit 2
(A) MDC (mw)	1,110	1,110
(B) Period Hrs	8,784	8,784
(C1) Net Generation (mWh)	7,685,065	6,305,060
(C1) Capacity Factor	78.82	64.67
(D1) Net mWh Not Generated due to Full Scheduled Outages	567,081	1,243,570
(D1) Scheduled Outages: percent of Period Hrs	5.82	12.75
(D2) Net mWh Not Generated due to Partial Scheduled Outages	40,005	56,080
(D2) Scheduled Derates: percent of Period Hrs	0.29	0.57
(E1) Net mWh Not Generated due to Full Forced Outages	275,243	36,741
(E1) Forced Outages: percent of Period Hrs	2.82	0.38
(E2) Net mWh Not Generated due to Partial Forced Outages	24,328	106,993
(E2) Forced Derates: percent of Period Hrs	0.25	1.10
(F) Net mWh Not Generated due to Economic Dispatch	1,158,520	2,001,796
(F) Economic Dispatch: percent of Period Hrs	11.88	20.53
(G) Net mWh Possible in Period	9,750,240	9,750,240
(H) Equivalent Availability	90.70	85.20
(I) Output Factor (%)	89.40	84.30
(J) Heat Rate (BTU/NkWh)	9,102	9,279

*Estimated

Footnote: (J) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2)

January 2012 through December 2012

Marshall Steam Station

	Marshall 1	Marshall 2	Marshall 3	Marshall 4
(A) MDC (mWh)	380	380	658	660
(B) Period Hrs	8,784	8,784	8,784	8,784
(C1) Net Generation (mWh)	1,078,626	1,370,510	3,263,260	3,902,223
(D) Net mWh Possible in Period	3,337,920	3,337,920	5,779,872	5,797,440
(E) Equivalent Availability	84.84	87.87	88.39	87.65
(F) Output Factor (%)	66.21	67.78	74.44	76.70
(G) Capacity Factor	32.31	41.06	56.46	67.31

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan

NCUC Rule R8-53 (C) (2)

January 2012 through December 2012

Cliffside Steam Station

		Cliffside 5
(A)	MDC (mWh)	554
(B)	Period Hrs	8,784
(C1)	Net Generation (mWh)	1,144,368
(D)	Net mWh Possible in Period	4,872,192
(E)	Equivalent Availability	89.57
(F)	Output Factor (%)	70.96
(G)	Capacity Factor	23.49

Note: This report is limited to capturing data beginning the first full month a unit is in commercial operation.

Cliffside unit 6 began pre-commercial operation in June 2012 and commercial operation on December 30, 2012. Cliffside unit 6 net generation (mWh) within the twelve month period was as follows:

June 2012:	1,496 mWh; pre-commercial
July 2012:	77,787 mWh; pre-commercial
August 2012:	212,376 mWh; pre-commercial
September 2012:	139,874 mWh; pre-commercial
October 2012:	(1,302) mWh; pre-commercial (auxiliaries only)
November 2012:	170,464 mWh; pre-commercial
December 2012:	168,280 mWh; pre-commercial & commercial combined

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 1

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Exhibit No. 3

DUKE ENERGY CAROLINAS
DOCKET NO. E-7, SUB 986
CALCULATION OF MERGER-RELATED FUEL COST SAVINGS

Line No.				
1	Total DEC and PEC Savings Projected For Year 1	$72,000,000		Merger Application Exhibits 4 and 5
2	Portion of Year One in Initial DEC Rate Period	83.33%		September 2012 through June 2013
3	Amount to Include in Initial DEC Rate Reduction		$60,000,000	Line 1 x Line 2
4	Total DEC and PEC Savings Projected For Year 2	$100,000,000		Merger Application Exhibits 4 and 5
5	Portion of Year Two in Initial DEC Rate Period	16.67%		July 2013 through August 2013
6	Amount to Include in Initial DEC Rate Reduction		$16,666,667	Line 4 x Line 5
7	Total Amount to Include in Initial DEC Rate Reduction		$76,666,667	Line 3 + Line 6
8	Projected Allocation to DEC based on 2012 Fuel Filings		58.75%	Forecasts in E-7, Sub 1002 and E-2, Sub 1018
9	Amount Allocated to DEC		$45,041,667	Line 7 x Line 8
10	Projected Allocation to NC Retail based on E-7, Sub		67.78%	Line 9 of Supplemental McManeus Exhibit 1, Schedule 2(c), Page 2 (E-7,Sub 1002)
11	Amount Allocated to DEC NC Retail		$30,527,839	Line 9 x Line 10
12	Projected Billing MWh Sales		55,014,183	Supplemental McManeus Exhibit 1, Schedule 2c, page 2 (E-7, Sub 1002)
13	Current composite Merger Savings decrement cents/kWh		(0.0555)	

DUKE ENERGY CAROLINAS
E-7, SUB 986
FUEL RATE CHANGE ASSOCIATED WITH MERGER SAVINGS
DERIVATION OF EQUAL PERCENTAGE DECREASE FOR ALL RATE CLASSES

Line No.	Rate Class	Projected Billing Period MWH Sales (a)		Annual Revenue at Current Rates (b)		Allocate Merger Related Fuel Cost Savings To Customer Class (c)	Increase / (Decrease) as % of Annual Revenue at Current Rates (d)	Rider XXX Increase/(Decrease) (e)	Rider XXXX Billing Factor[2]
		Supplemental McManeus Exhibit 1, Schedule 2c, page 2 (E-7, Sub 1002)		Supplemental McManeus Exhibit 6(c) (E-7, Sub 1002)		(b) /(b) line 4 * (c) line 4	(c) / (b)	(c) / (a) *100 ¢ / kwh	¢ / kwh
1	Residential	20,759,438	$	2,166,605	$	(14,686)	-0.7%	(0.0707)	(0.0731)
2	General Service/Lighting	21,958,810	$	1,649,633	$	(11,181)	-0.7%	(0.0509)	(0.0527)
3	Industrial	12,295,936	$	687,624	$	(4,661)	-0.7%	(0.0379)	(0.0392)
4	NC Retail	55,014,183	$	4,503,863	$	(30,528)			
5	NC Retail Decrease In Fuel Revenue[1]				$	(30,528)			

(2) Decremental Rates including NC gross receipts taxes and regulatory fee

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWHs	8886	9100	9717	9224	7403	6227	6814	57,370.03
Hours	8760	8760	8760	8760	8760	8760	8760	8760
MDC	1129	1129	1129	1129	846	846	846	7054
Capacity factor	89.85%	92.01%	98.25%	93.26%	99.89%	84.02%	91.94%	92.84%
Cost	58,506.30	64,893.26	64,136.26	61,268.04	50,747.55	43,802.62	47,039.02	390,393.04
$/MWH	6.58	7.13	6.60	6.64	6.86	7.03	6.90	
Avg $/MWHr		6.80483						
Remove dry storage cask cost (DSC)	99.24%	99.25%	99.78%	99.77%	99.01%	98.99%	99.02%	
Costs W/O DSC	58,059.46	64,408.35	63,992.21	61,127.78	50,242.79	43,360.56	46,576.39	387,767.54
$/MWH W/O DSC	6.53	7.08	6.59	6.63	6.79	6.96	6.84	
Avg $/MWHr		6.759061						
Cents per KWh		0.675906						

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWHs with approved CF	8926	8926	8926	8926	6594	6594	6594	55,483.64
Hours	8760	8760	8760	8760	8760	8760	8760	8760
MDC	1129	1129	1129	1129	846	846	846	7,054.00
Capacity factor	90.25%	90.25%	90.25%	90.25%	88.97%	88.97%	88.97%	89.79%
Cost	60,738.24	60,738.24	60,738.24	60,738.24	44,867.83	44,867.83	44,867.83	377,556.45
Avg $/MWHr		6.80483						
Costs W/O DSC	60,329.76	60,329.76	60,329.76	60,329.76	44,566.08	44,566.08	44,566.08	375,017.29
$/MWH W/O DSC								
Avg $/MWHr		6.759061						
Cents per KWh		0.675906						

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 5

Billing Period Sept 2013 through Aug 2014

Docket E-7, Sub 1033

RESOURCE_TYP DATA_TYPE	UNIT_Sept 13- Aug 14	
NUC Total	57,370.032	
COAL Total	26,716.153	
Adjustment	(438.378)	
Adusted Coal Total	26,277.775	
Gas CT and CC total	10,016.167	CC and CT
Run of River Total	1,779.848	
Pumped storage total	3,194.477	
conversion factor	80%	
Energy used to generate	3,993.096	
	798.62	
Catawba Joint Owners	(13,929.209)	
PURC Total	9,448.043	
Adjustment to exclude cost of mitigation sales	(803.900)	
SALE Total	(1,683.858)	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

RESOURCE_TYPE	Sept 13 - Aug 14	
NUC Total	390,393.04	
Adjustment for DSC	(2,625.50)	
Total Nuclear	387,767.54	
COAL Total	1,006,203.35	
Adjustment	(16,668.63)	
Portion of savings pymt to PEC	9,636.08	Workpaper 7
Adjusted Coal Total	999,170.80	
Gas CT and CC total	302,936.92	
Gas Transportation cost	19,900.00	
Portion of savings pymt to PEC	3,177.89	Workpaper 7
	326,014.80	
PURC Total	9,070.28	
Co gen Capacity	10,211.64	
Renewables	34,567.18	
Renewables Capacity	6,918.58	
Other Purchase Info not in model	6,923.83	
Allocated Economic Purchase cost	103,191.82	Workpaper 7
Payment to Progress	165,373.85	Workpaper 7
	336,257.19	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

Oct 12 to Sept 13

	Positive numbers represent costs, Negative numbers represent savings/cost reduction													
	Allocated Economic Purchase Cost		Mitigation Sale Cost		Economic Sales Cost		Fuel Transfer Payment		JOA Savings Payment		Gas Savings Payment		Coal Savings Payment	
	PEC	DEC	PEC	DEC	PEC	DEC	PEC	DEC	PEC	DEC	PEC	DEC	PEC	DEC
9/1/2013	$ 6,780,998	$ 9,599,247	$ -	$ -	$ -	$ (459,770)	$ (10,479,526)	$ 10,479,526	$ (428,536)	$ 428,536	$ (67,271)	$ 67,271	$ (1,308,113)	$ 1,308,113
10/1/2013	$ 5,134,944	$ 7,157,863	$ -	$ -	$ -	$ (696,100)	$ (11,061,496)	$ 11,061,496	$ (799,989)	$ 799,989	$ (69,367)	$ 69,367	$ (1,324,626)	$ 1,324,626
11/1/2013	$ 7,549,439	$ 10,786,446	$ -	$ -	$ (289,700)	$ (1,264,000)	$ (14,735,637)	$ 14,735,637	$ (726,903)	$ 726,903	$ (858,972)	$ 858,972	$ (1,374,776)	$ 1,374,776
12/1/2013	$ 2,941,157	$ 3,945,203	$ -	$ (3,411,800)	$ (1,314,600)	$ (2,082,300)	$ (3,669,466)	$ 3,669,466	$ (97,817)	$ 97,817	$ (920,024)	$ 920,024	$ (1,455,264)	$ 1,455,264
1/1/2014	$ 2,924,984	$ 4,113,413	$ -	$ (3,657,900)	$ (3,567,900)	$ (7,363,800)	$ (4,391,413)	$ 4,391,413	$ (140,707)	$ 140,707	$ (377,316)	$ 377,316	$ (83,098)	$ 83,098
2/1/2014	$ 3,099,233	$ 4,524,973	$ -	$ (3,249,300)	$ (2,975,000)	$ (2,781,800)	$ (5,880,090)	$ 5,880,090	$ (469,082)	$ 469,082	$ (369,075)	$ 369,075	$ (52,808)	$ 52,808
3/1/2014	$ 5,020,350	$ 7,293,577	$ -	$ -	$ -	$ (823,100)	$ (7,489,707)	$ 7,489,707	$ (731,892)	$ 731,892	$ (370,163)	$ 370,163	$ (472,671)	$ 472,671
4/1/2014	$ 7,142,443	$ 10,338,543	$ -	$ -	$ (196,716)	$ (43,166)	$ (7,687,536)	$ 7,687,536	$ (1,117,127)	$ 1,117,127	$ (28,630)	$ 28,630	$ (500,195)	$ 500,195
5/1/2014	$ 6,848,487	$ 9,986,384	$ -	$ -	$ (933,800)	$ (1,565,200)	$ (25,680,262)	$ 25,680,262	$ (1,975,799)	$ 1,975,799	$ (28,506)	$ 28,506	$ (492,511)	$ 492,511
6/1/2014	$ 8,191,616	$ 11,383,974	$ (10,963,200)	$ (6,193,400)	$ (3,309,100)	$ (3,005,800)	$ (14,051,278)	$ 14,051,278	$ (1,132,866)	$ 1,132,866	$ (29,323)	$ 29,323	$ (542,839)	$ 542,839
7/1/2014	$ 8,546,598	$ 11,715,463	$ (12,738,000)	$ (6,127,800)	$ (1,358,600)	$ (5,094,400)	$ (11,237,850)	$ 11,237,850	$ (500,234)	$ 500,234	$ (29,557)	$ 29,557	$ (1,009,672)	$ 1,009,672
8/1/2014	$ 9,074,791	$ 12,346,738	$ (11,695,800)	$ (7,199,200)	$ (984,300)	$ (2,896,600)	$ (10,127,715)	$ 10,127,715	$ (670,256)	$ 670,256	$ (29,685)	$ 29,685	$ (1,019,513)	$ 1,019,513

Sept 13 - Aug 14	$ 103,191,824	$ (29,839,400)	$ (28,086,036)	$ 126,491,974	$ 8,791,207	$ 3,177,889	$ 9,636,084

$ 165,373,847 Workpaper 8
$ 38,881,873 Workpaper 8
$ 126,491,974

$ (38,881,873)
$ (28,086,036)
$ (66,967,909)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

	Transfer Projection		Purchase Allocation Delta		Adjusted Transfer		Fossil Gen Cost		Pre-Net Payments		Actual Payments	
	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC	PECtoDEC	DECtoPEC
9/1/2013	211,342	49,902	137,687	(137,687)	349,029	49,902	$ 35.15	$ 35.82	$ 1,787,629	$ 12,267,155	$ -	$ 10,479,526
10/1/2013	219,225	6,464	105,379	(105,379)	324,604	6,464	$ 34.77	$ 34.95	$ 225,929	$ 11,287,424	$ -	$ 11,061,496
11/1/2013	313,598	69,920	181,505	(181,505)	495,103	69,920	$ 34.65	$ 34.57	$ 2,417,473	$ 17,153,110	$ -	$ 14,735,637
12/1/2013	241,167	151,218	11,555	(11,555)	252,721	151,218	$ 36.30	$ 36.40	$ 5,504,254	$ 9,173,720	$ -	$ 3,669,466
1/1/2014	284,237	179,120	7,741	(7,741)	291,977	179,120	$ 38.21	$ 37.76	$ 6,764,168	$ 11,155,581	$ -	$ 4,391,413
2/1/2014	290,285	153,988	13,527	(13,527)	303,813	153,988	$ 38.41	$ 37.60	$ 5,789,681	$ 11,669,771	$ -	$ 5,880,090
3/1/2014	257,980	101,227	51,399	(51,399)	309,378	101,227	$ 36.39	$ 37.21	$ 3,767,083	$ 11,256,790	$ -	$ 7,489,707
4/1/2014	303,867	122,212	27,920	(27,920)	331,787	122,212	$ 36.73	$ 36.80	$ 4,497,867	$ 12,185,402	$ -	$ 7,687,536
5/1/2014	513,221	16,830	222,430	(222,430)	735,651	16,830	$ 35.74	$ 36.57	$ 615,447	$ 26,295,708	$ -	$ 25,680,262
6/1/2014	319,160	36,971	105,402	(105,402)	424,562	36,971	$ 36.43	$ 38.30	$ 1,415,877	$ 15,467,155	$ -	$ 14,051,278
7/1/2014	253,516	74,399	126,996	(126,996)	380,512	74,399	$ 37.17	$ 39.08	$ 2,907,318	$ 14,145,168	$ -	$ 11,237,850
8/1/2014	267,901	83,041	96,694	(96,694)	364,595	83,041	$ 36.53	$ 38.40	$ 3,189,148	$ 13,316,863	$ -	$ 10,127,715
	3,475,498	1,045,292			4,563,732	1,045,292			38,881,873	165,373,847	-	126,491,974

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 9

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

	Sept - Aug	Retail Sales
NC Retail Sales	55,516,317	55,516,317
SC Residential MWh sales	6,516,476	6,516,476
SC Commercial MWh sales, incl. outdoor light	5,872,824	5,872,824
SC Public Light	41,371	41,371
SC Industrial MWh sales	8,545,462	8,545,462
NPL Resale	90,124	76,492,451
10A NC	1,191,810	
10A SC	317,356	
Rutherford @meter above FFR 2009-2010	816,960	
Piedmont @meter	390,737	
Blue Ridge @meter	1,150,383	
NC EMC fixed load shape	379,552	
Haywood @meter	115,735	
New River @meter	250,924	
Greenwood @meter	296,972	
Central @meter	895,875	
Regular Sales	82,388,880	
Company Use	218,987	
Line Losses	5,164,802	
Change in Unbilled	(96,395)	
Line Losses & Change in Unbilled & Company Use	5,287,395	
SC total	20,976,133	

North Carolina:

Residential	20,955,314
General	22,081,756
Industrial	9,637,232
Textile	2,607,521
Other	234,494
NC RETAIL	55,516,317

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Smith Workpaper 10

	February 1, 2012 - June 30, 2012			July 1 2012 - August 30, 2012			September 1 2012 - December 31, 2012		
	KWh sales	Rate difference	Dollar difference	KWh sales	Rate difference	Dollar difference	KWh sales	Rate difference	Dollar difference
	A	B	A * B = C	D	E	D * E = F	G	H	G * H = I
Residential	7,572,772,050	(0.2770)	$ (20,997,942)	4,296,739,615	(0.3079)	$ (13,229,661)	6,199,646,483	(0.0862)	$ (5,344,085)
General	8,800,102,937	(0.1461)	$ (12,858,950)	4,271,157,541	(0.1820)	$ (7,773,507)	7,272,173,112	(0.0171)	$ (1,243,547)
General subject to EE	7,715,930,255	0.0771	$ 5,948,982	3,744,950,932	0.0771	$ 2,887,357	6,376,241,385	0.0771	$ 4,916,082
Total General			$ (6,907,968)			$ (4,886,150)			$ 3,672,541
Industrial	5,113,386,680	(0.1081)	$ (5,563,368)	2,229,451,266	(0.1447)	$ (3,226,016)	4,104,343,143	(0.0171)	$ (701,843)
Industrial EE	3,185,178,551	0.0771	$ 2,455,734	1,388,725,194	0.0771	$ 1,070,707	2,556,595,344	0.0771	$ 1,971,135
Total General			$ (3,107,634)			$ (2,155,309)			$ 1,269,292

	Total adjustments	Revenue per RAC report	Adjusted Revenue	KWh Sales - Feb to Dec	Sales - Jan 12	total KWH Sales - Feb 12 thru Jan 13	Avg ¢/kwh at Current rates	Normalized Test Period Sales	Annualized Revenues
	C + F + I = J	K	J + K = L	A + D + G = M	N	M + N = O	L / M = N	O	N * O = P
					RAC Report			Smith EX 4	
Residential	$ (39,171,696)	$ 2,068,452,787	$ 2,030,281,089	18,069,158,748	2,101,262,608	20,170,421,356	10.06584	21,143,095	$ 2,128,247,264
General	$ (21,873,999)	$ 1,769,249,478	$ 1,747,375,430	20,343,453,590					
General subject to EE	$ 13,752,422		$ 13,752,427						
Total General	$ (8,121,577)	$ 1,769,249,478	$ 1,761,127,851	20,343,453,590	1,823,141,641	22,166,575,231	7.94497	22,112,847	$ 1,756,843,269
Industrial	$ (9,491,773)	$ 747,819,763	$ 738,328,340	11,447,181,089					
Industrial EE	$ 5,497,576		$ 5,497,576						
Total General	$ (3,993,647)	$ 747,819,763	$ 743,826,116	11,447,181,089	908,345,095	12,365,526,164	6.02019	12,278,200	$ 739,179,883
		4,586,571,978	4,535,235,056	49,859,771,407	4,832,749,344	54,692,522,751	8.29124	55,534,611	$ 4,624,265,621

General

	Opt out %	KWhs opted out	KWhs opt in
8,800,102,937	12.37%	1,084,172,682	7,715,930,255
4,271,157,541	12.37%	526,206,609	3,744,950,932
7,272,173,112	12.37%	895,931,727	6,376,241,385
20,343,453,590	12.37%	2,506,311,018	17,837,122,577

Industrial

	Opt out %	KWhs opted out	KWhs opt in
5,113,386,680	37.71%	1,928,258,109	3,185,178,551
2,229,451,266	37.71%	840,726,072	1,388,725,194
4,104,343,143	37.71%	1,547,747,799	2,556,595,344
11,447,181,089	37.71%	4,316,731,981	7,130,449,088

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 11

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

Reagents Forecast
Summary of All Stations

		2013 SEP	2013 OCT	2013 NOV	2013 DEC	2014 JAN	2014 FEB	2014 MAR	2014 APR	2014 MAY	2014 JUN	2014 JUL	2014 AUG	12ME 2014 AUG
Tons														
	Limestone	48,651	38,354	39,200	57,835	80,418	64,575	61,128	39,638	44,517	75 244	81,022	83,005	713,585
	Lime	513	404	544	568	968	856	898	700	401	819	866	900	8,437
	Ammonia	772	260	249	908	1,183	890	749	653	591	1,028	1,122	1,190	9,604
	Urea	1,321	1,532	1,440	1,550	1,846	1,553	1,466	591	1,137	1,711	1,790	1,747	17,685
	Aqueous Ammonia	502	501	473	516	509	454	264	489	508	489	483	531	5,719
	DBA	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Reagents	51,759	41,051	41,807	61,377	84,934	68,329	64,506	42,089	47,154	79,288	85,283	87,373	755,030
Average Cost/Ton														
	Limestone	30.50	30.09	29.66	30.47	30.78	30.76	30.60	30.44	31.44	30.87	30 93	31.02	
	Lime	125.20	125.65	125.65	125.66	127.28	127.28	127.28	127.74	127.74	127.74	128.20	128.20	
	Ammonia	772.32	782.01	789.05	744.50	753.11	753.20	757.34	759.00	769.01	772.15	758.16	724.24	
	Urea	384.69	376.98	363.95	363.87	369.78	388.04	401.11	414.03	427.12	400.55	400.21	384.94	
	Aqueous Ammonia	212.54	211.40	212.23	207.67	207.64	207.63	223.61	208 65	211.28	211.27	208.48	202.71	
	DBA	-	-	-	-	-	-	-	-	-	-	-	-	
Cost														
	Limestone	1,483,692	1,154,025	1,162,247	1,762,034	2,475,256	1,988,364	1,870,562	1,206,658	1,399,734	2,322,748	2,506,022	2,574,903	21,904,445
	Lime	64,268	50,768	68,331	71,321	123,189	108,953	114,269	89,402	51,276	104,582	111,055	115,384	1,072,784
	Ammonia	585,959	203,283	196,605	676,184	898,593	670,542	567,524	484,824	454,618	782,485	850,689	861,926	7,263,011
	Urea	508,226	577,585	524,182	563,828	682,595	602,746	588,181	244,886	485,512	685,136	716,435	672,534	6,851,848
	Aqueous Ammonia	106,687	105,904	100,450	107,163	105,591	94,312	59,030	102,073	107,304	103,274	100,767	107,669	1,200,225
	DBA	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Reagents	$ 2,759,034	$ 2,091,572	$ 2,051,825	$ 3,180,850	$ 4,286,234	$ 3,462,916	$ 3,199,565	$ 2,137,623	$ 2 498,442	$ 4,008,205	$ 4,284,947	$ 4,332,398	$ 38,292,312
Summary Costs by Station														
	Allen	-	-	-	-	16,528	-	-	-	-	29,550	102,158	64,220	212,456
	Belews Creek	999,411	241,618	163,909	1,133,079	1,438,204	1,069,886	681,184	798,216	815,767	1,277,517	1,380,251	1,480,845	11,659,688
	Buck	1,507	-	-	-	-	-	-	-	-	4,472	12,746	2,939	21,664
	Buck CC	51,262	54,600	49,243	49,278	49,632	43,470	1,417	48,771	49,645	47,798	48,671	47,543	536,330
	Dan River CC	55,405	51,304	51,208	57,906	58,959	50,841	57,613	56,302	57,659	55,476	54,096	60,125	663,695
	Cliffside	487,260	383,813	517,600	591,392	1,063,516	837,683	835,290	644,913	370,647	938,257	1,027,750	989,969	8,676,090
	Marshall	1,159,533	1,360,237	1,269,866	1,352,689	1,855,422	1,456,224	1,444,061	590,077	1,204,724	1,626,916	1,629,604	1,668,516	16,415,851
	Riverbend	4,656	-	-	8,226	5,973	4,813	-	2,344	-	30,218	31,670	20,436	108,338
	Total by Station	$ 2,759,034	$ 2,091,572	$ 2,051,825	$ 3,180,550	$ 4,285,234	$ 3,462,916	$ 3,199,585	$ 2,137,623	$ 2,498,442	$ 4,008,205	$ 4,284,947	$ 4,332,398	$ 38,292,312

Total by Product		Allen	BC	Buck	Buck CC	Cliffside	Dan River CC	Marshall	Riverbend	Total	less Riverbend	Add New	Total
12ME													
2014	Limestone	132,406	6,165,534	-	-	5,834,449	-	9,772,055	-	21,904,445			
AUG	Lime	-	-	-	-	1,072,784	-	-	-	1,072,784			
	Ammonia	-	5,494,153	-	-	1,768,857	-	-	-	7,263,011			
	Urea	80,049	-	21,664	-	-	-	6,643,796	106,338	6,851,848	(106,338)		
	Aqueous Ammonia	-	-	-	536,330	-	663,695	-	-	1,200,225			
	DBA	-	-	-	-	-	-	-	-	-			
	Total	212,456	11,659,688	21,664	536,330	8,676,090	663,695	16,415,851	106,338	38,292,312	(106,338)	3,654,195	41,840,169

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Billing Period Sept 2013 through Aug 2014
Docket E-7, Sub 1033

Projected DEC fuel flex chemicals

Month	Mag Hydroxide Cost ($1000)				Calcium Carbinate ($1000)				Hydrated Lime ($1000)				
	Allen	Belews Creek	Cliffside 5	Marshall	Allen	Belews Creek	Cliffside 5	Marshall	Allen	Belews Creek	Cliffside 5	Marshall	
September-13	$ -	$ 51.34	$ -	$ 70.64	$ -	$ 32.57	$ -	$ 67.23	$ -	$ 29.81	$ -	$ -	
October-13	$ -	$ 53.14	$ -	$ 58.29	$ -	$ 33.71	$ -	$ 55.47	$ -	$ 30.86	$ -	$ -	
November-13	$ -	$ 48.34	$ -	$ 61.08	$ -	$ 30.67	$ -	$ 58.13	$ -	$ 32.75	$ -	$ -	
December-13	$ -	$ 55.62	$ -	$ 73.47	$ -	$ 35.28	$ -	$ 69.91	$ -	$ 44.85	$ -	$ -	
January-14	$ 3.19	$ 83.09	$ -	$ 91.70	$ 2.02	$ 52.71	$ -	$ 87.26	$ -	$ 61.65	$ -	$ -	
February-14	$ 2.14	$ 61.68	$ -	$ 77.30	$ 1.35	$ 39.13	$ -	$ 73.56	$ -	$ 45.76	$ -	$ -	
March-14	$ -	$ 59.80	$ -	$ 80.43	$ -	$ 37.93	$ -	$ 76.54	$ -	$ 44.36	$ -	$ -	
April-14	$ -	$ 57.21	$ -	$ 35.79	$ -	$ 36.29	$ -	$ 34.05	$ -	$ 42.44	$ -	$ -	
May-14	$ -	$ 52.01	$ -	$ 64.19	$ -	$ 32.99	$ -	$ 61.09	$ -	$ 38.59	$ 7.90	$ -	
June-14	$ 3.44	$ 84.74	$ -	$ 76.81	$ 2.18	$ 53.76	$ -	$ 73.10	$ -	$ 62.87	$ 26.87	$ -	
July-14	$ 13.53	$ 95.99	$ -	$ 75.97	$ 8.58	$ 60.90	$ -	$ 72.29	$ -	$ 55.74	$ 31.96	$ -	
August-14	$ 5.69	$ 103.44	$ -	$ 80.56	$ 3.61	$ 65.62	$ -	$ 76.67	$ -	$ 60.06	$ 22.49	$ -	
12 ME 8/31/2014	$ 28	$ 806	$ -	$ 846	$ 18	$ 512	$ -	$ 805	$ -	$ 550	$ 89	$ -	$ 3,654

Data provided by: Ashley Coleman/Dan Donochod

6/3/2013

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2% calculation test
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Revised Smith Workpaper 13

Line No.	Description	Forecast $	(over)/under Collection $	Total $
1	Amount in current docket	117,326,716	43,824,250	161,150,967
2	Amount in Sub 1002, prior year docket	127,612,570	56,365,940	183,978,510
3	Increase/(Decrease)	(10,285,854)	(12,541,690)	(22,827,543)
4	2% of 2012 NC revenue of 4,557,487,757			91,149,755
	Excess of purchased power growth over 2% of Revenue			0

WP 6	PURC Total	9,070.28	68.31%	6,195,648
WP 6	Cogen Capacity	10,211.64	71.82%	7,333,693
WP 6	Renewables	34,567.18	68.31%	23,611,842
WP 6	Renewables Capacity	6,918.58	71.82%	4,968,719
WP 6	Other Purchase Info not in model	6,923.83	68.31%	4,729,466
WP 6	Allocated Economic Purchase cost	103,191.82	68.31%	70,487,347
		170,883.34		117,326,716

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2% calculation test
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

2012

	Jan12	Feb12	Mar12	Apr12	May12	Jun12	Jul12	Aug12	Sep12	Oct12	Nov12	Dec12	12 ME
System KWH Sales - Sch 4	6,805,880,814	6,518,270,641	6,137,030,128	5,908,384,411	6,037,837,848	6,919,330,378	7,834,783,831	7,870,798,350	7,182,112,886	5,947,189,818	6,162,548,387	6,442,816,299	79,868,587,279
NC Retail KWH Sales - Sch 4	4,635,133,138	4,471,304,226	4,225,512,882	4,010,671,402	4,082,257,686	4,698,516,271	5,358,806,570	5,440,541,832	4,950,527,596	4,052,000,906	4,169,014,344	4,395,020,302	54,555,908,546
NC Retail % of Sales (Calc)	68.10%	68.59%	68.85%	67.87%	67.61%	67.90%	68.37%	69.12%	68.96%	68.13%	67.65%	68.23%	68.31%
Link to Sch 4	68.10%	68.59%	68.85%	67.87%	67.61%	67.90%	68.37%	69.12%	68.96%	68.13%	67.65%	68.23%	
	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	ok	
Fuel related component of purchased power (economic)													
System Actual $ - Sch 3 Fuel$	8,255,726	10,719,383	9,191,069	14,679,715	10,895,899	8,502,953	17,542,487	17,204,401	16,824,767	22,712,589	20,811,541	9,846,289	166,856,819
System Actual $ - Sch 3 Fuel-related$, Sch 2 pg 1	7,718,288	7,934,045	6,771,006	10,021,398	8,976,304	7,597,443	6,537,885	7,628,918	8,097,381	9,953,029	9,252,897	4,495,772	93,984,366
Total System Economic $	15,974,014	18,653,428	15,962,075	24,701,113	19,872,203	16,100,396	24,080,372	24,833,319	24,922,148	32,665,618	30,064,438	14,342,061	260,841,185
Less Native Load Transfers & Native Load Transfer Savings							11,369,314	10,419,741	10,174,248	23,773,408	17,766,838	6,189,237	79,662,786
Total System Economic $ w/o Native Load Transfers	15,974,014	18,653,428	15,962,075	24,701,113	19,872,203	16,100,396	12,711,058	14,413,578	14,747,900	8,892,210	12,297,600	8,152,824	181,278,399
NC Actual $ (Calc)	10,878,694	12,793,632	10,990,324	16,764,529	13,301,063	10,249,430	8,690,818	9,963,154	10,169,837	6,058,532	8,319,427	5,562,276	123,741,717
Billed rate (c/kWh)	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1580	0.1984	0.1984	0.1984	0.1984	
Billed $	7,462,156	7,104,902	6,714,340	6,372,957	6,486,707	7,462,764	8,511,966	8,645,021	9,839,703	8,039,169	8,271,324	8,720,911	93,831,920
Over (Under) $:	(3,416,538)	(5,688,730)	(4,275,984)	(10,391,572)	(6,814,356)	(2,786,666)	(178,852)	(1,318,133)	(330,134)	1,980,637	(48,102)	3,158,634	(30,109,797)
Fuel related component of purchased power (renewables)													
System Actual $ - Sch 2 pg 1	4,133,469	3,175,281	3,840,449	3,868,382	3,712,275	3,750,184	3,164,099	3,084,572	3,571,248	4,199,338	3,487,354	2,597,480	42,581,098
Less: REPS correction	187,794	134,844	175,288	178,371	156,140	155,267	119,793	115,271	141,367	183,851	143,654	95,536	1,783,973
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	3,945,675	3,040,437	3,665,161	3,690,011	3,556,135	3,594,917	3,044,306	2,969,301	3,429,881	4,015,487	3,343,700	2,501,914	40,797,125
NC Actual $ (Calc)	2,687,101	2,085,313	2,523,563	2,504,393	2,404,427	2,440,059	2,081,456	2,052,481	2,365,173	2,736,009	2,262,040	1,706,935	27,848,950
Billed rate (c/kWh):	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	0.0335	0.0335	0.0335	0.0335	
Billed $	1,047,238	997,101	942,289	894,380	910,343	1,047,323	1,194,568	1,213,241	1,661,442	1,357,420	1,396,620	1,472,533	14,134,497
Over (Under) $:	(1,639,863)	(1,088,212)	(1,581,274)	(1,610,013)	(1,494,084)	(1,392,735)	(886,888)	(839,241)	(703,731)	(1,378,589)	(865,421)	(234,402)	(13,714,453)
TOTAL Over (Under) $:													(43,824,250)

Revised Smith Workpaper

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2% calculation test
Test Period Ended December 31, 2012
Docket E-7, Sub 1033

2011

	11-May	11-Jun	11-Jul	11-Aug	11-Sep	11-Oct	11-Nov	11-Dec
System KWH Sales - Sch 4	6,022,058,699	7,381,119,256	7,788,342,170	8,351,124,039	7,481,207,062	6,046,921,470	5,867,549,474	6,271,930,552
NC Retail KWH Sales - Sch 4	4,010,233,512	5,000,619,491	5,270,645,977	5,702,669,021	5,136,873,658	4,086,598,907	3,975,774,127	4,301,668,750
NC Retail % of Sales (Calc)	66.59%	67.75%	67.67%	68.29%	68.66%	67.58%	67.76%	68.59%
Link to Sch 4	66.59%	67.75%	67.67%	68.29%	68.66%	67.58%	67.76%	68.59%
	ok	ok	ok	ok	ok	ok	ok	ok
Fuel related component of purchased power (economic)								
System Actual $ - Sch 3 Fuel$	$ 9,532,161	$ 13,202,825	$ 12,295,664	$ 16,327,183	$ 9,144,775	$ 10,794,118	$ 12,343,970	$ 10,035,702
System Actual $ - Sch 3 Fuel-related$; Sch 2 pg 1	5,533,594	8,608,615	6,971,864	9,939,855	6,122,295	7,238,996	8,928,907	6,225,082
Total System Economic $	15,065,755	21,811,440	19,267,528	26,267,038	15,267,070	18,033,114	21,272,877	16,260,784
NC Actual $ (Calc)	$ 10,032,648	$ 14,776,988	$ 13,039,016	$ 17,936,774	$ 10,482,935	$ 12,187,045	$ 14,414,221	$ 11,152,623
Billed rate (¢/kWh):	0.1390	0.1390	0.1390	0.1390	0.1589	0.1589	0.1589	0.1589
Billed $:	$ 5,574,225	$ 6,950,861	$ 7,326,198	$ 7,926,710	$ 8,162,492	$ 6,493,606	$ 6,317,505	$ 6,835,348
Over (Under) $:	$ (4,458,423)	$ (7,826,127)	$ (5,712,818)	$ (10,010,064)	$ (2,320,443)	$ (5,693,439)	$ (8,096,716)	$ (4,317,274)
Fuel related component of purchased power (renewables)								
System Actual $ - Sch 2 pg 1	$ 725,888	$ 3,237,830	$ 2,736,721	$ 2,214,935	$ 2,371,920	$ 3,831,695	$ 3,764,341	$ 3,120,942
NC Actual $ (Calc)	$ 483,385	$ 2,193,591	$ 1,852,036	$ 1,512,496	$ 1,628,648	$ 2,589,516	$ 2,550,668	$ 2,140,530
Billed rate (¢/kWh):	0.0156	0.0156	0.0156	0.0156	0.0223	0.0223	0.0223	0.0223
Billed $:	$ 625,596	$ 780,097	$ 822,221	$ 889,616	$ 1,145,523	$ 911,312	$ 886,598	$ 959,272
Over (Under) $:	$ 142,212	$ (1,413,494)	$ (1,029,815)	$ (622,880)	$ (483,125)	$ (1,678,205)	$ (1,664,070)	$ (1,181,258)

TOTAL Over (Under) $:

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line No.	Year	Reference	MWH Net Output	MWH Line Loss/ Company Use	Average Line Loss/ Co. Use %
1	2008	Prior fuel filing	90,943,002	5,234,947	
2	2009	Prior fuel filing	84,321,352	5,181,728	
3	2010	Prior fuel filing	90,359,224	5,683,489	
4	2011	Prior fuel filing	87,535,397	4,792,382	
5	2012	Exhibit 6	86,224,791	5,214,250	
6	5 Years	Sum L1:L5	439,383,766	26,106,795	5.94%
7	Line Loss/Co. Use Factor		((1/(1-L6))		1.0632

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Subject: Median Hydro Generation 1982 - 2012

The table below summarizes the updated 31 year median hydro generation for the historical calendar year period 1982 - 2012.

Duke Energy

MEDIAN CONVENTIONAL HYDRO GENERATION (MWH)
(Pumped Storage Hydro plants are not included)
31 YEARS 1982 - 2012

	Median Year	System Total	R-O-R	Storage	Nantahala
January	1994	222,000	10,500	173,400	38,100
February	2004	170,700	10,800	122,000	37,900
March	1982	220,000	10,600	163,800	45,600
April	1996	154,600	13,000	114,900	26,700
May	2005	128,200	8,400	84,400	35,400
June	1987	124,700	4,900	81,700	38,000
July	1998	96,900	6,000	69,000	22,000
August	1993	109,200	5,000	77,300	26,900
September	1983	106,800	4,700	64,500	37,700
October	1984	98,700	4,800	66,900	27,000
November	1984	103,000	5,100	68,100	29,800
December	1995	169,700	9,600	104,200	55,800
TOTALS		1,704,500	93,400	1,190,200	420,900

Note: The Run-of-River (R-O-R), Storage, and Nantahala Medians do not necessarily correspond to the year of the System Median.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line No.	Year	Reference to NC Fuel Filing	Jocassee Pumped Storage Output	Jocassee Pumping Input	Bad Creek Pumped Storage Output	Bad Creek Pumping Input	System Total Net
1	2008	Sch 10, p. 6 of 6	1,083,815	1,387,130	2,554,294	3,210,183	(959,204)
2	2009	Sch 10, p. 6 of 6	926,568	1,148,967	1,917,824	2,417,800	(722,375)
3	2010	Sch 10, p. 6 of 6	925,837	1,077,790	2,041,348	2,578,364	(688,969)
4	2011	Sch 10, p. 6 of 7	917,215	1,042,175	1,997,078	2,532,517	(660,399)
5	2012	Sch 10, p. 6 of 7	928,617	1,103,984	1,752,364	2,218,596	(641,599)
6	Average		956,410	1,152,009	2,052,582	2,591,492	(734,509)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Line No.	Year	Reference	Actual Generation from CTs		
			Oil MWH	Gas CT MWH	Total MWH
1	2010	Schedule 5	(9,500)	612,241	602,741
2	2011	Schedule 5	40,811	700,504	741,315
3	2012	Schedule 5	6,865	916,328	923,193
4	Total	Sum L1:L3	38,176	2,229,073	2,267,249
5	Average	Calc	**12,725**	**743,024**	**755,750**

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 18

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

	January 1	February 2	March 3	April 4	May 5	June 6	Total
Fuel Savings - Gross for current month							
DEC Fuel Savings - Gross							
. Coal Blending	$ 1,383,822	$ 1,531,341	$ 1,223,878	$ 1,445,766	$ 1,362,588	$ 1,910,429	8,857,824
. Coal Commodity	159,879	171,243	127,638	86,616	85,702	20,858	651,936
. Coal Transportation	-	-	-	-	-	-	-
. Natural Gas / Oil	-	-	-	-	-	-	-
. Reagents	14,213	7,899	12,582	4,023	36,103	66,374	141,194
. Avoided Gas Desk O&M Cost	-	-	-	-	-	-	-
subtotal - DEC fuel savings	1,557,914	1,710,483	1,364,098	1,536,405	1,484,393	1,997,661	9,650,954
PEC Fuel Savings - Gross for current month							
. Coal Blending	-	-	-	-	-	-	-
. Coal Commodity	-	-	-	70,567	112,326	296,607	479,500
. Coal Transportation	-	-	-	75,137	106,683	124,184	306,004
. Natural Gas / Oil	-	-	-	-	-	-	-
. Reagents	35,182	35,046	70,300	60,565	38,762	46,962	286,817
. Avoided Gas Desk O&M Cost	-	-	-	-	-	-	-
subtotal - PEC fuel savings	35,182	35,046	70,300	206,269	257,771	467,753	1,072,321
Total - Fuel Saving -Gross	1,593,096	1,745,529	1,434,398	1,742,674	1,742,164	2,465,414	10,723,275
DEC sharing ratio July - Dec	0.58777968	0.58777968	0.58777968	0.58777968	0.58777968	0.58777968	
PEC sharing ratio July - Dec	0.41222032	0.41222032	0.41222032	0.41222032	0.41222032	0.41222032	
Total DEC share	936,389	1,025,986	843,110	1,024,308	1,024,009	1,449,120	6,302,923
Total PEC share	656,707	719,543	591,288	718,366	718,155	1,016,294	4,420,352
DEC gross	1,557,914	1,710,483	1,364,098	1,536,405	1,484,393	1,997,661	9,650,954
DEC net share	936,389	1,025,986	843,110	1,024,308	1,024,009	1,449,120	6,302,923
Amount to be shared with PEC	(621,525)	(684,497)	(520,988)	(512,097)	(460,384)	(548,541)	(3,348,031)
	68.10%	68.59%	68.85%	67.87%	67.61%	67.88%	
	(423,273)	(469,468)	(358,714)	(347,558)	(311,282)	(372,323)	(2,282,619)
PEC gross	35,182	35,046	70,300	206,269	257,771	467,753	1,072,321
PEC net share	656,707	719,543	591,288	718,366	718,155	1,016,294	4,420,352
Amount to be received from DEC	621,525	684,497	520,988	512,097	460,384	548,541	3,348,031

	Adjusted test period sales MWhs	Adjusted test period sales as a % of total MWh sales	Amount to be shared with PEC allocated as a % of total MWh sales
Residential	21,143,695	38.07%	(868,993)
General	22,112,646	39.82%	(908,939)
Industrial	12,278,269	22.11%	(504,687)
	55,534,611	100.00%	(2,282,619)

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 18

Test Period Ended December 31, 2012

Docket E-7, Sub 1033

	January	February	March	April	May	June	Total
	1	2	3	4	5	6	
Fuel Savings - Gross for current month							
DEC Fuel Savings - Gross							
. Coal Blending	$ 1,383,822	$ 1,531,341	$ 1,223,878	$ 1,445,766	$ 1,362,588	$ 1,910,429	8,857,824
. Coal Commodity	159,879	171,243	127,638	86,616	85,702	20,858	651,936
. Coal Transportation	-	-	-	-	-	-	-
. Natural Gas / Oil	-	-	-	-	-	-	-
. Reagents	14,213	7,899	12,582	4,023	36,103	66,374	141,194
. Avoided Gas Desk O&M Cost	-	-	-	-	-	-	-
subtotal - DEC fuel savings	1,557,914	1,710,483	1,364,098	1,536,405	1,484,393	1,997,661	9,650,954
PEC Fuel Savings - Gross for current month							
. Coal Blending	-	-	-	-	-	-	-
. Coal Commodity	-	-	-	70,567	112,326	296,607	479,500
. Coal Transportation	-	-	-	75,137	106,683	124,184	306,004
. Natural Gas / Oil	-	-	-	-	-	-	-
. Reagents	35,182	35,046	70,300	60,565	38,762	46,962	286,817
. Avoided Gas Desk O&M Cost	-	-	-	-	-	-	-
subtotal - PEC fuel savings	35,182	35,046	70,300	206,269	257,771	467,753	1,072,321
Total - Fuel Saving -Gross	1,593,096	1,745,529	1,434,398	1,742,674	1,742,164	2,465,414	10,723,275
DEC sharing ratio July - Dec	0.58777968	0.58777968	0.58777968	0.58777968	0.58777968	0.58777968	
PEC sharing ratio July - Dec	0.41222032	0.41222032	0.41222032	0.41222032	0.41222032	0.41222032	
Total DEC share	936,389	1,025,986	843,110	1,024,308	1,024,009	1,449,120	6,302,923
Total PEC share	656,707	719,543	591,288	718,366	718,155	1,016,294	4,420,352
DEC gross	1,557,914	1,710,483	1,364,098	1,536,405	1,484,393	1,997,661	9,650,954
DEC net share	936,389	1,025,986	843,110	1,024,308	1,024,009	1,449,120	6,302,923
Amount to be shared with PEC	(621,525)	(684,497)	(520,988)	(512,097)	(460,384)	(548,541)	(3,348,031)
	68.10%	68.59%	68.85%	67.87%	67.61%	67.88%	
	(423,273)	(469,468)	(358,714)	(347,558)	(311,282)	(372,323)	(2,282,619)
PEC gross	35,182	35,046	70,300	206,269	257,771	467,753	1,072,321
PEC net share	656,707	719,543	591,288	718,366	718,155	1,016,294	4,420,352
Amount to be received from DEC	621,525	684,497	520,988	512,097	460,384	548,541	3,348,031

	Adjusted test period sales MWhs	Adjusted test period sales as a % of total MWh sales	Amount to be shared with PEC allocated as a % of total MWh sales
Residential	21,143,695	38.07%	(868,993)
General	22,112,646	39.82%	(908,939)
Industrial	12,278,269	22.11%	(504,687)
	55,534,611	100.00%	(2,282,619)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Smith Workpaper 19

Test Period Ended December 31, 2012
Docket E-7, Sub 1033
MWhs

Line #	Description	Reference	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	% NC	% SC
1	RESIDENTIAL	RAC001	20,121,712	6,157,414	26,279,126	76.57	23.43
2	Total General Service	RAC001	22,116,267	5,649,488	27,765,755		
3	less Lighting and Traffic Signals		739,161	227,740	966,901		
4	General Service subject to weather		21,377,106	5,421,748	26,798,854	79.77	20.23
	INDUSTRIAL						
5	Textile	RAC001	2,794,192	1,125,375	3,919,567	71.29	28.71
6	Other Industrial	RAC001	9,523,736	7,534,250	17,057,986	55.83	44.17
7	Total Industrial		12,317,928	8,659,625	20,977,553	58.72	41.28
8	Total Retail Sales	1+2+7	54,555,907	20,466,527	75,022,434		
9	Total Retail Sales subject to weather	1+4+7	53,816,746	20,238,787	74,055,533	72.67	27.33

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Test Period Ended December 31, 2012
Weather Normalization Adjustment
Docket E-7, Sub 1033

Line #	Description	REFERENCE MWH	REFERENCE %	Total Company MWH	NC RETAIL % To Total	NC RETAIL MWH	SC RETAIL % To Total	SC RETAIL MWH
	Residential							
1	Total Residential			1,274,546	76.57	975,920	23.43	298,626
	General Service							
2	Total General Service			90,927	79.77	72,533	20.23	18,395
	Industrial							
3	Textile			(10,161)	71.29	(7,243)	28.71	(2,917)
4	Other			(26,777)	55.83	(14,950)	44.17	(11,827)
5	Total Industrial			(36,937)	58.72	(22,193)	41.28	(14,744)
6	Total Retail	L1:L2 + L5		1,328,536		1,026,260		302,277
7	Wholesale			127,409				
8	Total Company	L6 + L7		1,455,945		1,026,260		302,277

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Test Period Ended December 31, 2012
Weather Normalization Adjustment
Docket E-7, Sub 1033

2012	TOTAL MWH ADJUSTMENT
JAN	228,976
FEB	299,365
MAR	263,635
APR	297,306
MAY	(49,081)
JUN	65,830
JUL	(160,338)
AUG	(22,169)
SEP	186,835
OCT	101,001
NOV	(63,599)
DEC	126,785
ANN. SUM	1,274,546

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Test Period Ended December 31, 2012
Weather Normalization Adjustment- General
Docket E-7, Sub 1033

2012	Non-TOD Non-Electric Heat	Non-TOD Electric Heat	TOD Non-Electric Hat	TOD Electric Heat	TOTAL MWH ADJUSTMENT
JAN	14,370	3,802	(7,783)	2,631	13,020
FEB	18,782	4,981	(10,278)	3,607	17,092
MAR	14,573	2,862	(13,413)	2,909	6,931
APR	15,423	2,354	(17,622)	3,124	3,279
MAY	(7,478)	(4,562)	(9,543)	(1,303)	(22,886)
JUN	6,392	3,026	3,558	1,151	14,127
JUL	(19,581)	(10,737)	(18,778)	(3,454)	(52,550)
AUG	(2,699)	(1,496)	(2,575)	(478)	(7,247)
SEP	22,897	12,648	22,001	4,109	61,655
OCT	13,962	8,171	15,710	2,421	40,265
NOV	(1,130)	1,326	9,193	(318)	9,071
DEC	8,064	2,249	(3,677)	1,536	8,171
ANN. SUM	83,575	24,625	(33,209)	15,936	90,927

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Test Period Ended December 31, 2012
Weather Normalization Adjustment- Industrial
Docket E-7, Sub 1033

2012	TEXTILES	OTHER INDUSTRIAL	TOTAL MWH ADJUSTMENT
JAN	(1,568)	(4,183)	(5,751)
FEB	(3,132)	(8,360)	(11,492)
MAR	(5,402)	(14,755)	(20,157)
APR	(4,067)	(11,073)	(15,140)
MAY	(3,529)	(9,952)	(13,481)
JUN	4,542	12,862	17,403
JUL	(10,500)	(29,717)	(40,217)
AUG	3,315	9,381	12,696
SEP	5,750	16,285	22,035
OCT	5,126	14,385	19,511
NOV	2,483	6,834	9,317
DEC	(3,179)	(8,484)	(11,664)
ANN. SUM	(10,161)	(26,777)	(36,937)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Test Period Ended December 31, 2012
Weather Normalization Adjustment- Wholesale
Docket E-7, Sub 1033

2012	TOTAL MWH ADJUSTMENT
JAN	31,280
FEB	23,892
MAR	43,059
APR	12,244
MAY	(6,383)
JUN	2,534
JUL	(16,366)
AUG	9,029
SEP	16,022
OCT	2,590
NOV	(19,217)
DEC	28,725
ANN. SUM	127,409

Note: The Resale customers include:

1 Concord
2 Dallas
3 Forest City
4 Kings Mountain
5 Due West
6 Prosperity
7 Lockhart
8 Western Carolina University
9 City of Highlands
10 Haywood
11 Piedmont
12 Rutherford
13 Blue Ridge
14 Greenwood

DUKE ENERGY CAROLINAS
Customer Growth Adjustment to KWH Sales
Twelve Months Ended December 31, 2012

Smith Workpaper 21
Page 1

Rate Schedule	Reference	NC Proposed KWH [1] Adjustment	SC Proposed KWH Adjustment	Wholesale Proposed KWH Adjustment
NC Residential	ND-310/1	46,063,236	15,983,294	
NC General:				
General Service Small and Large	ND-330	(78,013,556)	(13,358,995)	
T2 Flood Lighting/Outdoor Lighting	ND-310/2	(1,406,241)	1,740,247	
Miscellaneous	ND-310/3	318,397	243,176	
Total General		(79,101,400)	(11,375,572)	
NC Public Street Lighting:				
T	ND-310/4	3,070,775	161,167	
TS	ND-310/5	(122,998)	59,808	
Total Street Lighting		2,947,777	220,975	
NC Industrial:				
I - Textile	ND-330	(946,436)	(1,007,571)	
I - Nontextile	ND-330	(16,519,327)	(1,668,123)	
Total Industrial		(17,465,764)	(2,675,694)	
Total		(47,556,150)	2,153,003	14,471,452

[1] Using the regression method (Residential, Lighting, Misc classes) and a customer by customer method for General Service and Industrial

DUKE ENERGY CAROLINAS
Calculation of Customer Growth Adjustment to KWH Sales - Wholesale
Twelve Months Ended December 31, 2012

Line No.		Reference	
1	Total System Resale (kWh Sales)	RAC001	6,130,366,441
2	Less Intersystem Sales	Schedule 1	1,141,573
3	KWH Sales Excluding Intersystem Sales	L1 - L2	6,129,224,868
4	Total Residential Growth Factor	Line 8	0.2361
5	Adjustment to KWH's - Wholesale	L3 * L4 / 100	14,471,452
6	Total System Retail Residential kWh Sales	RAC001	26,279,126,866
7	2012 Proposed Adjustment KWH - Residential (NC+SC)	ND310	62,046,530
8	Percent Adjustment	L7 / L6 * 100	0.2361

"RAC001": CarolinasOperating Revenue Report

DUKE ENERGY CAROLINAS
Customer Growth Adjustment to KWH Sales
Twelve Months Ended December 31, 2012
Customer by Customer Approach

NC	Rate Schedule	No. of Bills New Accounts	Test Yr Consumption New Accounts	(a) Unrealized Sales from New Accounts (kWh)	No. of Bills Closed Accounts	(b) Lost Sales from Closed Accounts	Net Adjustment to Growth (a minus b)
NC							
NC	GENL NTEX	32,375	64,207,556	68,652,550	77,333	146,666,106	(78,013,556)
NC	INDL NTEX	163	8,947,590	8,847,597	830	25,366,924	(16,519,327)
NC	INDL TEX	21	393,154	188,410	68	1,134,846	(946,436)
NC	Total	32,559	73,548,300	77,688,557	78,231	173,167,876	(95,479,319)

SC	Rate Schedule	No. of Bills New Accounts	Test Yr Consumption New Accounts	(a) Unrealized Sales from New Accounts (kWh)	No. of Bills Closed Accounts	(b) Lost Sales from Closed Accounts	Net Adjustment to Growth (a minus b)
SC							
SC	GENL NTEX	9,531	19,863,363	20,275,925	21,277	33,634,920	(13,358,995)
SC	INDL NTEX	66	4,486,152	3,323,226	245	4,991,349	(1,668,123)
SC	INDL TEX				19	1,007,571	(1,007,571)
SC	Total	9,597	24,349,515	23,599,151	21,541	39,633,840	(16,034,689)

(a): Estimated from individual accounts and bills
(b): Calculated from individual accounts and bills

The method uses the estimated lost sales from closed accounts, offset by the unrealized sales from newly established accounts with less than the full complement of bills (normally 12) issued during the year.The method was first approved for use in Docket E-7 Sub 909; see Bailey Direct Testimony pages 5,6 for a more detailed explanation and rationale

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to kWh
Twelve Months Ended Dec 31 2012
North Carolina Retail

	Number of Customers					
Month	Actual # of Customers [1]	Projected [3]	Increase (Decrease)	KWH Consumption [2]	Average Per Customer	Increase (Decrease) in KWh
January	1,592,490	1,600,367	7,877	2,052,553,641	1,289	10,153,453
February	1,592,911	1,600,367	7,456	1,785,443,480	1,121	8,358,176
March	1,594,367	1,600,367	6,000	1,576,390,855	989	5,934,000
April	1,594,956	1,600,367	5,411	1,252,704,582	785	4,247,635
May	1,595,500	1,600,367	4,867	1,320,093,240	827	4,025,009
June	1,596,272	1,600,367	4,095	1,638,140,493	1,026	4,201,470
July	1,597,773	1,600,367	2,594	2,159,210,131	1,351	3,504,494
August	1,598,508	1,600,367	1,859	2,137,529,484	1,337	2,485,483
September	1,598,686	1,600,367	1,681	1,773,807,828	1,110	1,865,910
October	1,598,501	1,600,367	1,866	1,271,002,314	795	1,483,470
November	1,600,025	1,600,367	342	1,428,842,682	893	305,406
December	1,600,832	1,600,367	(465)	1,725,993,659	1,078	(501,270)
Total	19,160,821		43,583	20,121,712,389		46,063,236

[1] Carolinas ORR Jan-Dec 2012
[2] Carolinas ORR Jan-Dec 2012
[3] Using Polynomial Cubic 24 Month Regression

Smith Workpaper 21
Page 5

DUKE ENERGY CAROLINAS
Calculation of Customer Growth Adjustment to kWh
Twelve Months Ended Dec 31 2012
North Carolina Retail

GENERAL T2 (Outdoor Lighting)
Schedules 25,34,35,36,26,37,38,39,94,95,96
(includes NPL yard and flood lighting)

	Number of Customers					
Month	Actual # of Customers [1]	Projected [2]	Increase (Decrease)	KWH Consumption [1]	Average Per Customer	Increase (Decrease) in KWh
January	277,900	275,362	(2,538)	41,309,482	149	(378,162)
February	275,512	275,362	(150)	40,861,612	148	(22,200)
March	277,314	275,362	(1,952)	40,992,971	148	(288,896)
April	275,085	275,362	277	40,783,584	148	40,996
May	276,142	275,362	(780)	40,967,603	148	(115,440)
June	273,080	275,362	2,282	40,557,043	149	340,018
July	278,769	275,362	(3,407)	41,419,562	149	(507,643)
August	273,210	275,362	2,152	40,638,593	149	320,648
September	279,011	275,362	(3,649)	41,123,566	147	(536,403)
October	278,480	275,362	(3,118)	41,095,891	148	(461,464)
November	275,623	275,362	(261)	40,859,325	148	(38,628)
December	273,745	275,362	1,617	40,705,161	149	240,933
Total	3,313,871		(9,527)	491,314,393		(1,406,241)

[1] Per Book by Rate Schedule Page 8 attached
[2] Using polynomial quartic 48 month regression
Note: NPL unmetered signs included with Public Lighting

DUKE ENERGY CAROLINAS

Smith Workpaper 21

Page 6

Calculation of Customer Growth Adjustment to kWh
Twelve Months Ended December 31 2012
North Carolina Retail

GENERAL-MISC.
Schedules 49 (BC)

	Number of Customers				Average	Increase
Month	Actual # of Customers [1]	Projected [2]	Increase (Decrease)	KWH Consumption [1]	Per Customer	(Decrease) in KWh
January	4,260	4,686	426	948,459	223	94,998
February	4,172	4,686	514	973,584	233	119,762
March	4,388	4,686	298	797,557	182	54,236
April	4,453	4,686	233	616,592	138	32,154
May	4,560	4,686	126	571,850	125	15,750
June	4,596	4,686	90	662,903	144	12,960
July	4,643	4,686	43	751,216	162	6,966
August	4,646	4,686	40	727,609	157	6,280
September	4,744	4,686	(58)	651,894	137	(7,946)
October	4,811	4,686	(125)	523,308	109	(13,625)
November	4,701	4,686	(15)	779,946	166	(2,490)
December	4,690	4,686	(4)	758,274	162	(648)
Total	54,664		1,568	8,763,192		318,397

[1] Per Book by Rate Schedule Page 4 attached
[2] Using polynomial cubic 12 month regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to kWh
Twelve Months Ended December 31 2012
North Carolina Retail

GENERAL T (Public and Govt Lighting)
Schedule 72,73,74,75

Month	Number of Customers: Actual # of Customers [1]	Number of Customers: Projected [2]	Number of Customers: Increase (Decrease)	KWH Consumption [1]	Average Per Customer	Increase (Decrease) In KWh
January	5,279	5,376	97	19,626,814	3,718	360,646
February	5,244	5,376	132	19,651,634	3,747	494,604
March	5,240	5,376	136	19,637,349	3,748	509,728
April	5,209	5,376	167	19,624,399	3,767	629,089
May	5,359	5,376	17	19,705,973	3,677	62,509
June	5,249	5,376	127	19,701,720	3,753	476,631
July	5,435	5,376	(59)	19,735,428	3,631	(214,229)
August	5,268	5,376	108	19,716,875	3,743	404,244
September	5,371	5,376	5	19,744,417	3,676	18,380
October	5,371	5,376	5	19,766,935	3,680	18,400
November	5,333	5,376	43	19,768,573	3,707	159,401
December	5,335	5,376	41	19,695,607	3,692	151,372
Total	63,693		819	236,375,724		3,070,775

[1] Per Book by Rate Schedule Page 1. New Schedule GL (73,74,75) included beginning 2010
[2] Using polynomial Cubic 48 month regression

DUKE ENERGY CAROLINAS

Smith Workpaper 21

Page 8

Calculation of Customer Growth Adjustment to kWh
Twelve Months Ended December 31 2012
North Carolina Retail

GENERAL TS
Schedule 83

Month	Number of Customers: Actual # of Customers [1]	Projected [2]	Increase (Decrease)	KWH Consumption [1]	Average Per Customer	Increase (Decrease) in KWh
January	5,734	5,616	(118)	1,052,360	184	(21,712)
February	5,709	5,616	(93)	944,416	165	(15,345)
March	5,723	5,616	(107)	955,003	167	(17,869)
April	5,706	5,616	(90)	961,785	169	(15,210)
May	5,730	5,616	(114)	901,657	157	(17,898)
June	5,640	5,616	(24)	961,118	170	(4,080)
July	5,713	5,616	(97)	939,207	164	(15,908)
August	5,640	5,616	(24)	940,936	167	(4,008)
September	5,622	5,616	(6)	954,809	170	(1,020)
October	5,704	5,616	(88)	925,723	162	(14,256)
November	5,630	5,616	(14)	954,425	170	(2,380)
December	5,578	5,616	38	979,742	176	6,688
Total	68,129		(737)	11,471,181		(122,998)

1 Per Book by Rate Schedule Page 2
[2] Using linear 12 month regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to KWHs
Twelve Months Ended December 31, 2012
South Carolina Retail

RESIDENTIAL

	Number of Customers					
Month	Actual # of Customers [1]	Projected [3]	Increase (Decrease)	KWH Consumption [2]	Average Per Customer	Increase (Decrease) in KWh
January	454,717	457,241	2,524	620,513,075	1,365	3,445,260
February	455,053	457,241	2,188	536,456,051	1,179	2,579,652
March	455,546	457,241	1,695	459,027,591	1,008	1,708,560
April	455,401	457,241	1,840	385,882,606	847	1,558,480
May	455,894	457,241	1,347	411,595,345	903	1,216,341
June	455,935	457,241	1,306	522,268,634	1,145	1,495,370
July	456,614	457,241	627	683,840,454	1,498	939,246
August	456,332	457,241	909	667,940,089	1,464	1,330,776
September	456,282	457,241	959	550,767,430	1,207	1,157,513
October	456,339	457,241	902	387,130,969	848	764,896
November	457,165	457,241	76	419,192,832	917	69,692
December	457,493	457,241	(252)	512,799,401	1,121	(282,492)
Total	5,472,771		14,121	6,157,414,477		15,983,294

[1] Carolinas Operating Revenue Report Summary
[2] Carolinas Operating Revenue Report Summary
[3] Using Polynomial Quartic 36 Month Regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to KWHs
Twelve Months Ended December 31, 2012
South Carolina Retail

Smith Workpaper 21

Page 10

GENERAL T2 (Outdoor Lighting)
Schedules 25,32,34,35,36,26,37,38,39,95,96
(includes Greenwood SL)

Month	Number of Customers: Actual # of Customers [1]	Number of Customers: Projected [2]	Number of Customers: Increase (Decrease)	KWH Consumption [1]	Average Per Customer	Increase (Decrease) In KWh	kWh for T2	kwh for SL [2]
January	116,812	118,125	1,313	15,109,623	129	169,377	15,080,081	29,542
February	116,938	118,125	1,187	15,569,705	133	157,871	15,540,361	29,344
March	116,899	118,125	1,226	15,483,642	132	161,832	15,454,220	29,422
April	116,998	118,125	1,127	15,524,512	133	149,891	15,495,091	29,421
May	116,415	118,125	1,710	15,445,763	133	227,430	15,416,161	29,602
June	117,329	118,125	796	15,592,593	133	105,868	15,563,095	29,498
July	116,935	118,125	1,190	15,585,239	133	158,270	15,555,939	29,300
August	116,924	118,125	1,201	15,520,010	133	159,733	15,490,550	29,460
September	116,924	118,125	1,201	15,363,152	131	157,331	15,333,808	29,344
October	116,777	118,125	1,348	15,455,773	132	177,936	15,426,465	29,308
November	117,178	118,125	947	15,524,575	132	125,004	15,495,412	29,163
December	118,203	118,125	(78)	15,575,221	132	(10,296)	15,546,131	29,090
Total	1,404,332		13,168	185,749,808		1,740,247	185,397,314	352,494

[1] Per Book by Rate Schedule Pages 14 (Misc T2-Greenwood) and Page 18 attached

[2] Using Polynomial Quartic 12 month regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to KWHs

Twelve Months Ended December 31, 2012

South Carolina Retail

GENERAL-MISC.

Schedules 33, 49 (BC and EH)

	Number of Customers				Average	Increase
Month	Actual # of Customers [1]	Projected [2]	Increase (Decrease)	KWH Consumption [1]	Per Customer	(Decrease) in KWh
January	1,274	1,603	329	296,634	233	76,657
February	1,299	1,603	304	231,714	178	54,112
March	1,354	1,603	249	287,103	212	52,788
April	1,379	1,603	224	49,503	36	8,064
May	1,446	1,603	157	141,602	98	15,386
June	1,478	1,603	125	161,419	109	13,625
July	1,533	1,603	70	222,592	145	10,150
August	1,554	1,603	49	230,274	148	7,252
September	1,583	1,603	20	198,121	125	2,500
October	1,584	1,603	19	164,311	104	1,976
November	1,596	1,603	7	187,125	117	819
December	1,604	1,603	(1)	246,086	153	(153)
Total	17,684		1,552	2,416,484		243,176

[1] Per Book by Rate Schedule Page 12

[2] Using polynomial quartic12 month regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to KWHs

Twelve Months Ended December 31, 2012

South Carolina Retail

GENERAL T

Schedule 72,73,74,75

(Government, Public Lighting)

Month	Number of Customers: Actual # of Customers[1]	Projected[2]	Increase (Decrease)	KWH Consumption[1]	Average Per Customer	Increase (Decrease) in KWh
January	1,902	1,934	32	3,192,396	1,678	53,696
February	1,899	1,934	35	3,302,937	1,739	60,865
March	1,913	1,934	21	3,300,055	1,725	36,225
April	1,916	1,934	18	3,304,942	1,725	31,050
May	1,913	1,934	21	3,307,589	1,729	36,309
June	1,938	1,934	(4)	3,316,560	1,711	(6,844)
July	1,928	1,934	6	3,337,956	1,731	10,386
August	1,937	1,934	(3)	3,334,991	1,722	(5,166)
September	1,968	1,934	(34)	3,307,362	1,681	(57,154)
October	1,923	1,934	11	3,288,857	1,710	18,810
November	1,929	1,934	5	3,328,017	1,725	8,625
December	1,949	1,934	(15)	3,331,323	1,709	(25,635)
Total	23,115		93	39,652,985		161,167

[1] Per Book by Rate Schedule Page 9

[2] Using polynomial Quartic 24 month regression

DUKE ENERGY CAROLINAS

Calculation of Customer Growth Adjustment to KWHs
Twelve Months Ended December 31, 2012
South Carolina Retail

GENERAL TS
Schedule 83

	Number of Customers					
Month	Actual # of Customers [1]	Projected [2]	Increase (Decrease)	KWH Consumption [1]	Average Per Customer	Increase (Decrease) in KWh
January	1,419	1,467	48	208,290	147	7,056
February	1,423	1,467	44	183,106	129	5,676
March	1,424	1,467	43	187,414	132	5,676
April	1,421	1,467	46	193,663	136	6,256
May	1,417	1,467	50	183,141	129	6,450
June	1,423	1,467	44	197,006	138	6,072
July	1,427	1,467	40	195,487	137	5,480
August	1,441	1,467	26	194,881	135	3,510
September	1,430	1,467	37	196,669	138	5,106
October	1,428	1,467	39	190,810	134	5,226
November	1,439	1,467	28	198,663	138	3,864
December	1,471	1,467	(4)	207,613	141	(564)
Total	17,163		441	2,336,743		59,808

1 Per Book by Rate Schedule Page 10
2 Using Polynomial Quartic 12 month regression

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense

Test Period Ended December 31, 2012
Docket E-7, Sub 1033

Year 2012	AC- Energy	AC- Capacity	North Carolina AC- Energy	North Carolina AC- Capacity	NC Retail MWH Sales	Total sales from fuel report less intersystem	% of NC to total sales from fuel report	Plant allocator NC	Plant allocator Resid	General	Industrial
January	$ (236,971)	$ (38,781)	(161,383)	(26,411)	4,696,133	6,895,691	68.10%	0.00%	46.04%	37.53%	16.43%
February	$ (168,871)	$ (27,734)	(115,822)	(19,022)	4,471,304	6,519,271	68.59%	0.00%	46.04%	37.53%	16.43%
March	$ (218,661)	$ (35,918)	(150,554)	(24,731)	4,225,513	6,137,030	68.85%	0.00%	46.04%	37.53%	16.43%
April	$ (220,235)	$ (38,158)	(149,473)	(25,898)	4,010,671	5,909,384	67.87%	0.00%	46.04%	37.53%	16.43%
May(1)	$ (198,242)	$ (32,688)	(134,038)	(22,101)	4,082,258	6,037,638	67.61%	0.00%	46.04%	37.53%	16.43%
June	$ (196,371)	$ (32,383)	(133,287)	(21,980)	4,696,516	6,919,337	67.88%	0.00%	46.04%	37.53%	16.43%
July	$ (150,373)	$ (24,834)	(102,813)	(16,980)	5,356,807	7,834,783	68.37%	0.00%	46.04%	37.53%	16.43%
August	$ (144,778)	$ (21,982)	(100,076)	(15,195)	5,440,542	7,870,768	69.12%	0.00%	46.04%	37.53%	16.43%
September	$ (173,415)	$ (28,550)	(119,583)	(21,784)	4,959,528	7,192,113	68.96%	76.30%	43.28%	38.06%	18.66%
October	$ (227,572)	$ (37,482)	(155,052)	(28,599)	4,052,001	5,947,190	68.13%	76.30%	43.28%	38.06%	18.66%
November	$ (179,071)	$ (29,504)	(121,143)	(22,511)	4,169,014	6,162,548	67.65%	76.30%	43.28%	38.06%	18.66%
December	$ (118,150)	$ (19,565)	(80,608)	(14,928)	4,395,620	6,442,815	68.23%	76.30%	43.28%	38.06%	18.66%
Total	$ (2,232,710)	$ (367,579)	(1,523,832)	(260,138)	54,555,907	79,868,568	68.31%				

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of Duke Energy Carolinas, LLC's Supplemental Testimony of Robert J. Duncan, II and Revised Smith Exhibits and Workpapers in Docket No. E-7 Sub 1033 has been served by electronic mail (e-mail), hand delivery, or by depositing a copy in the United States Mail, first class postage prepaid, properly addressed to the parties of record.

This, the 3rd day of June, 2013.

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