

INFORMATION SHEET

**OFFICIAL COPY**

PRESIDING: Chairman Finley and Commissioners Beatty, Bailey, Dockham Patterson & Gray  
PLACE: Dobbs Building, Raleigh, NC  
DATE: July 18, 2016  
TIME: 2:00 p.m. – 5:20 p.m.  
DOCKET NO.: E-2, Sub 1095, E-7, Sub 1100 and G-9, Sub 682  
COMPANY: Duke Energy Corporation and Piedmont Natural Gas Company, Inc.  
DESCRIPTION: Application to Engage in Business Combination Transaction and Address Regulatory Conditions and Codes of Conduct.  
VOLUME: 1

APPEARANCES

**FILED**

**JUL 26 2016**

Clerk's Office  
N.C. Utilities Commission

**DUKE ENERGY CORPORATION:**

Lawrence B. Somers, Esq.  
Kodwo Ghartey-Tagoe, Esq.

**FOR PIEDMONT NATURAL GAS COMPANY, INC.:**

James H. Jeffries, IV, Esq.

**FOR NORTH CAROLINA WASTE AWARENESS AND REDUCTION NETWORK and THE CLIMATE TIMES:**

John D. Runkle, Esq.

**FOR FAYETTEVILLE PUBLIC WORKS COMMISSION:**

James P. West, Esq.

**FOR CAROLINA UTILITY CUSTOMERS ASSOCIATION, INC.:**

Robert F. Page, Esq.

**FOR ENVIRONMENTAL DEFENSE FUND:**

Tatjana Vujic, Esq.

**FOR THE USING AND CONSUMING PUBLIC:**

Antoinette R. Wike, Esq.  
Elizabeth D. Culpepper, Esq.

WITNESSES

Ruth Zalph  
Beth Henry  
Clint McSherry  
Dr. Steve English  
Thomas E. Skains

John Wagoner  
Catherine Chandler  
Hope Taylor  
Emily Wilkins

Dr. Steven Norris  
Andrew Hernandez  
Dr. Richard Fireman  
Lynn J. Good

EXHIBITS

Fireman Exhibit Number 1 (I)

Application of Duke Energy Corporation and Piedmont Natural Gas, Inc., and Exhibits A, B, C and D (A)  
Agreement and Stipulation of Settlement Between The Applicants and The Public Staff, as amended (A)  
Agreement and Stipulation of Settlement Between The Applicants and CUCA (A)  
Agreement and Stipulation of Settlement Between The Applicants and Environmental Defense Fund (A)  
NC WARN Good/Skains Cross-Exhibit 1 (A)

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COPIES ORDERED: E-mail: Somers, Jeffries, Runkle, West, Wike and Culpepper  
Paper: Finley (Kim made copy)

REPORTED BY: Kim Mitchell

TRANSCRIPT PAGES: 169

TRANSCRIBED BY: Kim Mitchell

PREFILED PAGES: 27

DATE TRANSCRIBED: July 22, 2016

TOTAL PAGES: 142

NORTH CAROLINA UTILITIES COMMISSION  
APPEARANCE SLIP

DATE 7/18/16 DOCKET #: E-2, Sub 1095;  
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APPEARING FOR: Carolina Utility Customers Association, Inc.

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

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# NORTH CAROLINA UTILITIES COMMISSION

## APPEARANCE SLIP

DATE 7/18/16 DOCKET #: C-2, Subs 1095, et al  
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 FIRM NAME Duke Energy Corporation  
 ADDRESS P.O. Box 1551, Nclet 20  
 CITY Charlotte ZIP 27602

APPEARING FOR: Duke Energy Corp.

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

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Email:

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bo.somers@duke-energy.com

Signature:

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# NORTH CAROLINA UTILITIES COMMISSION

## APPEARANCE SLIP

G-9, SUB 682

DATE July 18, 2016 DOCKET #: E-2, SUB 1095, E-7, Sub 1100  
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 CITY CHARLOTTE NC 28202

APPEARING FOR: DUKE ENERGY CORPORATION

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

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NORTH CAROLINA UTILITIES COMMISSION  
APPEARANCE SLIP

DATE 7/18/16 DOCKET #: G-9, SUB 682  
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APPEARING FOR: PIGMY NATURAL GAS

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

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NORTH CAROLINA JUDICIAL COMMISSION  
APPEARANCE SHEET

DATE 7/10/16

DOCKET #:

G-9 Sub 682  
E2 Sub 1095 / E7 Sub 1100

NAME AND TITLE OF APPEARER

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FIRM NAME

Attorney at Law

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APPEARING FOR: NCWARR, The Climate Trust,

& NC Housing Coalition

APPLICANT

COMPLAINANT

INTERVIEWER

PROSECUTOR

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John Pankle

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# NORTH CAROLINA UTILITIES COMMISSION APPEARANCE SLIP

DATE: 07/18/2016 DOCKET #: 15-2,551,095 R-7,846,110  
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APPEARING FOR:

APPLICANT	COMPLAINANT	RESPONDENT	DEFENDANT
			✓

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NORTH CAROLINA UTILITIES COMMISSION  
APPEARANCE SLIP

DATE 7-18-16 DOCKET #: E-2, SUB 1095  
E-7, SUB 1100  
G-6, SUB 682  
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SOUTHEAST  
CLEAN  
ENERGY

APPEARING FOR: ENVIRONMENTAL DEFENSE FUND

APPLICANT	COMPLAINANT	INTERVENER <u>X</u>
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Signature of Public Staff Member

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PUBLIC STAFF - APPEARANCE SLIP

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PUBLIC STAFF MEMBER Elizabeth D. Culpepper

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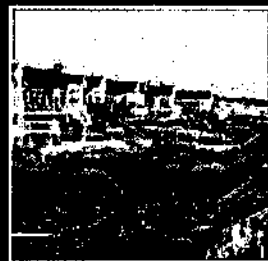
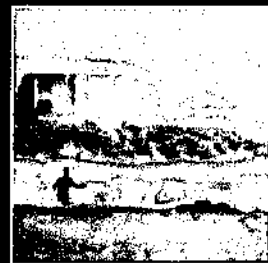
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Elizabeth D. Culpepper

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# Impacts of Global Warming on North Carolina's Coastal Economy



## Key Findings

Global warming is projected to have significant impacts on North Carolina coastal resources as sea level rises and hurricanes become more intense. Extensive development in the coastal zone in recent decades has put more people and property at risk for these impacts.

In this context, a scientific study was undertaken by researchers at four North Carolina universities to consider three important aspects of the coastal economy and their vulnerability to a changing climate: the impacts of sea-level rise on the coastal real estate market, the impacts of sea-level rise on coastal recreation and tourism, and the impacts of stronger tropical storms and hurricanes on business activity.

The study used a range of moderate assumptions, not best- or worst-case scenarios. Its focus was only the specific economic impacts mentioned above, and as such, it does not attempt to provide a comprehensive analysis of all potential impacts, such as the possible loss of species or the natural ecosystems in which they live. This brief summary brochure is designed to present the main findings of the study in plain language for the benefit of the public and policy makers. The full technical report can be obtained at:

### Global warming will result in

#### Sea-level rise

Billions in lost property values  
Large losses in recreational benefits  
Complete loss of many beaches

#### Hurricane intensity increases

Losses due to business interruptions  
Increasing agricultural losses  
Greater damage to forests  
Increasing commercial fishing losses

## Sea-level Rise and Coastal Inundation

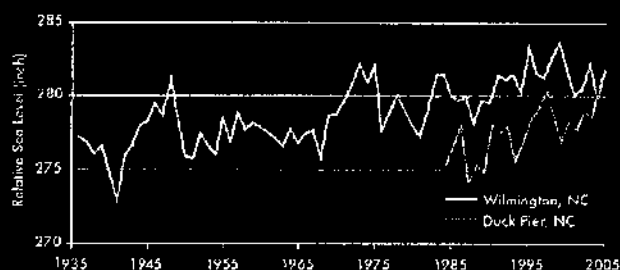


A one-foot rise in sea level can cause the inland movement of the shoreline by 2,000 to 10,000 feet when the land is as flat as the North Carolina coast.

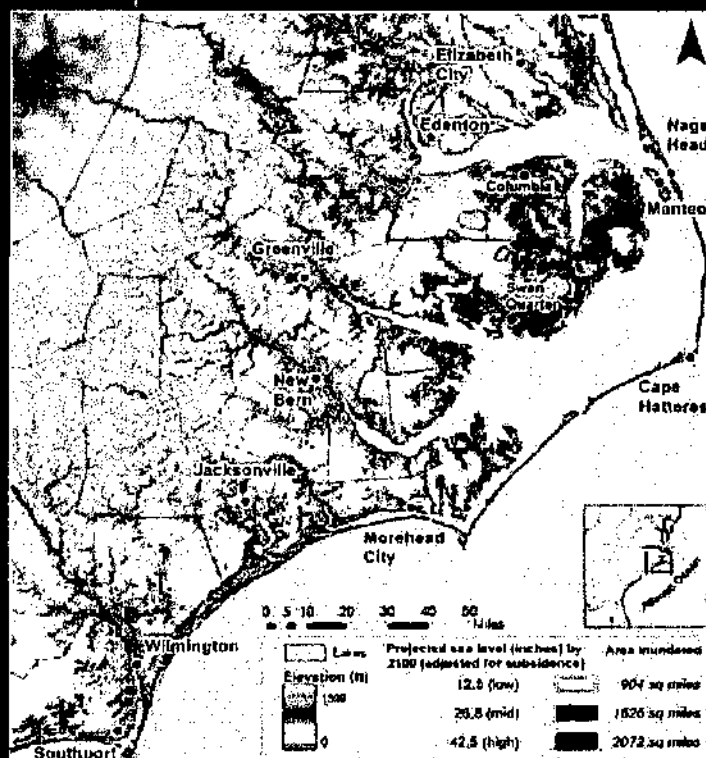
The North Carolina coast is particularly vulnerable to sea-level rise for several reasons: the land has very little slope, meaning that even small increases in sea level result in a wide expanse of coastal land being inundated and lost. In addition, while sea level is rising globally due to warming, the coastal land in this area is slowly sinking due to tectonic forces, so the relative sea-level rise is larger here than in places where the coastline is stable or rising. Thus the current rate of sea-level rise in this area is about twice the global average.

Global warming causes sea level to rise for several reasons. First, as water warms it expands, taking up more space. Second, as mountain glaciers around the world melt, this water flows to the oceans. And third, the two large polar ice sheets on Greenland and Antarctica are now melting, although how much and how fast they will melt is not well known. Thus current projections of future sea-level rise don't fully account for changes in the large ice sheets, and future sea-level rise could be greater than the assumptions used in this study.

## Observed Rates of Sea-level Rise along the North Carolina Coast



## Land in Red is at Risk of Loss Due to Sea-level Rise by 2100



The sea-level rise projections for this area range from about one to three feet within this century, with additional increases later.

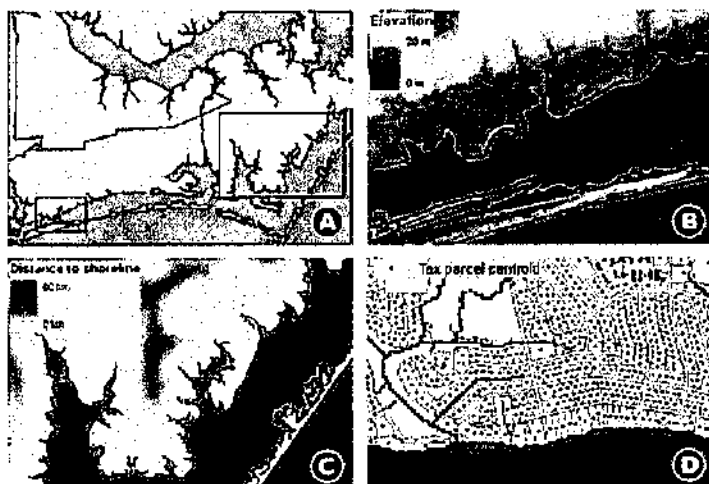
# Sea-level Rise



## Property Losses

1. The value of property at risk to sea-level rise in just four counties over the next 75 years is \$6.9 billion.
2. Projected losses in residential property values vary by county, with the northern counties comparatively more vulnerable than the southern. The property at risk in Dare County ranges from 2% to 12% of the total property value.

### Property Value Data for Carteret County



Carteret County (a), lidar elevation surface (b), distance to shoreline (c), and tax parcel centroids (d).

New Hanover, Dare, Carteret, and Bertie Counties were chosen for this analysis because they represent a cross-section of the NC coast geographically and in terms of development. Three of these are also the three most populous counties on the NC coast.

## Recreation and Tourism

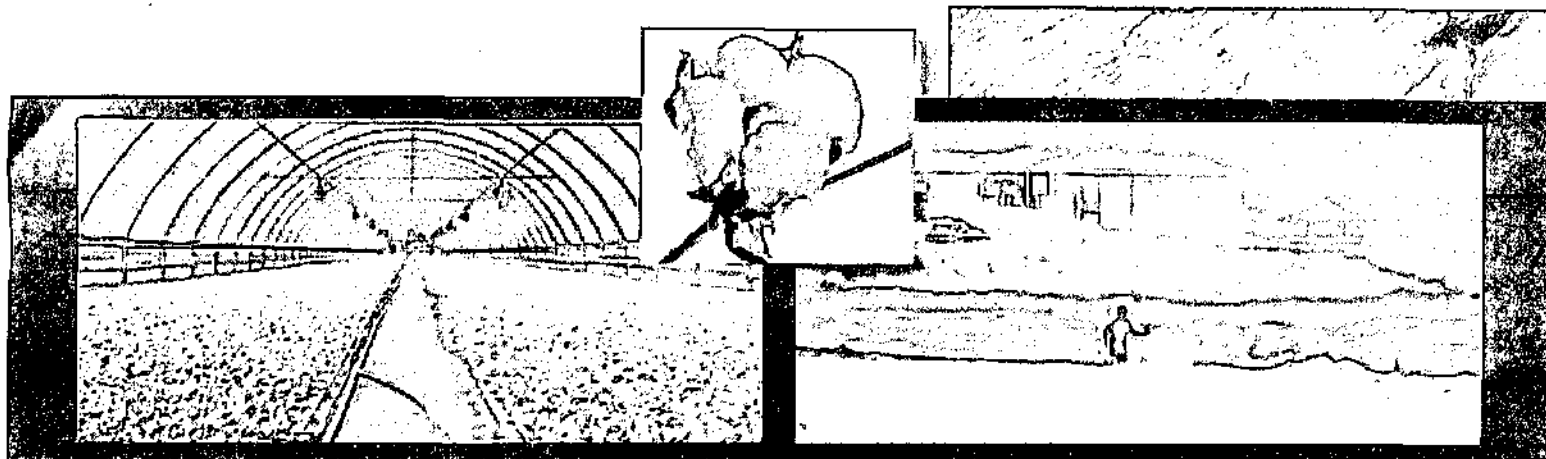
3. The lost recreation value of climate change-induced sea-level rise to local beach goers is projected to be \$93 million a year by 2030 and \$223 million a year by 2080 for the southern North Carolina beaches.
4. Spending by non-local North Carolina residents on beach trips would fall significantly with warming-induced sea-level rise, dropping by 16% per year by 2030 and by 48% per year by 2080.
5. Reduced opportunities for beach trips and fishing trips are projected to result in lost recreational benefits totaling \$3.9 billion for the southern North Carolina beaches over the next 75 years.

Only the southern NC counties of Brunswick, New Hanover, Pender, Onslow, and Carteret were considered in the beach recreation analysis, due to data limitations.

### Projected Changes in Beach Width for the Southern NC Beaches

By 2080, 14 of the 17 recreational swimming beaches in southern NC are projected to have eroded all the way to the road, making beach recreation no longer possible.

Beach	Average width (in feet) in each year		
	2004	2030	2080
Fort Macon	90	40	0
Atlantic Beach	135	85	0
Pine Knoll Shores	110	60	0
Indian Beach/Salter Path	90	40	0
Emerald Isle	130	80	0
North Topsail Beach	82	32	0
Surf City	90	40	0
Topsail Beach	110	60	0
Wrightsville Beach	160	110	3
Carolina Beach	185	135	28
Kure Beach	130	80	0
Fort Fisher	400	350	243
Caswell Beach	80	30	0
Oak Island	120	70	0
Holden Beach	90	40	0
Ocean Isle Beach	85	35	0
Sunset Beach	115	65	0



## Business, Agriculture, and Forests

**6.** Increased hurricane intensity will interrupt businesses, reducing economic output to varying degrees, depending on location and the severity of warming. Business interruption losses in just four NC counties due to increases in category 3 hurricane severity (excluding increases in all other categories) are projected to rise by \$34 million per storm in 2030, and by \$157 million per storm in 2080. Assuming no increase in hurricane frequency, the projected cumulative losses from 2004 to 2080 due to increased category 3 severity in these four counties amount to \$1.44 billion.

**7.** Increasing storm intensity is expected to have serious impacts on agriculture. A category 1 hurricane now causes about \$50 million in agricultural damage, a category 2, about \$200 million, and a category 3, about \$800 million, illustrating how significant an increase in hurricane intensity would be for this sector.

**8.** Increased forest damage associated with an increase in storm severity from category 2 to category 3 is about 150% per storm event, or about \$900 million more in damages.

The four counties (New Hanover, Dare, Carteret, and Bertie Counties) selected for the hurricane intensity analysis represent a range of geographic location and urbanization intensity. Changes among low-intensity hurricane categories were identified as the most likely impacts of climate change on storm intensity. Although low-intensity storms cause less physical damage than do high-intensity storms, low-intensity storms occur with much greater frequency, especially in North Carolina; thus, their cumulative economic impacts can be very large.

### Impacts of Increased Storm Severity on NC Timber Damage (2004 dollars)

Hurricane Category	NC Statewide Forest Acres Damaged	NC Statewide Timber Damage Losses
2	0.8 million acres	\$0.6 billion
3	8.3 million acres	\$1.5 billion

### Impacts of Increased Storm Severity on Agricultural Damages Per Hurricane, 1996–2006

Storm Category	NC Statewide Totals (2004 dollars)
Tropical Storm	\$53,695,368
Category 1	\$32,878,317
Category 2	\$208,558,508
Category 3	\$837,822,329

As hurricanes increase in intensity, average damages rise.



**This study was conducted by:**

**Okmyung Bin, Department of Economics, East Carolina University, Greenville, NC**

**Chris Dumas, Department of Economics and Finance, University of North Carolina at Wilmington**

**Ben Poulter, Duke University, Nicholas School of the Environment and Department of Global Change and Natural Systems, Potsdam Institute for Climate Impact Research, Germany**

**John Whitehead, Department of Economics, Appalachian State University, Boone, NC**

**For further information about the research, contact John Whitehead <[whiteheadj@appstate.edu](mailto:whiteheadj@appstate.edu)> or Ben Poulter <[ben.poulter@pik-potsdam.de](mailto:ben.poulter@pik-potsdam.de)>**

**This research was supported by a grant from the National**

## RIMS 2016: Sea Level Rise Will Be Worse and Come Sooner

Think sea level rise will be moderate and something we can all plan for? Think again.

Sea levels could rise by much more than originally anticipated, and much faster, according to new data being collected by scientists studying the melting West Antarctic ice sheet – a massive sheet the size of Mexico.

That revelation was made by an official with the National Oceanic and Atmospheric Administration on Tuesday at the annual RIMS conference for risk management and insurance professionals in San Diego, Calif.

The conference is being attended by more than 10,000 people, according to organizers. It was day No. 3 of the conference, which ends Wednesday.

Margaret Davidson, NOAA's senior advisor for coastal inundation and resilience science and services, and Michael Angelina, executive director of the Academy of Risk Management and Insurance, offered their take on climate change data in a conference session titled "Environmental Intelligence: Quantifying the Risks of Climate Change."



Davidson said recent data that has been collected but has yet to be made official indicates sea levels could rise by roughly 3 meters or 9 feet by 2050-2060, far higher and quicker than current projections. Until now most projections have warned of sea level rise of up to 4 feet by 2100.

These new findings will likely be released in the latest sets of reports on climate change due out in the next few years.

"The latest field data out of West Antarctic is kind of an OMG thing," she said.

Davidson's purpose was to talk about how NOAA is sharing information with the insurance community and the public, and to explain how data on climate change is being collected.

She explained that reports like those from the Intergovernmental Panel on Climate Change and the National Climate Assessment, which come out roughly every five years, are going on old data.

By the time the scientists compiling those reports get the data it's roughly two years old, because it took those gathering the data that long to collect it. It takes authors of the reports a few years to compile them.

"By the time we get out the report, it's actually synthesizing data from about a decade ago," she said.

Angelina's focus was also on the data. He spoke about the ongoing development of the Actuaries Climate Index and the Actuaries Climate Risk Index.

The goals of the projects are to create climate change indices that reflect an actuarial perspective, to create an index that measures changes in climate extremes, use indices to inform the insurance industry and the public, and promote the actuarial profession by contributing statistically to the climate change debate.

So far their findings show the climate is definitely changing – though neither Davidson nor Angelina addressed the cause of this change, which they said was not the purpose of their talk.

Angelina said a new way of looking at weather is required when dealing with climate change, and that just looking at averages isn't enough to give an accurate picture of climate change and the risk it presents.

The projects he's involved with have instead looked at weather extremes.

"By looking at extremes I can actually acknowledge that I have a problem," he said.

He used the notorious Bell Curve grading system to illustrate his point.

The goal of the curve is to achieve a 70 percent average among students. But if a teacher got to that 70 percent figure by having half the students failing poorly and half doing excellently, there's a problem: half of the students aren't getting it.

Looking at extreme temperature indices from more than 40 years ago and now, "things are different," he said.

So too are days of excessive rain, and excessive dry days, wind power and the sea level index.

"They're all up," he said.

He added: "We're in a different climate. The climate has changed."

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## Climate change puts 1.3bn people and \$158tn at risk, says World Bank

Organisation urges better city planning and defensive measures to defend against rapid rise in climate change-linked disasters

Larry Elliott Economics editor

Monday 16 May 2016 15.00 EDT

The global community is badly prepared for a rapid increase in climate change-related natural disasters that by 2050 will put 1.3 billion people at risk, according to the World Bank.

Urging better planning of cities before it was too late, a report published on Monday from a Bank-run body that focuses on disaster mitigation, said assets worth \$158tn – double the total annual output of the global economy – would be in jeopardy by 2050 without preventative action.

The Global Facility for Disaster Reduction and Recovery said total damages from disasters had ballooned in recent decades but warned that worse could be in store as a result of a combination of global warming, an expanding population and the vulnerability of people crammed into slums in low-lying, fast-growing cities that are already overcrowded.

“With climate change and rising numbers of people in urban areas rapidly driving up future risks, there’s a real danger the world is woefully unprepared for what lies ahead,” said John Roome, the World Bank Group’s senior director for climate change.

“Unless we change our approach to future planning for cities and coastal areas that takes into account potential disasters, we run the real risk of locking in decisions that will lead to drastic increases in future losses.”

The facility’s report cited case studies showing that densely populated coastal cities are sinking at a time when sea levels are rising. It added that the annual cost of natural disasters in 136 coastal cities could increase from \$6bn in 2010 to \$1tn in 2070.

The report said that the number of deaths and the monetary losses from natural disasters varied from year to year, but the upward trend was pronounced.

Total annual damage – averaged over a 10-year period – had risen tenfold from 1976-1985 to 2005-2014, from \$14bn to more than \$140bn. The average number of people affected each year had risen over the same period from around 60 million people to more than 170 million.

Although developed countries have been responsible for the bulk of historic global emissions, poorer countries are more vulnerable to the impact of climate change and they demanded financial help from the west as part of last December’s breakthrough global deal to reduce emissions.

Oxfam this week called on rich countries to make good on the pledges made at the Paris conference to provide the funding to help developing countries adapt to the effects of global warming.

“Climate change is a brutal reality confronting millions of the world’s most vulnerable people. Their need for financial support to adapt to climate extremes is urgent and rising,” Oxfam said in its Unfinished Business report.

“International support for adaptation falls well short of what is needed. Latest estimates indicate that only 16% of international climate finance is currently dedicated to adaptation - a mere \$4bn-\$6bn per year of which is public finance.”

According to the the facility, disaster risk is affected by three factors. It said these were: hazard - the frequency of potentially dangerous naturally occurring events, such as earthquakes or tropical cyclones; exposure - the size of the population and the economic assets located in hazard-prone areas; and vulnerability - the susceptibility of the exposed elements to the natural hazard.

It added that hazard was increasing due to climate change; exposure was going up because more people were living in hazardous areas and that vulnerability was on the rise because of badly designed and poorly planned housing.

The World Bank-run body said the population was expected to rise by at least 40% in 14 of the 20 most populated cities in the world between 2015 and 2030, with some cities growing by 10 million people in that period. “Many of the largest cities are located in deltas and are highly prone to floods and other hazards, and as these cities grow, an ever greater number of people and more assets are at risk of disaster.”

Francis Ghesquiere, head of the secretariat at the The Global Facility for Disaster Reduction and Recovery, said: “By promoting policies that reduce risk and avoiding actions to drive up risk, we can positively influence the risk environment of the future. The drivers of future risk are within the control of decision makers today. They must seize the moment.”

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**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

May 3, 2016

Frank K. Berry  
607 W. Union St.  
Morganton, NC 28655

Re: NCUC Docket Nos. E-2, Sub 1095; E-7, Sub 1100; and G-9,  
Sub 682 – Application of Duke Energy Corporation and Piedmont  
Natural Gas Company, Inc., for Authority to Engage in a Business  
Combination Transaction

Dear Mr. Berry:

Thank you for your letter of April 20, 2016, regarding the proposed merger of Duke Energy Corporation and Piedmont Natural Gas Company. Mr. Ayers has asked me to respond on his behalf.

The Public Staff is responsible for representing consumers in matters before the Utilities Commission affecting public utility rates and service. We have assigned a task force consisting of accountants, engineers, attorneys, and financial analysts to review the proposed merger transaction, including the market power and cost-benefit analyses submitted with the application.

The standard for approval of the merger is that it be found by the Commission to be justified by the public convenience and necessity. This has been held to mean that the transaction will have no adverse impact on the utilities' North Carolina retail ratepayers, that consumers are protected as much as possible from potential costs and risks related to the transaction, and that there are sufficient benefits from the transaction to offset any such costs and risks.

The purpose of the Public Staff investigation is to identify, and to the extent possible quantify, all known and potential benefits, costs, and risks to ratepayers related to the merger and to recommend appropriate regulatory conditions ensure

Executive Director 733-2435	Communications 733-2810	Economic Research 733-2902	Legal 733-6110	Transportation 733-7766
Accounting 733-4279	Consumer Services 733-9277	Electric 733-2267	Natural Gas 733-4326	Water 733-5610

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May 03 2016

Frank K. Berry  
Page Two  
May 3, 2016

that the standard for approval is clearly met before the parties are allowed to proceed with the transaction. You may follow the proceedings on the Commission's website [www.ncuc.net](http://www.ncuc.net) by clicking on "Docket Search" and typing in any one of the docket and sub docket numbers.

Thank you again for taking time to make us aware of your concerns.

Sincerely,

*Tony Wike*

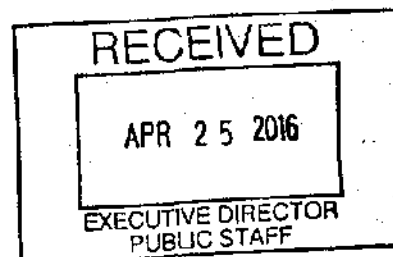
Antoinette R. Wike  
Chief Counsel

cc: Chief Clerk

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May 03 2016

April 20, 2016



Mr. Christopher J. Ayers, Executive Director  
Public Staff—North Carolina Utilities Commission  
4326 Mail Service Center  
Raleigh, NC 27699-4300

RE: Docket No. E2 Sub 1095  
Docket No. E7 Sub 1100  
Docket No. G9 Sub 682

Dear Mr. Ayers,

I am vehemently opposed to Piedmont Natural Gas becoming a "direct, wholly owned subsidiary of Duke." North Carolina is already behind many states that have deregulated electric rates enabling customers to purchase electricity as low as \$.09 per kwh. I currently pay \$.13 to \$.14 per kwh.

To enable Duke to control both these services of energy, electricity and natural gas, would have the potential of further financial increases to customers.

I strongly recommend that you disallow this merger between Duke Energy Corp. and Piedmont Natural Gas.

Sincerely,

A handwritten signature in cursive script, appearing to read "Frank K. Berry".

Frank K. Berry  
607 W. Union St.  
Morganton, NC 28655

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May 03 2016



1A

OFFICIAL COPY

Jan 15 2016

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

**FILED**

DOCKET NO. E-2, SUB 1095  
DOCKET NO. E-7, SUB 1100  
DOCKET NO. G-9, SUB 682

**JUL 26 2016**

Clerk's Office  
N.C. Utilities Commission

In the Matter of	)	
	)	
Application of Duke Energy	)	<b>APPLICATION OF DUKE ENERGY</b>
Corporation and Piedmont Natural	)	<b>CORPORATION AND PIEDMONT</b>
Gas, Inc. to Engage in a Business	)	<b>NATURAL GAS, INC. TO ENGAGE IN</b>
Combination Transaction and	)	<b>A BUSINESS COMBINATION</b>
Address Regulatory Conditions and	)	<b>TRANSACTION AND ADDRESS</b>
Code of Conduct	)	<b>REGULATORY CONDITIONS AND</b>
	)	<b>CODE OF CONDUCT</b>

Duke Energy Corporation ("Duke Energy") and Piedmont Natural Gas Company, Inc. ("Piedmont") (collectively referred to as "the Applicants") hereby apply to the North Carolina Utilities Commission ("the Commission") pursuant to N.C. Gen. Stat. § 62-111(a), Commission Rule R1-5, and Regulatory Condition 9.1<sup>1</sup> for authorization to: engage in a business combination transaction ("Transaction" or "Merger") pursuant to the Merger Agreement attached hereto as Exhibit A ("Merger Agreement"); and revise and apply Duke Energy Carolinas, LLC's ("DEC") and Duke Energy Progress, LLC's ("DEP") Regulatory Conditions and Code of Conduct to Piedmont. In support of this Application, the Applicants show the following:

1. Duke Energy is a corporation organized and existing under the laws of the State of Delaware. Its principal office is located at 550 South Tryon Street, Charlotte, North Carolina 28202, and it is the sole owner of DEC and DEP. DEC and

<sup>1</sup> As approved by the Commission in its June 29, 2012 Order Approving Merger Subject to Regulatory Conditions and Code of Conduct in Docket No. E-2, Sub 998 and E-7, Sub 986. Regulatory Condition 9.1 requires that, for proposed business combinations that will have an Effect on DEC's or DEP's Rates or Service, applications for approval of such business combinations under G.S. §62-111(a) must be filed at least 180 days in advance of the close of the proposed combination.

DEP are electric utilities organized, existing and operating under the laws of the State of North Carolina and are authorized to generate, transmit and distribute electric power in their respective service territories in North Carolina and South Carolina. DEC's service territory in North Carolina and South Carolina encompasses approximately 24,000 square miles, and it serves 2.5 million customers. DEP's service territory in North Carolina and South Carolina encompasses approximately 32,000 square miles, and it serves 1.5 million customers. Duke Energy is also the sole owner of Forest Subsidiary, Inc. ("Forest"), a North Carolina corporation created to accomplish the Transaction. Forest does not provide utility service in North Carolina and is not subject to the jurisdiction of the Commission. Duke Energy's subsidiaries Duke Energy Indiana, LLC, Duke Energy Ohio, LLC ("DEO"), Duke Energy Kentucky, LLC ("DEK"), and Duke Energy Florida, LLC also serve a combined 3.3 million electric customers in their respective territories, and DEO and DEK serve 500,000 retail gas customers.

2. Piedmont is a corporation organized and existing under the laws of the State of North Carolina. Its principal office is located at 4720 Piedmont Row Drive, Charlotte, North Carolina 28210. Piedmont is a natural gas utility authorized to distribute natural gas services to customers in its service territory in North Carolina, South Carolina and Tennessee. Piedmont's service territory in North Carolina and South Carolina encompasses approximately 39,000 square miles, and it serves approximately 1 million customers.

3. The names and addresses of the Applicants' attorneys who are authorized to receive notices and communications with respect to this application are:

Kodwo Ghartey-Tagoe  
Senior Vice President – State and Federal Regulatory Legal Support  
Duke Energy Corporation  
DEC 45A/P.O. Box 1321  
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Charlotte, North Carolina 28202  
Telephone: (704) 331-1079  
Email: jimjeffries@mvalaw.com

#### THE TRANSACTION

4. On or about October 24, 2015, Duke Energy, Forest, and Piedmont entered into an agreement setting forth the terms of the Transaction. A copy of the Merger Agreement is attached to this Application as Exhibit A. The Transaction,

which is explained in detail in a filing with the United States Securities and Exchange Commission<sup>2</sup>, may be fairly summarized as follows:

- a. Forest and Piedmont will merge, with Piedmont being the surviving entity (this surviving entity is referred to herein as New Piedmont);
- b. The articles of incorporation and bylaws of New Piedmont will be in the form of the articles of incorporation and bylaws of Forest prior to the Transaction;
- c. Immediately following the Transaction closing, the directors of New Piedmont will be those persons that were the directors of Forest immediately prior to the Transaction closing. Subsequent to the Transaction closing, changes to the directors of New Piedmont may be made based upon integration efforts and Duke Energy's entity management conventions;
- d. Immediately following the Transaction closing, the officers of New Piedmont will be those persons that were the officers of Piedmont immediately prior to the Transaction closing. Subsequent to the Transaction closing, changes to the officers of New Piedmont may be made based upon integration efforts and Duke Energy's entity management conventions; and
- e. New Piedmont will be a direct, wholly-owned subsidiary of Duke Energy.

---

<sup>2</sup> See <http://www.sec.gov/Archives/edgar/data/78460/000119312515402439/d49546ddefm14a.htm>

5. As provided by the Merger Agreement, upon consummation of the Transaction: (i) each issued and outstanding share of common stock of Piedmont will be converted into and will thereafter represent solely the right to receive an amount in cash; and (ii) each issued and outstanding share of capital stock of Forest will be converted into and become one validly issued, fully paid, and non-assessable share of common stock of New Piedmont. Thus, as a result of the Transaction: (i) Duke Energy (which presently owns all the stock of Forest) will own all the stock of New Piedmont; and (ii) the ownership of stock in Duke Energy will not be impacted.

6. Under the terms of the Merger Agreement, each share of Piedmont's common stock will be converted into the right to receive \$60.00 in cash, without interest and less any applicable withholding taxes. This represents a 42.1% premium over the closing price of Piedmont common stock on October 23, 2015, the last trading day prior to the announcement of the Merger.

7. Duke Energy has agreed, following the Transaction, to expand the size of its board of directors by one seat and has designated Mr. Thomas E. Skains, Chairman, President and Chief Executive Officer ("CEO") of Piedmont to serve as a director on Duke Energy's Board of Directors.<sup>3</sup> Mr. Skains will retire from Piedmont upon the closing of the Transaction. Duke Energy has also agreed to offer to retain Piedmont's existing executive operating management team in order to manage and facilitate best practices within Duke Energy's utility subsidiaries' expanded natural

---

<sup>3</sup> Duke Energy's Board of Directors currently consists of fifteen members. Adding an additional Director as a result of this Transaction would otherwise bring the total board composition to sixteen based upon current count and assuming that the four existing members who are eligible for retirement in 2016 are replaced. If those four Directors who are eligible for retirement are not replaced, the total number of Duke Energy Board positions would be eleven, including Lynn Good, prior to closing of this Transaction. Adding one additional member as a result of this Transaction would thus bring the total composition of the Duke Energy Board of Directors to twelve.

gas operations. Mr. Frank Yoho currently serves as Piedmont's Senior Vice President and Chief Commercial Officer. Following the closing of the Transaction, he will lead Duke Energy's natural gas operations and will report to Duke Energy Chairman, President, and CEO Lynn Good, and be a member of the company's senior management committee. Ms. Good will remain in place and continue to oversee all employees and operations of Duke Energy.

8. At the closing of the Transaction, Piedmont will become New Piedmont, a wholly-owned subsidiary of Duke Energy that will continue to exist as a separate legal entity. New Piedmont will retain its existing headquarters in Charlotte.

#### THE LEGAL STANDARD FOR APPROVAL

9. N.C. Gen. Stat. § 62-111(a) provides that all mergers or combinations affecting a public utility require Commission approval. This statute further provides that the Commission shall determine whether to approve a proposed merger based on whether it is "justified by the public convenience and necessity." In order to assure this standard is met, by order issued November 2, 2000, in Docket No. M-100, Sub 129, the Commission has directed that a market power analysis and a cost-benefit analysis must accompany all natural gas or electric utility merger applications.

10. As explained by the Commission in its Order issued August 29, 1988, in Docket No. E-7, Sub 427 (Order approving Duke Power Company's purchase of Aluminum Company of America's stock interest in Nantahala Power and Light Company), N.C. Gen. Stat. § 62-111 requires the Commission to determine whether rates and service will be adversely affected by a proposed transaction. (Order, p. 7 *citing North Carolina ex rel. Utilities Comm'n. v. Carolina Coach Company*, 269

N.C. 717, 153 S.E.2d 461 (1967)). By Commission Order issued April 22, 1997, in Docket No. E-7, Sub 596 (Order approving the merger of Duke Power Company and PanEnergy Corp.), the Commission similarly explained that for the public convenience and necessity standard to be met, expected benefits must be at least as great as known and expected costs so that customers are not harmed by the merger. Factors to be considered by the Commission include, but are not limited to, maintenance of or improvement in service quality, the extent to which costs can be lowered and rates can be maintained or reduced, and the continuation of effective state regulation.

11. By Order issued December 7, 1999, in Docket No. G-5, Sub 400 (Order approving the merger of SCANA Corporation and Public Service Company of North Carolina, Inc.), the Commission found that N.C. Gen. Stat. § 62-111 does not require that a proposed business combination transaction be based upon demonstrations of specific cost savings. Cost savings are merely one factor that may be considered in evaluating a request to engage in a business combination transaction. Other factors include, but are not limited to, such non-quantifiable benefits as: a larger, more viable, and more financially diverse company with a broader range of assets and increased ability to provide stable and reliable service; a stronger and more diverse company that is able to compete regionally; and a corporation with a strong presence in North Carolina. Corporate presence directly bears on creation of corporate and other taxes payable to the State of North Carolina, and on the provision of significant employment opportunities.

12. Finally, the Commission held in its June 29, 2012 Order Approving Merger Subject to Regulatory Conditions and Code of Conduct in Docket Nos. E-2, Sub 998, and E-7, Sub 986, from the Duke Energy/Progress Energy, Inc. merger, that a proposed business combination is justified by the public convenience and necessity when the merger will have no adverse impact on the utilities' North Carolina retail ratepayers, when the utilities' customers are protected as much as possible from potential costs and risk resulting from the merger, and when there are sufficient benefits from the merger to offset the potential costs and risks. (Order, at p. 108). *Aff'd, In re Duke Energy Corp.*, \_\_ N.C.App. \_\_, 755 S.E.2d 382 (2014)

13. The combination of Duke Energy and Piedmont satisfies the standard of approval that has been articulated and applied by the Commission. As demonstrated below, the combination of the two companies will produce financial benefits arising from the advantages of a larger, more diversified company; will generate direct and immediate operational benefits to customers; will provide additional benefits over time; will retain the strong corporate citizenship and presence of Piedmont in the Carolinas; and will not diminish effective state regulation. A cost-benefit analysis setting forth the costs and benefits of the Transaction is attached as Exhibit B in compliance with the Commission's order issued November 2, 2000, in Docket No. M-100, Sub 129. A Market Power Study, also required by the Commission's November 2, 2000 Order, is attached as Exhibit C.

#### FINANCIAL AND STRATEGIC BENEFITS

14. The acquisition of Piedmont by Duke Energy will produce benefits for customers of Piedmont, DEC, and DEP, as well as benefits for the State of North



Carolina, consistent with past combinations approved by the Commission. New Piedmont will retain its name and operate as a business unit of Duke Energy and continue to maintain its current headquarters office in Charlotte. The size and diversity of the combined company will provide the financial strength to better compete for capital and invest in electric generation and natural gas infrastructure (including additional pipeline assets) in the Carolinas when needed, as well as other necessary modernization of its plant, equipment, infrastructure and service offerings. Regulated utility operations will constitute over 90 percent of the combined company's business, thus enhancing a highly-focused electric and natural gas utility positioned to maximize operational and supply chain efficiencies.

15. Abundant, low-cost natural gas will continue as an increasingly important part of the nation's energy mix, as the transition away from coal generation to cleaner natural gas generation advances. The Transaction provides compelling strategic benefits that will result in a more diversified combined Company, which will be positioned to grow its natural gas platform.

#### DIRECT AND IMMEDIATE OPERATIONAL BENEFITS

16. As set forth above, upon the closing of the Transaction, Mr. Yoho will lead Duke Energy's natural gas operations in the Carolinas, Tennessee, Ohio, and Kentucky and report to Ms. Good. He will be assisted in these efforts by members of Piedmont's existing operational leadership team using the best practices identified during the integration process.

17. DEC and DBP operate six natural gas-fired combined cycle generation plants at five different generation facilities in North Carolina, and DEC and DEP's

2015 Integrated Resource Plan Update Reports filed with the Commission include significant new natural gas-fired generation additions over the planning horizon. These natural gas-fired plants represent an increasingly economical aspect of the diversified generation mix that is a staple of Duke Energy's long-range plans to continue to deliver cleaner, smarter energy solutions that our customers value. By the same token, service to these plants accounts for more than half of Piedmont's annual throughput in North Carolina and South Carolina. The combined ownership and operational control of both electric and gas infrastructure resulting from the Transaction will provide additional opportunities to enhance Duke Energy's experience and skills in the increasingly important areas of natural gas procurement, transportation and pipeline construction, and may provide opportunities to potentially lower DEC and DEP's fuel costs for the benefit of their customers. Ensuring an adequate, reliable and cost-effective supply of natural gas to DEC and DEP to generate electricity for their customers is an important benefit to North Carolina and the utilities' customers. See Order Approving Merger and Issuance of Securities, Docket Nos. E-2, Sub 740, and G-21, Sub 377 (July 13, 1999) at pp.6-8 (order approving DEP's (then Carolina Power & Light Company) acquisition of North Carolina Natural Gas).

18. In addition to the growing need for natural gas to fuel electric generation, the direct use of natural gas will become an even more important energy source based upon the current gas forecasts, the current direction of federal environmental regulations, and customers who will have more options when it comes to energy consumption. The financial benefits to Piedmont from becoming part of the

larger, more diversified Duke Energy, as outlined above, will enable Piedmont to access, on reasonable terms, the capital needed to meet this expected customer growth.

19. The Atlantic Coast Pipeline is an example of new, significant natural gas infrastructure investment that is part of a growing national trend responding to ample regional natural gas supply. The combined Duke Energy and Piedmont will be well positioned for a future that may require additional natural gas infrastructure and services to meet the needs of our customers, including additional upstream infrastructure and services.

20. The largely overlapping service areas of DEC, DEP, and Piedmont in the Carolinas create the potential for more efficient and reliable operations of both electric and gas utility facilities. The Transaction will facilitate the seamless provision of energy services (gas and electric) for the utilities' customers, and enhance customer service, safety and reliable operations, which DEC, DEP, and Piedmont put at the forefront of their public utility missions.

21. The Transaction will not have a net adverse impact on the rates and services of DEC, DEP, and Piedmont. Applicants are not seeking to recover the Transaction fees and acquisition premium from customers.

#### FUTURE INTEGRATION BENEFITS

22. Although the Applicants do not expect significant financial synergies to result from the Transaction due to the nature of the business combination, it is anticipated that upon the actual integration of Duke Energy and Piedmont, additional cost savings opportunities will be created. The transition to integration is a

significant undertaking, and these savings will occur over time as a result of the combination and assimilation of some of the companies' supply chain functions and corporate and administrative programs. There will be upfront costs associated with integrating these functions to yield benefits, but customers will enjoy the benefits of these savings, net of the costs to achieve, in future rate proceedings.

23. The cost savings described above do not reflect any savings associated with involuntary workforce reductions. Duke Energy and Piedmont do not anticipate a significant number of involuntary workforce reductions associated with the combination. Some consolidation of overlapping or redundant functions is anticipated, however, and some elimination of functions that are no longer required for New Piedmont as a non-publicly traded company will also occur.

#### CAROLINAS CORPORATE PRESENCE

24. Duke Energy and Piedmont have a long history of strong corporate citizenship and presence in the Carolinas. The Carolinas will continue to benefit from an industry leader headquartered here, as well as the philanthropic, cultural, and civic support associated with a major corporate presence. DEC, DEP, and Piedmont are leaders in economic development for both North Carolina and South Carolina, and these efforts will be continued and enhanced as a result of the Transaction. As part of the Merger Agreement, Applicants have further committed to establish an advisory board for their operations (the "Advisory Board"), which would meet several times a year to receive information and provide feedback on financial and operating results, customer service performance, community and government relations, and economic

development and investment opportunities that affect Duke Energy's and Piedmont's local stakeholders.

25. After the Merger is completed, Duke Energy will continue to be the largest electric power holding company in the United States and will become the 15<sup>th</sup> largest natural gas local distribution company ("LDC"). As the utility industry continues to consolidate in order to achieve many of the advantages described herein, it is much less likely that the resulting company will be acquired by another entity with the risk of corporate headquarters being moved to another region.

EFFECTIVE STATE REGULATION IS NOT DIMINISHED

26. In Docket Nos. E-2, Sub 998 and E-7, Sub 986, the Commission adopted regulatory conditions and Codes of Conduct for DEP and DEC, respectively. The purpose of these regulatory conditions and Codes of Conduct was, among other things, to ensure that the Commission's jurisdiction over DEP and DEC was not diminished, and that the companies' rates and quality of service were not adversely impacted as a result of previous mergers or combinations involving DEP, DEC, and their corporate parents or affiliates, or the establishment of service companies. As explained earlier, upon the completion of the Transaction, Piedmont will become a wholly-owned subsidiary of Duke Energy. Attached to this Application as Exhibit D are DEP's, DEC's, and Piedmont's proposed regulatory conditions and Code of Conduct. The documents have been properly revised to reflect this new affiliation. These revisions will cause New Piedmont and all of its subsidiaries to be treated as "Affiliates" under DEP's and DEC's Commission-approved regulatory conditions and Code of Conduct, and New Piedmont, as appropriate and where applicable, to be

treated the same as DEP and DEC. The proposed regulatory conditions and Code of Conduct attached hereto have also been updated and revised to enable more efficient compliance, as well as to reflect changed conditions and to be consistent with Commission decisions since 2012. Additionally, new affiliate service agreements will be filed as appropriate, as well as updated affiliate services lists.

27. Furthermore, DEP, DEC, and New Piedmont will remain subject to full regulation by the Commission. The Merger in no way diminishes the authority of the Commission to regulate the service quality and rates of any of these companies. Therefore, effective state regulatory oversight of all three utilities will continue.

#### DUKE ENERGY'S ISSUANCE OF SECURITIES

28. N.C. Gen. Stat. § 62-160 through § 62-169 and Commission Rule R1-16 govern the issuance of securities by a public utility. In its June 29, 2012 Order Approving Merger Subject to Certain Regulatory Conditions and Code of Conduct in Docket Nos. E-7, Sub 786 and E-2, Sub 998, the Commission approved certain regulatory conditions pertaining to financings, mergers, acquisitions, or other business combination transactions. In conjunction with this Application, Duke Energy is filing its Request For Expedited Approval of Piedmont Transaction-Related Financing pursuant to Regulatory Conditions 7.6(d) and 9.1, and requests Commission approval of said request within thirty (30) days as set forth more fully in that filing.

#### CONCLUSION

29. Commission approval of the Transaction will produce benefits for customers of Piedmont, DEC, and DEP, as well as benefits for the State of North

Carolina, consistent with past combinations approved by the Commission. The acquisition of Piedmont by Duke Energy at the holding company level will create a financially stronger combined Company and allow DEP, DEC, and Piedmont to more effectively finance the large infrastructure investments required to meet the future energy needs of North Carolina and South Carolina. Solidifying Piedmont's strong corporate presence in North Carolina ensures continued and direct economic benefits to the State including local jobs, salaries, taxes, purchasing, charitable and civic leadership and economic development investments.

30. The revision of Duke Energy's Regulatory Conditions and Code of Conduct to apply to Piedmont will address any affiliate and cost allocation issues associated with the Merger and will ensure the continuation of effective state regulation.

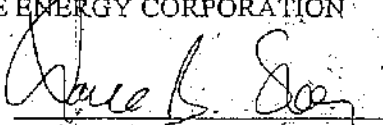
31. Thus, any potential costs and risk resulting from this combination will have been remedied and immediate net benefits to the utilities' customers assured. The acquisition of Piedmont by Duke Energy is justified by the public convenience and necessity for the reasons explained above. The Commission should approve the proposed business combination transaction.

WHEREFORE, Applicants apply to the Commission for approval of the proposed business combination described herein, as well as the revised Duke Energy Regulatory Conditions and Code of Conduct, all in the manner described herein.

Respectfully submitted this the 15<sup>th</sup> day of January, 2016.

DUKE ENERGY CORPORATION

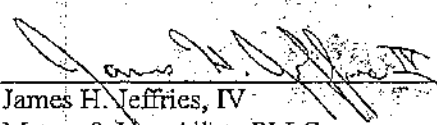
By:

  
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Lawrence B. Somers  
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PIEDMONT NATURAL GAS COMPANY, INC.

By:

  
James H. Jeffries, IV  
Moore & Van Allen, PLLC  
100 North Tryon Street, Suite 4700  
Charlotte, North Carolina 28202

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Jan 15 2016

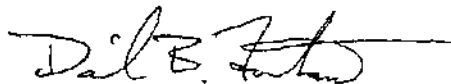


## VERIFICATION

STATE OF NORTH CAROLINA       )  
  )  
COUNTY OF WAKE                    )

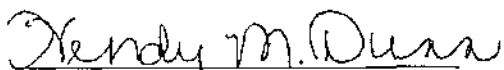
David B. Fountain, being first duly sworn, deposes and says:

That he is Duke Energy's North Carolina President; that he has the authority to verify the foregoing Application of Duke Energy Corporation and Piedmont Natural Gas, Inc. to Engage in a Business Combination Transaction and Address Regulatory Conditions and Codes of Conduct; that he has read this Application and knows the contents thereof; and that the same is true of his own knowledge.



David B. Fountain

Sworn to and subscribed before me  
this 15 day of January, 2016.

  
Notary Public Wendy M. Dunn

expiration date: June 8, 2019



## VERIFICATION

STATE OF NORTH CAROLINA       )  
  )  
COUNTY OF MECKLENBURG       )

Bruce P. Barkley, being first duly sworn, deposes and says:

That he is Vice President – Regulatory Affairs of Piedmont Natural Gas, Inc.; that he has the authority to verify the foregoing Application of Duke Energy Corporation and Piedmont Natural Gas, Inc. to Engage in a Business Combination Transaction and Address Regulatory Conditions and Codes of Conduct; and that the same is true of his own knowledge.

Bruce P. Barkley  
Bruce P. Barkley

Sworn to and subscribed before me  
this 13<sup>th</sup> day of January, 2016.

Jacqueline M. Berry  
Notary Public

Expires: 11/29/2016



/A

(Page 1 of 68  
Filed in the  
Docket system)

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**FILED**

JUL 26 2016

Clerk's Office  
N.C. Utilities Commission

Jan 15 2016

# EXHIBIT A

# MERGER AGREEMENT

# EXHIBIT B

## COST-BENEFIT ANALYSIS

Jan 15 2016

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/A

**Duke Energy Acquisition of Piedmont Natural Gas Company  
Cost-Benefit Analysis**

Page 1

**INTRODUCTION**

The following cost-benefit analysis was developed in relation to Duke Energy's pending merger with Piedmont Natural Gas Company. The analysis documents the expected benefits, detriments, costs and savings associated with the purchase. The information and format of this analysis is consistent with the requirements set forth in Docket No. M-100, Sub 129 dated November 2, 2000.

**ASSUMPTIONS**

The following assumptions were used when developing the cost-benefit analysis:

The analysis identifies future expected benefits, detriments, costs and savings associated with the merger and is subject to change as a result of changes in economic conditions, regulatory orders, management decisions and/or operating conditions that were not known at the time this analysis was developed.

Estimates reflected herein were developed as of December 2015.

The analysis captures incremental benefits and costs resulting from the merger and includes both qualitative and quantitative benefits.

The analysis does not include federal and state income tax ramifications of the transaction.

**COST-BENEFIT ANALYSIS FILING REQUIREMENT**

Docket No. M-100, Sub 129 Ordering Paragraph 2.(a) requires... *"a comprehensive list of all material areas of expected benefits, detriment, cost, and savings over a specified period (e.g. three to five years) following consummation of the merger and a clear description of each individual item in each area."*

Duke Energy and Piedmont provide the following information in response to this requirement:

**Duke Energy Acquisition of Piedmont Natural Gas Company**  
**Cost-Benefit Analysis**

Page 2

**SUMMARY OF PRESENTLY QUANTIFIABLE CUSTOMER COSTS AND BENEFITS**

The following table provides a summary of the anticipated quantifiable costs and benefits applicable to customers with respect to the proposed transaction which have been identified at this time. The integration process currently underway between Piedmont and Duke Energy is anticipated to yield additional economic benefits to customers which have not yet been quantified. Additional on-going, but currently non-quantifiable, customer benefits are discussed in the pages that follow. Customers will not bear any acquisition premium or transaction costs associated with this merger, which shall be paid exclusively by shareholders.

**Quantified Benefits**

1. Piedmont Board Of Directors costs - \$2.1 million annually	
2. CEO compensation costs - \$3.0 million annually	
3. Outside counsel costs - \$0.4 million annually	
4. Outside auditor costs - \$1.0 million annually	
5. Transfer agent costs - \$0.55 million annually	
6. Insurance costs - \$2.3 million annually	
7. Stock listing fee - \$0.1 annually	
	Total Presently Quantifiable Benefits = \$9.45 million annually

**Integration Costs**

1. Integration consultant costs - \$4.75 million, one-time <sup>1</sup>	Total Presently Quantifiable Costs = \$4.75 million, one-time <sup>2</sup>
---	--

<sup>1</sup> Estimated pre-closing fees. Does not reflect all costs to achieve future benefits

<sup>2</sup> Applicants reserve the right to seek to recover integration costs from customers in future cost recovery proceedings to the extent that such costs result in net benefits.

**Duke Energy Acquisition of Piedmont Natural Gas Company  
Cost-Benefit Analysis**

Page 3

**COMPREHENSIVE IDENTIFICATION OF ALL ANTICIPATED MERGER COSTS AND BENEFITS<sup>3</sup>**

ITEM	DESCRIPTION	(BENEFIT) / DETRIMENT
<b>BENEFITS FROM THE MERGER</b> - Merging Piedmont into the family of Duke Energy subsidiaries will create an organization with greater financial strength, greater diversity of resources, reduced economic risks for customers and improved operational efficiencies.		
<b>Increased Financial Strength</b>	The combination of the two companies will increase and strengthen Piedmont's ability to access, on reasonable terms, the capital needed to expand service to new customers and to meet its obligations under federal integrity management regulations.	On-going benefit  <u>Quantification of Benefit</u>  The amount of these benefits to accrue to Duke Energy Carolinas ("DEC"), Duke Energy Progress ("DEP") and Piedmont customers will depend upon numerous factors, including, but not limited to, conditions in the financial markets, and cannot reasonably be quantified at this time.
<b>Reduced Market Risk</b>	The merger will produce a combined gas/electric customer mix that is more tolerant of economic downturns than either individual company. The combined customers from both companies will have greater rate protection since both will become a part of a larger aggregate customer population with shared costs.	On-going benefit  <u>Quantification of Benefit</u>  This benefit is not readily quantifiable but will accrue to DEC, DEP and Piedmont customers.
<b>System Reliability and Efficiencies</b>	Duke Energy is Piedmont's largest customer and is reliant, to a significant degree, on the reliability of natural gas to fuel its already substantial and growing natural gas-fired turbine fleet. Consolidation of ownership and control of both gas and electric infrastructure within a common service territory will create the potential for more efficient and reliable operations of both gas and electric utility facilities. The merger will provide additional opportunities to enhance the combined Duke Energy's experience and skills in the increasingly important areas of natural gas procurement, transportation and pipeline construction, with the commensurate ability to potentially lower DEC and DEP's fuel costs for the benefit of their customers. It should also facilitate the seamless provision of energy services (gas and electric) to the combined	On-going benefit  <u>Quantification of Benefit</u>  This benefit will accrue to the benefit of DEC, DEP and Piedmont customers, but is not readily quantifiable at this time and depends on effective implementation of measures designed to realize the potential efficiencies and enhanced reliability offered by the merger.

<sup>3</sup> Including quantifiable customer costs and benefits from the table above.

**Duke Energy Acquisition of Piedmont Natural Gas Company  
Cost-Benefit Analysis**

Page 4

ITEM	DESCRIPTION	(BENEFIT) / DETRIMENT
	companies' utility customers. Additionally, it will enhance customer service, and the safety and reliability of service provided by both companies. Finally, it will potentially enhance long-term planning and coordination of construction of natural gas infrastructure serving all customers (including power plants).	
<b>Impact on Access to Upstream Gas Supply and Capacity</b>	The proposed merger will also create the potential to enhance the procurement of additional upstream interstate pipeline capacity on a more efficient basis in order to meet the combined needs of Duke Energy's electric and natural gas customers as well as Piedmont's natural gas customers.	<p>On-going Benefit</p> <p style="text-align: center;"><u>Quantification of Benefit</u></p> <p>This benefit is not quantifiable at this time but to the extent it is realized, the customers of DEC, DEP and Piedmont will be the primary beneficiaries through lower upstream demand/fuel costs.</p>

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# Duke Energy Acquisition of Piedmont Natural Gas Company Cost-Benefit Analysis

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ITEM	DESCRIPTION	(BENEFIT) / DETRIMENT
Utility Governance and Operations	<p>Duke Energy and Piedmont are in the early stages of examining the potential benefits of the integration of Piedmont into the Duke Energy family of companies. Both Duke Energy and Piedmont are experienced utility providers in North Carolina and other states and have duplicative systems and practices that have the potential to be synchronized and optimized in a post-merger environment. Such synchronization and optimization should result in both qualitative and quantitative benefits to customers by improving the provision of services by both companies and by reducing costs associated with more efficient operations. The merger also presents the opportunity to consolidate systems and processes between Piedmont and Duke Energy's existing LDC operations in Ohio and Kentucky which should also result in operational best practices and economic efficiencies.</p> <p>Duke Energy has in place the corporate and administrative functions necessary to support many of the functions now performed by Piedmont. These functions include, but are not limited to, strategic planning, treasury, finance, tax, accounting, legal, investor relations, human resources, information technology and public relations. Duke Energy believes that the incremental costs of absorbing these redundant activities will be significantly less than the cost of Piedmont providing these services on a stand-alone basis.</p> <p>In addition, the integration of certain programs will provide economies of scale in areas such as shareholder services, fleet management, travel programs, supply chain, facilities management, security, insurance, advertising, professional services, payroll and benefits plan administration, and credit facilities, among others. Also, future operational expenditures in the area of information systems, which each company would otherwise make on a standalone basis, should be combined and more efficiently applied to a larger customer base.</p>	<p>On-going benefit</p> <p><u>Quantification of Benefit</u></p> <p>Anticipated Piedmont savings identified to date of (\$9.45 million) include:</p> <ol style="list-style-type: none"> <li>1. Board Of Directors costs - \$2.1 million annually</li> <li>2. CEO compensation costs - \$3.0 million annually</li> <li>3. Outside counsel costs - \$0.4 million annually</li> <li>4. Outside auditor costs - \$1.0 million annually</li> <li>5. Transfer agent costs - \$0.55 million annually</li> <li>6. Insurance costs - \$2.3 million annually</li> <li>7. Stock listing fee - \$0.1 million annually</li> </ol>
Maintenance of Piedmont Corporate Presence in North Carolina	<p>The proposed merger will continue to maintain Piedmont's corporate headquarters and presence in Charlotte, North Carolina. This is a direct benefit to the State and to the localities where Piedmont's offices, equipment and employees are located. These benefits include the positive direct economic effect of rents, salaries, taxes, purchasing, and charitable contributions but also include indirect benefits such as continued civic engagement and the maintenance of Piedmont's existing brand. This is a benefit to the Commission and to the Company's customers through</p>	<p>On-going benefit</p> <p><u>Quantification of Benefit</u></p> <p>Piedmont's corporate headquarters rental payments are in the range of \$4 million annually and its annual charitable donations to the communities and organizations in North Carolina are approximately \$1.5 million as of the most recent year.</p>

# Duke Energy Acquisition of Piedmont Natural Gas Company

## Cost-Benefit Analysis

Page 6

ITEM	DESCRIPTION	(BENEFIT) / DETRIMENT
	enhanced responsiveness and sensitivity to local and state issues and priorities, including economic development and the expansion of gas infrastructure. In addition, the implementation of the Advisory Board called for in the Merger Agreement will benefit the communities in which Duke Energy and Piedmont operate by providing additional input for corporate management.	
<b>Enhanced Ability to Facilitate Infrastructure Expansion</b>	In order to facilitate economic growth and the attraction of new businesses to North Carolina, business development entities and local governments must coordinate the availability of a full panoply of utility and infrastructure services. Currently, Duke Energy and Piedmont have distinct policies and practices regarding their ability to extend infrastructure to under-developed areas of the State. Under a merged company, the ability to coordinate the extension of gas and electric infrastructure would be simpler and more coherent thereby increasing the opportunity to achieve such expansions.	On-going benefit  <u>Quantification of Benefit</u>  This benefit is not presently quantifiable, but will accrue to the benefit of DEC, DEP and Piedmont customers.
<b>No Change in Rates, Charges or Terms and Conditions of Service</b>	Although Duke Energy and Piedmont believe that the proposed merger will provide most or all of the benefits identified above, it is important to note that the merger will not result in any increase to rates or charges or changes in terms or conditions of service pursuant to which Duke Energy Carolinas, Duke Energy Progress and Piedmont currently provide service to customers in the North Carolina. Any such changes proposed in the future would, of course, be subject to the direct supervisory authority of the NCDUC. Based on this fact alone, it is clear that the proposed merger will have no detrimental impact on customers in North Carolina, irrespective of the various benefits listed above.	Present Benefit, no detriment to customers  <u>Quantification of Benefit</u>  There is no detriment to customers because Duke Energy and Piedmont will not pass along to customers the acquisition premium and transaction costs set forth below.

**Duke Energy Acquisition of Piedmont Natural Gas Company  
Cost-Benefit Analysis**

Page 7

**ONE-TIME TRANSACTION RELATED COSTS TO BE BORNE BY APPLICANTS AND NOT CUSTOMERS**

ITEM	DESCRIPTION	(BENEFIT) / DETRIMENT
Transaction Fees	There will be one-time costs associated with this transaction. Examples of these costs include investment banker fees, transaction costs related to security issuances, legal, accounting and advisory fees.	One-time cost absorbed by Duke Energy and Piedmont. <u>Quantification of (Benefit) / Detriment</u> These costs are currently estimated at \$125 million.
Acquisition Premium over Book Value	Excess of purchase price (market value) over book value of assets.	One-time cost absorbed by Duke Energy. <u>Quantification of (Benefit) / Detriment</u> Approximately \$3.4 billion as of October 31, 2015. This amount represents a total enterprise acquisition premium spread across all of Piedmont's businesses and jurisdictions rather than a North Carolina only premium.

/A

(pg. 1 of 49  
filed in the  
docket system)  
(confidential  
pages filed  
under seal.)

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Jan 15 2016

## EXHIBIT C

# MARKET POWER REPORT

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(page 1 of  
63 pages  
added in  
the docket  
system)

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Jan 15 2016

## EXHIBIT D

# PROPOSED REGULATORY CONDITIONS

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**FILED**

**JUL 26 2016**

Clerk's Office  
N.C. Utilities Commission

**SETTLEMENT AGREEMENT**

This settlement agreement is entered into this 13<sup>th</sup> day of June, 2016 by and among Duke Energy Corporation ("Duke Energy"), Piedmont Natural Gas Company, Inc. ("Piedmont"), their public utility subsidiaries Duke Energy Carolinas, LLC ("DEC"), and Duke Energy Progress, LLC ("DEP") (collectively, the Applicants) and the Carolina Utility Customers Association, Inc. ("CUCA") (collectively, the "Settling Parties").

WHEREAS, Duke Energy and Piedmont have filed for North Carolina Utilities Commission approval of a business combination in Docket Nos. E-2, Sub 1095, E-7, Sub 1110, and G-9, Sub 682 (the Docket);

WHEREAS, CUCA has intervened in the Docket and raised questions regarding the risks and benefits of the proposed business combination to its members; and

WHEREAS, having determined that the proposed business combination of Duke Energy and Piedmont is in the public interest and should be approved, CUCA and the Applicants now desire to resolve and settle all issues presented in the Docket.

NOW, THEREFORE, for and in consideration of the foregoing, the mutual commitments and promises set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Settling Parties hereby agree to resolve all issues among them regarding the Docket on the following terms:

1. DEC and DEP guarantee that their North Carolina retail customers will receive their allocable shares of an additional \$35 million in fuel and fuel-related cost savings achieved by DEC and DEP over and above the amount DEC and DEP are obligated to provide to them pursuant to the North Carolina Utilities Commission *Order Approving Merger Subject to Regulatory Conditions and Code of Conduct* issued June 29, 2012, in Docket Nos. E-2, Sub 998, and E-7, Sub 986 ("Duke-Progress Merger Order") and Duke Energy was ordered to guarantee in the December 12, 2012 *Order Approving Settlement Agreement and Closing Investigation* in Docket No. E-7, Sub 1017. The additional \$35 million in fuel and fuel-related costs savings will be achieved on or before

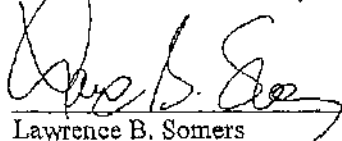
December 31, 2017; however, such period shall be further extended by an additional 18 months if the conditions outlined in the Stipulation approved by the Duke-Progress Merger Order occur. The total cumulative amount of guaranteed fuel and fuel-related costs savings from the Duke-Progress Merger and this Settlement Agreement is seven hundred twenty-one million, eight hundred thousand dollars (\$721,800,000).

2. The Applicants and CUCA will support this Settlement Agreement and use their best efforts to implement and achieve its provisions.
3. This Settlement Agreement shall be binding upon the parties upon the execution hereof but its substantive terms shall be effective only upon both the approval of the Settlement Agreement, in its entirety, by the Commission and the closing of the Merger contemplated in the Docket. In the event one or both of these conditions fail to occur, the Settling Parties agree that the Stipulation shall not be binding upon the Settling Parties.
4. CUCA waives its rights to cross-examine the Applicants' witnesses with respect to their pre-filed testimony and exhibits and agree to stipulate into the record the Applicants' pre-filed direct and any rebuttal testimony without objection. If questions should be asked on cross-examination by an intervenor who is not a party to this agreement or a member of the Commission, the Applicants and CUCA reserve the right to present testimony and exhibits to respond to such questions and cross-examine any witnesses with respect to such testimony and exhibits, provided that such testimony, exhibits, and cross-examination are not inconsistent with this Settlement Agreement.

IN WITNESS WHEREOF, the Parties have signed and executed as of the date set forth above.

DUKE ENERGY CORPORATION, DUKE ENERGY CAROLINAS, LLC  
and DUKE ENERGY PROGRESS, LLC

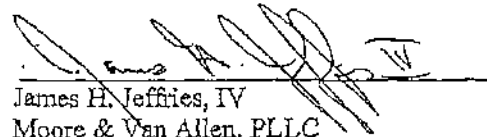
By:



Lawrence B. Somers  
Deputy General Counsel

PIEDMONT NATURAL GAS COMPANY, INC.

By:



James H. Jeffries, IV  
Moore & Van Allen, PLLC  
Attorney for Piedmont Natural Gas Company

CAROLINA UTILITY CUSTOMERS ASSOCIATION, INC.

By:



Sharon C. Miller  
Executive Director

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Jun 14 2016



## SETTLEMENT AGREEMENT

This settlement agreement is entered into this 20<sup>th</sup> day of June, 2016 by and among Duke Energy Corporation ("Duke Energy"), its public utility subsidiaries Duke Energy Carolinas, LLC ("Duke Energy Carolinas"), and Duke Energy Progress, LLC ("Duke Energy Progress"), and Piedmont Natural Gas Company, Inc. ("Piedmont") (collectively, the "Applicants") and the Environmental Defense Fund ("EDF") (collectively, the "Settling Parties").

WHEREAS, Duke Energy and Piedmont have filed for North Carolina Utilities Commission approval of a business combination in Docket Nos. E-2, Sub 1095, E-7, Sub 1110, and G-9, Sub 682 (the Docket);

WHEREAS, EDF has intervened in the Docket and raised questions how the proposed business combination could impact Duke Energy's use of voltage optimization in Duke Energy Carolinas and Duke Energy Progress' service territories; and

WHEREAS, having determined that the proposed business combination of Duke Energy and Piedmont is in the public interest and should be approved, EDF and the Applicants now desire to resolve and settle all issues presented in the Docket.

NOW, THEREFORE, for and in consideration of the foregoing, the mutual commitments and promises set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Settling Parties hereby agree to resolve all issues among them regarding the Docket on the following terms:

1. Duke Energy will complete a cost-benefit analysis for a broad deployment of Integrated Volt-Var Control in its Duke Energy Carolinas territory, similar to the deployment plan that Duke Energy developed for its Duke Energy Indiana territory. Additionally, the Company will perform a cost-benefit analysis for the Duke Energy Progress Distribution System Demand Response (DSDR) program to evaluate the expansion of Integrated Volt-Var Control beyond

current peak demand reductions such that Integrated Volt-Var Control includes conservation voltage reduction and balancing of grid management and customer reliability requirements. Duke Energy will provide the cost-benefit estimates in the October 2018 North Carolina Smart Grid Technology Plan filing.

2. The Applicants and EDF will support this Settlement Agreement and use their best efforts to implement and achieve its provisions.
3. This Settlement Agreement shall be binding upon the parties upon the execution hereof but its substantive terms shall be effective only upon both the approval of the Settlement Agreement, in its entirety, by the Commission and the closing of the Merger contemplated in the Docket. In the event one or both of these conditions fail to occur, the Settling Parties agree that the Stipulation shall not be binding upon the Settling Parties.
4. EDF agrees to withdraw the pre-filed direct testimony of Diane Munns. EDF waives its rights to cross-examine the Applicants' witnesses with respect to their pre-filed testimony and exhibits and agrees to stipulate into the record the Applicants' pre-filed direct and any supplemental or rebuttal testimony without objection and agrees to represent to the Commission that this Settlement Agreement is designated to resolve the issues raised by EDF in this proceeding. If questions should be asked on cross-examination by an intervenor who is not a party to this agreement or a member of the Commission, the Applicants and EDF reserve the right to present testimony and exhibits to respond to such questions and cross-examine any witnesses with respect to such testimony and exhibits, provided that such testimony, exhibits, and cross-examination are not inconsistent with this Settlement Agreement.

IN WITNESS WHEREOF, the Parties have signed and executed as of the date set forth above.

**DUKE ENERGY CORPORATION, DUKE ENERGY CAROLINAS, LLC  
and DUKE ENERGY PROGRESS, LLC**

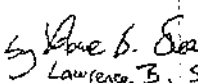
By: 

Lawrence B. Somers  
Deputy General Counsel

**PIEDMONT NATURAL GAS COMPANY, INC.**

By: 

James H. Jeffries, IV  
Moore & Van Allen, PLLC  
Attorney for Piedmont Natural Gas Company

(by  w/permission)  
Lawrence B. Somers

**ENVIRONMENTAL DEFENSE FUND**

By: 

John Finnigan  
Lead Attorney