PUBLIC VERSION

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

APPLICATION FOR AUTHORIZATION OF DISPOSITION OF JURISDICTIONAL ASSETS AND MERGER UNDER SECTIONS 203(a)(1) and 203(a)(2) OF THE FEDERAL POWER ACT

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Pursuant to Sections 203(a)(1) and 203(a)(2) of the Federal Power Act ("FPA") and Part 33 of the Regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), Duke Energy Corporation ("Duke Energy") and Progress Energy, Inc. ("Progress Energy") (collectively, with their public utility subsidiaries, "Applicants"),[1] hereby submit their application ("Application") for the approval for a transaction, described in detail below, pursuant to which Progress Energy will become a wholly-owned subsidiary of Duke Energy and the former shareholders of Progress Energy will become shareholders of Duke Energy (the "Transaction"). Concurrently with this Application, Applicants are making two related filings under Section 205 of the FPA: (1) a Joint Open Access Transmission Tariff ("Joint OATT") pursuant to which the Applicants will provide transmission service in the Carolinas and in Florida at non-pancaked rates; and (2) a Joint Dispatch Agreement, pursuant to which Duke Energy Carolinas, LLC and Progress Energy Carolinas, Inc. will jointly dispatch

[1] In addition, all subsidiaries of Duke Energy and Progress Energy that are public utilities subject to the Commission's jurisdiction also request the Commission's approval of the Transaction pursuant to FPA Section 203 to the extent such approval is required. These subsidiaries are identified in Section II and Exhibit B of this Application.

their generation fleets in order to operate their systems more economically for the benefit of their customers.

As explained below, the proposed Transaction meets the Commission's standards for determining when a transaction is consistent with the public interest. As a result, Applicants request that the Commission issue an order approving the Transaction on or before July 31, 2011.

I. INTRODUCTION

The Transaction, when completed, will permit the Applicants to achieve a number of benefits for customers:

- Fuel and related variable operation and maintenance ("O&M") savings, which have been estimated to be approximately $360 million over the time period 2012-2016, will be achieved by jointly dispatching the combined generation fleets of Duke Energy and Progress Energy in North Carolina and South Carolina. The fuel portion of these savings will flow through to retail and wholesale requirements customers through operation of the Applicants' fuel adjustment clauses.

- Additional fuel savings beyond those achieved by joint dispatch are anticipated as the merged company utilizes best practices for fuel procurement and use, including transportation services, coal purchasing and blending practices, purchases of reagents used for emissions reduction, and combining duplicative fuel-related functions.

- Utility subsidiaries of the merged company will provide transmission in North Carolina, South Carolina, and Florida pursuant to a Joint OATT that will eliminate transmission rate pancaking for transmission customers in these states.

- It is anticipated that upon the actual integration of Duke Energy and Progress Energy and their service companies, 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 the companies' information technology systems, supply chain functions, generation operations, corporate and administrative programs, and inventories.

- The combined company will be stronger financially and will have enhanced access to capital. This will strengthen the Applicants' ability to make the planned new capital investments that are necessary to replace soon to be retired resources, meet load growth and improve environmental performance, thereby increasing the Applicants' ability to serve their customers in an efficient, reliable and environmentally responsible fashion. This benefit is especially important because both companies have embarked upon

aggressive construction programs to replace or modernize old coal units with new cleaner generation.

- Although the merged company will be large compared to other U.S. electric utilities, this size enables the merged company to achieve important scale and scope efficiencies. It is a fact that the U.S. electric utility industry, for historic reasons, has been highly fragmented. Utilities in other parts of the world that have not been subject to similar constraints are significantly larger than the largest U.S. utilities, including the combined Duke/Progress. *See* Appendix 3. These foreign utilities and their customers have benefited from the economies of scale made possible by their size. The Transaction will make it possible for the Applicants and their customers to realize similar benefits.

Many of the benefits enabled by this Transaction are enhanced by the close proximity of the Applicants' utility operations in the Carolinas. The Applicants recognize, however, that the same proximity that enhances merger benefits may, at first blush, raise concerns about the competitive effects of the Transaction. Upon closer scrutiny, however, the Transaction will not adversely affect competition in retail or wholesale markets, and instead will benefit both retail and wholesale customers.

The Transaction does not affect retail competition for the simple reason that there is no retail competition in either North Carolina or South Carolina. The Applicants are legally obligated to serve all retail load located in their service territories.[2]

Turning to the Transaction's affect on wholesale competition, Progress Energy has exited the unregulated wholesale merchant business and has divested all of its generation that is not used to serve its retail and wholesale requirements loads, while Duke Energy does not have any merchant generation located in the Carolinas.[3] The Applicants' competition analysis presented with this Application confirms that no competitive issues are raised by the Transaction.

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[2] There are no current or foreseeable plans to consider retail competition in either state.

[3] A subsidiary of Duke Energy indirectly owns three solar qualifying facilities ("QFs") located in the Carolinas which collectively produce a total of 7 MW (net) capacity, all of which is dedicated to sales under long-term contracts.

Focusing on the Available Economic Capacity measure of capacity—which is the measure that the Commission has found to be applicable to transactions in states where there is no retail competition and no organized wholesale markets—the Applicants' analysis identifies no systematic competitive concerns raised by the Transaction.[4] The combination of the two companies simply does not increase the market concentration to any material degree.

Moreover, data regarding the Applicants' sales over the last three years confirms the competition analysis and demonstrates that the Applicants make only negligible sales to third parties in each other's balancing authority areas (or "BAAs"). Indeed, only 0.007% of Duke Energy Carolinas' sales in 2008-2010 were made to third-party customers in the Progress Energy Carolinas market, and the Progress Energy Carolinas' sales to such customers in the Duke Energy Carolinas market in the 2008-2010 time frame was even less, only 0.003% of Progress Energy Carolinas' total sales.[5]

In sum, the Transaction will allow the Applicants to achieve significant benefits for their customers and to make needed capital investments at lower costs. These consumer benefits will be achieved without harm to competitive wholesale markets. Consequently, the Commission should issue an order approving the Transaction as consistent with the public interest without conducting an evidentiary hearing.

II. DESCRIPTION OF THE APPLICANTS

A. Duke Energy

Duke Energy, a Delaware corporation, is a public utility holding company headquartered in Charlotte, North Carolina. Together with its subsidiaries, Duke Energy is a diversified energy

[4] *See* discussion in Section IV.A, below.

[5] For further explanation and illustration, see *infra*, pages 28-30.

company with both regulated and unregulated utility operations. Duke Energy supplies, delivers and processes energy for customers in the U.S. and selected international markets. A list of Duke Energy's energy subsidiaries and affiliates is attached as Exhibit B-1.

1. Duke Energy Operating Companies

Duke Energy's regulated utility operations consist of its U.S. franchised electric and gas segment, which serves approximately 4 million customers located in five states in the Southeast and Midwest regions of the United States, representing a population of approximately 11 million people. The U.S. franchised electric and gas segment consists of regulated generation, electric and gas transmission and distribution systems. The segment's generation portfolio includes a mix of energy resources with different operating characteristics and fuel sources.

In its electric operations, Duke Energy owns approximately 27,000 megawatts of generating capacity and has a service area of approximately 50,000 square miles. Duke Energy subsidiaries also sell electricity wholesale to incorporated municipalities and to public and private utilities. Duke Energy's gas operations include regulated natural gas transmission and distribution with approximately 500,000 customers located in southwestern Ohio and northern Kentucky.

Duke Energy has four subsidiaries that are regulated electric utility operating companies: Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or "DEC"), Duke Energy Indiana, Inc. ("Duke Energy Indiana" or "DEI"), Duke Energy Ohio, Inc. ("Duke Energy Ohio" or "DEO"), and Duke Energy Kentucky, Inc. ("Duke Energy Kentucky" or "DEK") (collectively, the "Duke Energy Operating Companies").[6] In addition to electric power, DEO and DEK also distribute

[6] Prior to the merger of Duke Energy and Cinergy in 2006, these entities had been doing business as Duke Power, a division of Duke Energy Corporation in the Carolinas; The

and sell natural gas in Ohio and Kentucky, respectively. The Duke Energy Operating Companies and their jurisdictional affiliates are authorized to sell power at market-based rates, with the exception of sales within the Duke Energy Carolinas BAA.[7] Only DEO operates in a state that has implemented retail competition (Ohio), as described in more detail below.

DEC: Duke Energy Carolinas, a wholly-owned subsidiary of Duke Energy, is a vertically-integrated electric utility that generates, transmits, distributes, and sells electricity to approximately 2.4 million customers within its franchised service territory in North Carolina and South Carolina. Retail service provided by Duke Energy Carolinas is subject to the regulatory jurisdiction of the North Carolina Utilities Commission ("NCUC") and the Public Service Commission of South Carolina ("PSCSC"). Duke Energy Carolinas' sales of wholesale energy and capacity and its provision of open-access transmission service are subject to the jurisdiction of the Commission. Duke Energy Carolinas is also authorized to sell energy, capacity and ancillary services at market-based rates outside of the DEC BAA.[8]

DEI: Duke Energy Indiana is a vertically-integrated electric utility that generates, transmits, distributes, and sells electricity to approximately 780,000 customers within its

(continued)
Cincinnati Gas & Electric Company in Ohio; The Union Light, Heat and Power Company in Kentucky; and PSI Energy, Inc. in Indiana.

[7] *See Duke Power, a Div. of Duke Energy Corp.*, 111 FERC ¶ 61,506 (2005) ("*Duke Power*"); *see also Duke Power*, 113 FERC ¶ 61,192 (2005), *order approving settlement*, 115 FERC ¶ 61,042 (2006) (approving cost-based rates for wholesale sales within the Duke Power control area). DEC's baseline electric market-based rate tariff was accepted by Letter Order on October 26, 2010 in Docket No. ER10-2566-000. DEI, DEK, and DEO's baseline market-based rate tariffs were accepted by Letter Order on October 22, 2010 in Docket Nos. ER10-2034-000 (DEI), ER10-2032-000 (DEK), and ER10-2033-000 (DEO).

[8] *See Duke Power*, 111 FERC ¶ 61,506 at PP 59-61.

franchised service territory in central, north central and southern Indiana. Duke Energy Indiana is a wholly-owned indirect subsidiary of Duke Energy and is regulated by the Indiana Utility Regulatory Commission and this Commission. Duke Energy Indiana is authorized to sell wholesale power at market-based rates.[9]

DEO: Duke Energy Ohio, an indirect wholly-owned subsidiary of Duke Energy, is a combination electric and gas public utility company that generates, transmits, distributes and sells electricity at retail and wholesale, and distributes and sells natural gas at retail in southwestern Ohio. Its retail electric and natural gas distribution operations are regulated by the Public Utilities Commission of Ohio ("PUCO"). Under Ohio's restructuring statute, which initiated retail electric competition starting in 2001, DEO's retail customers have the legal right to purchase power from Competitive Retail Electric Service providers. DEO has market-based rate authority, and has received waiver of the Commission's affiliate restrictions.[10]

DEK: DEO also is the direct parent of Duke Energy Kentucky, which operates in northern Kentucky. Duke Energy Kentucky's principal lines of business include generation, transmission, distribution and sale of electricity, and the sale and transportation of natural gas. Duke Energy Kentucky's retail electric operations are subject to the jurisdiction of the Kentucky Public Service Commission ("KPUC"). Duke Energy Kentucky has been authorized to sell wholesale power at market-based rates.[11]

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[9] *See Cincinnati Gas & Elec. Co.*, 113 FERC ¶ 61,197 (2005) ("*Cincinnati Gas & Electric*").

[10] *Id.; Cinergy Corp.*, 128 FERC ¶ 61,102 (2009).

[11] *See Cincinnati Gas & Electric*, 113 FERC ¶ 61,197

DEO and DEK have proposed to withdraw their transmission assets from the Midwest Independent Transmission System Operator, Inc. ("MISO") and join PJM Interconnection, L.L.C. ("PJM") as of January 1, 2012.[12] Approximately 5,000 MW of generation owned by DEO and DEK is proposed to "move" from the MISO market to the PJM market as part of the integration into PJM. Duke Energy also currently owns some capacity in PJM.

2. Commercial Power

Duke Energy's commercial power segment owns, operates and manages power plants, primarily located in the Midwest region of the United States in the footprints of the MISO and the PJM regional transmission organizations. Duke Energy Retail Sales, LLC ("DERS"), a subsidiary of Duke Energy and part of the commercial power segment, serves retail electric customers in Ohio with generation and other energy services. The commercial power segment also includes Duke Energy Generation Services, Inc. ("DEGS"), an on-site energy solutions and utility services provider. The commercial power segment owns and operates a generation portfolio of approximately 7,550 net megawatts of power generation, excluding wind assets. The commercial power segment includes Duke's unregulated Midwest generation reporting unit.

Ohio initiated retail electric competition in 2001. DEO's retail customers have the legal right to purchase power from Competitive Retail Electric Service ("CRES") providers. Effective January 1, 2009, approximately half of Commercial Power's Ohio-based generation assets operate under an Electric Security Plan ("ESP") that expires on December 31, 2011. Competitive markets allow Duke Energy's native load customers in Ohio to switch generation suppliers.

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[12] *Duke Energy Ohio, Inc.*, 133 FERC ¶ 61,058 (2010) (conditionally accepting the realignment proposal), *reh'g denied*, 134 FERC ¶ 61,235 (2011).

a. Duke Energy Retail Sales, LLC

DERS is an indirect, wholly-owned subsidiary of Duke Energy. DERS serves retail electric customers in the southwest, west central and northern portions of Ohio with generation and other energy services at competitive rates. DERS is certified by the PUCO as a CRES provider in Ohio. DERS owns no generation or transmission facilities but engages in the purchase and sale of physical and financial positions in the wholesale power market, including purchases from DEO, in support of its retail sales effort.

b. Duke Energy Generation Services, Inc.

DEGS is a non-regulated affiliate of Duke Energy and a leader in developing innovative renewable energy solutions, including wind, solar and biopower projects. DEGS has approximately 735 MW of wind power in commercial operation (as of December 31, 2009), more than 5,000 MW of wind energy projects in the development pipeline, and has committed more than $1 billion to its wind power business since its launch in 2007.

DEGS also builds, owns and operates electric generation for large energy consumers, municipalities, utilities and industrial facilities. DEGS manages 6,300 MW of power generation at 21 facilities in the United States. DEGS also has created solar photovoltaic, biomass, energy storage and a commercial transmission business.

c. Midwest Generation

Duke's unregulated Midwest generation reporting unit includes about 4,000 MW of coal-fired generation plants that currently are dedicated to Duke Energy Ohio customers, and about 3,600 MW of gas-fired plants located in Ohio, Pennsylvania, Illinois, and Indiana that serve unregulated energy markets in the Midwest.

3. Duke Energy International, LLC and its Affiliates

Duke Energy International owns, operates and manages power generation facilities and engages in sales and marketing of electric power and natural gas outside the U.S., targeting power generation in Latin America. Duke Energy's international segment owns, operates or has substantial interests in approximately 4,000 net megawatts of generation.

4. Diamond Acquisition Corporation

Diamond Acquisition Corporation ("Diamond Acquisition") is a North Carolina corporation and a wholly-owned subsidiary of Duke Energy. Diamond Acquisition was formed on January 6, 2011, for the purpose of effecting the merger. Diamond Acquisition has not conducted any activities other than those incidental to its formation and the matters contemplated in the merger agreement.

B. Progress Energy

Progress Energy is a North Carolina corporation, headquartered in Raleigh, N.C. Together with its subsidiaries, Progress Energy owns about 22,000 megawatts of generation capacity and has approximately $10 billion in annual revenues. Progress Energy owns, directly or indirectly, all of the common stock of its two major electric utility subsidiaries and varying percentages of other non-regulated subsidiaries. A list of Progress Energy's energy subsidiaries and affiliates is attached as Exhibit B-2.

1. Progress Energy Operating Companies

Progress Energy's two major electric utility subsidiaries, Carolina Power & Light Company, d/b/a/ Progress Energy Carolinas, Inc. ("PEC") and Florida Power Corporation, d/b/a/ Progress Energy Florida, Inc. ("PEF") (together, the "Progress Energy Operating Companies"), serve about 3.1 million customers in the Carolinas and Florida.

The Progress Energy Operating Companies are authorized to sell power at market based rates, with the exception of (i) sales within their respective BAAs in the Carolinas ("CPLW" and "CPLE"); and (ii) sales within Peninsular Florida.[13] In addition to FERC jurisdiction, the Progress Energy Operating Companies are subject to the rules and regulations of the NCUC, PSCSC, and the Florida Public Service Commission ("FPSC"). Neither of the Progress Energy Operating Companies operates in states that have implemented retail competition.

PEC: PEC is a vertically integrated electric utility organized in North Carolina. PEC's retail service area spans about 34,000 square miles and includes much of the eastern half of North Carolina, the northeastern quadrant of South Carolina and the Asheville area in western North Carolina. In the Carolinas, the company maintains more than 70,000 miles of distribution and transmission lines providing service to approximately 1.5 million customers.

PEF: PEF is a vertically integrated electric utility organized in Florida. PEF's retail service area in Florida spans about 20,000 square miles in central Florida, including metropolitan St. Petersburg, Clearwater and the greater Orlando area. In Florida, the company maintains more than 35,000 miles of distribution and transmission lines serving approximately 1.6 million customers.

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[13] *See Fla. Power Corp.*, 113 FERC ¶ 61,131 at P 17 (2005); *De Soto County Generating Co.*, 106 FERC ¶ 61,100 at P 8 (2004); *Carolina Power & Light Co.*, 82 FERC ¶ 61,004 (1998); *Fla. Power Corp.*, 79 FERC ¶ 61,385 (1997). As an affiliate of PEF, PEC is also mitigated in the same areas as PEF. PEF has market-based rate authority for sales outside of peninsular Florida. *Fla. Power Corp.*, 79 FERC ¶ 61,385. PEC and PEF's baseline market-based rate tariffs were accepted by Letter Order on August 25, and September 2, 2010 in Docket Nos. ER10-1760-000 and ER10-1758-000, respectively.

III. DESCRIPTION OF THE TRANSACTION

A. The Merger Agreement

The terms and conditions of the Transaction are set forth in the Agreement and Plan of Merger, dated as of January 8, 2011, by and among Duke Energy Corporation, Diamond Acquisition Corporation and Progress Energy, Inc. (the "Merger Agreement"). A copy of the Merger Agreement is included with this Application at Exhibit I. Under the terms of the Merger Agreement, and subject to regulatory approvals and the satisfaction of certain obligations of the parties, Diamond Acquisition ("Merger Sub"), a wholly-owned direct subsidiary of Duke Energy, will merge with and into Progress Energy and each share of Progress Energy common stock will be cancelled and converted into the right to receive 2.6125 shares of Duke Energy common stock, subject to certain adjustments. Progress Energy will be the surviving corporation of the merger between it and Merger Sub and will thereby become a wholly-owned subsidiary of Duke Energy; the former shareholders of Progress Energy will become shareholders of Duke Energy. Attached as Exhibit C-3 is a chart showing the post-Transaction organizational structure of Duke Energy.

Based on the closing price of Duke Energy common stock on the New York Stock Exchange on January 7, 2011, the last trading day before the public announcement of the Merger Agreement, Progress Energy shareholders would receive a value of approximately $46.48 per share, or $13.7 billion in total equity value.

Duke Energy also will assume approximately $12.2 billion in Progress Energy net debt. Following completion of the merger, officials anticipate Duke Energy shareholders will own approximately 63 percent of the combined company and Progress Energy shareholders will own approximately 37 percent on a fully diluted basis.

As part of the Transaction, Duke Energy's board of directors approved a reverse stock split. The reverse stock split would become effective if and at the time the merger is completed, at a ratio of 1:3. A reverse stock split reduces the number of outstanding shares in proportion to the split ratio. By reducing the number of shares outstanding, the reverse stock split will ensure that Duke Energy will have enough shares authorized for issuance to Progress Energy shareholders in the merger. The 2.6125 exchange ratio will be adjusted to reflect the expected reverse stock split.

When the Transaction is completed, the Merger Agreement provides that Duke Energy will have an 18 member board of directors. Duke Energy expects that each of its 11 current directors of Duke Energy will continue as directors, subject to such individual's ability and willingness to serve. Progress Energy expects that seven of the current directors of Progress Energy will serve on the board of directors of Duke Energy, similarly subject to such individual's ability and willingness to serve.

B. Related Filings

Applicants are making two related Section 205 filings concurrently with the Application. These filings are summarized below.

1. The Joint OATT

The Joint OATT will apply to transmission service over the transmission facilities of Duke Energy Carolinas, Progress Energy Carolinas, and Progress Energy Florida. The most important feature of the Joint OATT is that it will eliminate any potential rate pancaking and will allow transmission services to be obtained over the transmission systems of these companies at

non-pancaked rates. The Joint OATT maintains each company's existing rates as zonal rates.[14] The charge paid by transmission customers will be the applicable rate in the zone where the energy being transmitted exits the Applicants' system, *i.e.* the zone where the energy is either consumed or is transmitted through an interface to another transmission system.[15]

2. The Joint Dispatch Agreement

The Joint Dispatch Agreement will be between Duke Energy Carolinas and Progress Energy Carolinas and will provide for the joint dispatch of their generation resources upon consummation of the Transaction. Energy transfers between the two companies will be priced such that the companies share the cost savings achieved as a result of the joint dispatch in proportion to the amount of generation run by each company as part of the joint dispatch.

Duke Energy Carolinas and Progress Energy Carolinas have made certain commitments to the NCUC regarding filings with this Commission that involve a transfer of control of, or operational responsibility for, Duke Energy Carolinas and Progress Energy Carolinas. Consistent with those commitments, the Applicants request that the Commission include language in its approval to the effect that, if the Joint Dispatch Agreement creates any such transfer and the value of such transfer needs to be established for retail ratemaking purposes, then this Commission's approval of the Application in no way affects the right of the NCUC to

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[14] The zonal rate for Duke Energy Carolinas is based on the recent filing made in Docket No. ER11-2895-000, which the Commission has not yet acted upon. To the extent that the Commission requires any changes to the rates filed in Docket No. ER11-2895-000, those changes automatically would apply to the Duke Energy Carolinas zonal rate in the Joint OATT.

[15] To the extent that a transaction involves transmitting energy from one zone, through the transmission system of a third party or parties, and back into a different zone, the only charge would be the charge applicable to the second zone, that is, the zone where the energy is either consumed or is transmitted through an interface to another transmission system.

review and determine the value of such transfer for purposes of determining the rates for services rendered to Duke Energy Carolinas' and Progress Energy Carolinas' North Carolina retail customers.

IV. THE TRANSACTION IS CONSISTENT WITH THE PUBLIC INTEREST

Section 203(a)(4) of the FPA provides that "the Commission shall approve the proposed disposition . . . if it finds that the proposed transaction will be consistent with the public interest."[16] The Applicants need not show that a transaction positively benefits the public interest, but rather simply that it is "consistent with the public interest," *i.e.*, that the transaction does not harm the public interest.[17]

Proposed mergers are subject to the analysis set forth in the Commission's Merger Policy Statement. In determining whether a proposed disposition of jurisdictional facilities is consistent with the public interest, the Commission evaluates the impacts of the proposed disposition on competition, rates and regulation.[18] When considering impacts on competition, the Commission reviews both horizontal competition issues that may result from increases in concentration in energy and capacity markets and vertical competition issues that may result from increases in the

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[16] 16 U.S.C. § 824b.

[17] *See, e.g., Texas-New Mexico Power Co.*, 105 FERC ¶ 61,028 at P 23 & n.14 (2003) (citing *Pac. Power & Light Co. v. FPC*, 111 F.2d 1014, 1016-17 (9th Cir. 1940)).

[18] *See Inquiry Concerning the Commission's Merger Policy Under the Federal Power Act; Policy Statement*, Order No. 592, FERC Stats & Regs. ¶ 31,044 at 30,111 (1996) ("Merger Policy Statement"), *recons. denied*, Order No. 592-A, 79 FERC ¶ 61,321 (1997) (codified at 18 C.F.R. pt. 2).

ability or incentive to leverage control over other assets, such as electric transmission and natural gas transportation facilities, to enhance revenues in generation markets.[19]

In addition, the Commission also must determine under FPA § 203(a)(4) that a proposed transaction will not result in the cross-subsidization of a non-utility associate company by a traditional utility company, or the pledge or encumbrance of utility assets for the benefit of an associate company, unless that cross-subsidization, pledge, or encumbrance will be consistent with the public interest. The standards for evaluating cross-subsidization issues are set forth in Order Nos. 669, 669-A and 669-B,[20] and were clarified in the Commission's Supplemental Merger Policy Statement.[21]

As demonstrated below, the Transaction satisfies each of these standards. Therefore, the Transaction is consistent with the public interest and should be approved.

A. No Adverse Impact on Competition

1. No Potential for the Exercise of Horizontal Market Power

Although each of the Applicants owns a large amount of generation capacity, the combination of the two companies will not have a significant effect on competition. This is the case for a number of reasons:

- The only region where the Applicants own overlapping generation is in the Carolinas. Duke Energy does have any generation in competition with Progress Energy's significant

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[19] *See Revised Filing Requirements Under Part 33 of the Commission's Regulations*, Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,872 (2000) ("Order No. 642").

[20] *Transactions Subject to FPA Section 203*, Order No. 669, FERC Stats. & Regs. ¶ 31,200 ("Order No. 669"), *order on reh'g*, Order No. 669-A, FERC Stats. & Regs. ¶ 31,214 ("Order No. 669-A"), *order on reh'g*, Order No. 669-B, FERC Stats. & Regs. ¶ 31,225 (2006) ("Order No. 669-B").

[21] *FPA Section 203 Supplemental Policy Statement*, FERC Stats. & Regs. ¶ 31,253 (2007) ("Supplemental Merger Policy Statement").

generation assets located in Florida, and Progress Energy does not have any generation in competition with Duke Energy's significant generation assets located in MISO and PJM.

- Although both Applicants own generation in the Carolinas, the generation capacity owned by each Applicant is devoted almost exclusively to serving the retail and wholesale requirements customers in their respective balancing authority areas.

- Progress Energy has completely exited the competitive wholesale business and has divested the generation previously used by its affiliates to support that business. Duke Energy Carolinas owns no merchant generation in the Carolinas.

- Only a small percentage of Duke Energy Carolinas' total energy generated is used to make wholesale sales to customers other than its native-load wholesale requirements customers. The same is true for Progress.

- Moreover, Duke Energy Carolinas makes negligible wholesale sales to third-party customers in the Progress Energy balancing authority areas and Progress Energy makes negligible wholesale sales to third-party customers in the Duke Energy Carolinas balancing authority area.

In order to confirm the lack of competitive harm resulting from the Transaction, the Applicants have engaged Dr. William Hieronymus to prepare the "Appendix A Analysis," also known as the "Competitive Analysis Screen" required by the Commission's Merger Regulations.[22] Consistent with the Commission's requirement that a forward-looking analysis be performed, Dr. Hieronymus performed an analysis based on projected conditions in 2012, the year in which the Transaction is expected to be consummated. Dr. Hieronymus' analysis, which is attached to this Application as Exhibit J, demonstrates that the combination of the Applicants will not result in adverse competitive effects. The steps performed by Dr. Hieronymus in his analysis are summarized below:

[22] The Appendix A Analysis was first described in the Merger Policy Statement, FERC Stats. & Regs. ¶ 31,044 at 30,130-36. The requirements of the Appendix A Analysis since have been incorporated into the Commission's Merger Regulations at 18 C.F.R. § 33.3.

Identification of Relevant Geographic Markets

The first step in the analysis is to define those geographic markets where the Applicants have overlapping generation, and where horizontal market power potentially could be an issue. The following table shows the markets where each Applicant owns generation, and where their generation ownership overlaps.[23]

Market	Duke Energy (MW)	Progress Energy (MW)
DEC	19,102	0
PEC	0	12,601
PEF	0	9,996
PJM	3,089	0
MISO*	12,408	0
Other	198	0
Total	34,797	22,597

*Approximately 5,000 MW of this generation potentially will be moved to PJM in 2012. The analysis reflects this possibility.

As this table shows, there are no specific markets in which both Applicants own generation, and the only region where there is any overlap is in the Carolinas. Consequently, Dr. Hieronymus focused his analysis on the three balancing authority areas in the Carolinas where the generation owned by the Applicants is located: (1) Duke Energy Carolinas; (2) Progress Energy Carolinas-East; and (3) Progress Energy Carolinas-West.[24] Consistent with the Commission's requirements, Dr. Hieronymus also analyzed each balancing authority area that is directly interconnected with one of these three balancing authority areas, known as "First Tier

[23] PEC's capacity includes some jointly-owned capacity in the Carolinas that it operates on behalf of co-owners that also are its requirements customers.

[24] The Applicants expect that the separate balancing authority areas will be maintained after the consummation of the Transaction, although they will engage in joint dispatch pursuant to the Joint Dispatch Agreement discussed below.

Markets."[25] Dr. Hieronymus also considered the effect of the Transaction in the other markets in which Applicants own generation or historically have sold energy, and concluded that, under the Commission's Merger Regulations, a Competitive Analysis Screen is not required in these markets.[26]

Concentration Analysis

Once the relevant geographic markets have been identified, the Commission's analysis requires the determination of pre- and post-transaction market shares in each such market, from which a Herfindahl-Hirschman Index ("HHI") can be derived. As the Commission stated in its Merger Policy Statement and Order No. 642, an increase in the post-transaction HHI of more than 100 in a moderately concentrated market (HHI from 1000 to 1800) or of more than 50 in a highly concentrated market (HHI above 1800) is considered by the Commission to be a "screen failure" that requires further analysis and potential mitigation.[27] To the extent that HHI increases

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[25] *See* Merger Regulations, 18 C.F.R. § 33.3(c)(2). The two companies share interconnections to five balancing authority areas that thus were analyzed: PJM, South Carolina Public Service Authority (Santee Cooper) ("SC"), South Carolina Electric & Gas Company ("SCEG"), Tennessee Valley Authority ("TVA"), and Southern Company Services, Inc. ("SOCO").

[26] Exhibit J-1 at 55.

[27] *See* Merger Policy Statement, FERC Stats. & Regs. ¶ 31,044 at 30,134. However, the Department of Justice and the FTC have revised their Horizontal Merger Guidelines. *See* DOJ and FTC, *Horizontal Merger Guidelines* (Aug. 19, 2010), http://ftc.gov/os/2010/08/100819hmg.pdf. Among the changes made in the revised guidelines was a change in the HHI thresholds used in evaluating market concentration. The new guidelines define markets with an HHI of less than 1500 as unconcentrated, markets with an HHI between 1500 and 2500 as moderately concentrated, and markets with an HHI above 2500 as highly concentrated. Further, the revised guidelines provide that mergers involving an increase in the HHI of less than 100 points are unlikely to have adverse competitive effects; that mergers in unconcentrated markets are unlikely to have adverse competitive effects; that mergers in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns; and

are lower than the levels described above, or if the post-transaction HHI is unconcentrated (HHI below 1000), then no further analysis is required to determine that the transaction does not raise any competitive issues.[28]

Dr. Hieronymus' analysis derives market shares for each of 10 different load conditions representing expected load levels in the summer, winter, and shoulder time periods. For each of these 10 load conditions, he determined the amount of generation capacity that could be delivered to the market at 105% of the expected market price. The market shares used to derive the HHIs are then based on each owner's share of this calculation of delivered capacity.

Import Assumptions

In order to perform the required market share calculations, it is necessary to consider not only all generation located inside of the balancing area authority being analyzed, but also generation located outside of the balancing area authority that can be imported into the market at the applicable price level. In order to perform this calculation, the Applicants performed studies of the simultaneous import limits ("SILs") for each of the Applicants' three balancing authority

(continued)
that mergers in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns, and that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power. The Commission recently issues a Notice of Inquiry requesting comments as to whether these revised thresholds should be adopted. *See Analysis of Horizontal Market Power under the Federal Power Act*, 134 FERC ¶ 61,191 (2011).

[28] Merger Policy Statement, FERC Stats. & Regs. ¶ 31,044 at 30,119 n.33; Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,896 n.62.

areas being analyzed in detail and also for their First-Tier Markets,[29] based on projected conditions for 2012, the year that Dr. Hieronymus analyzed.

These studies were conducted by the Applicants' transmission employees in a manner broadly consistent with the Commission's guidance in conducting SIL studies in the context of market-based rate proceedings,[30] recognizing that for purposes of this filing, the SIL is based on 2012 projections rather than historical information such as that used in proceedings concerning market-based rate authority. In addition to the SILs, Dr. Hieronymus also considered transmission limits on interfaces between the balancing authority areas being analyzed.

Once the import limits were established, Dr. Hieronymus allocated available import capacity, after accounting for all existing firm reservations, to all potential competing suppliers (including the Applicants) on a pro-rata basis. This is the standard approach taken by Dr. Hieronymus for allocating transmission capacity, and it has been approved by the Commission on a number of occasions.[31]

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[29] The Applicants did not conduct a SIL analysis for PJM, one of the First-Tier Markets. Instead, Dr. Hieronymus relied on a recent SIL analysis conducted in connection with the FirstEnergy-Allegheny merger in Docket No. EC10-68. *See FirstEnergy Corp.*, 133 FERC ¶ 61,222 (2010) ("*FirstEnergy*").

[30] *Market-Based Rates for Wholesale Sales of Elec. Energy, Capacity and Ancillary Servs. by Pub. Utils.*, Order No. 697, FERC Stats. & Regs. ¶ 31,252 at PP 354-62, *order clarifying final rule*, 121 FERC ¶ 61,260 (2007), *order on reh'g and clarification*, Order No. 697-A, FERC Stats. & Regs ¶ 31,268 at PP 142-46, *order on reh'g and clarification*, 124 FERC ¶ 61,055 at P 5, *order on reh'g and clarification*, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 at PP 22-25 (2008), *order on reh'g and clarification*, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), *order on reh'g and clarification*, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305, *order on clarification*, 131 FERC ¶ 61,021, *reh'g denied*, 134 FERC ¶ 61,046 (2010), *reh'g pending* (codified at 18 C.F.R. pt. 35), *appeal docketed sub nom. Mont. Consumer Counsel v. FERC*, Nos. 08-71827, *et al.* (9th Cir. May, 1, 2008).

[31] *See Exelon Corp.*, 112 FERC ¶ 61,011 at P 129, *reh'g denied*, 113 FERC ¶ 61,299 at P 24 & n.30 (2005) (citations omitted).

Measures of Capacity Used in Analysis

As required by the Commission's Merger Regulations, Dr. Hieronymus has performed his analysis using both the Available Economic Capacity ("AEC") and the Economic Capacity ("EC") measures of capacity.[32] However, as the Commission has held on numerous occasions, the AEC measure of capacity is more appropriate for markets where there is no retail competition and no indication that retail competition will be implemented in the near future,[33] while the EC measure is more appropriate for regions with competitive markets and retail competition, such as PJM.[34] Consequently, the Applicants focus on the AEC results for their three balancing area authorities analyzed by Dr. Hieronymus, as well as for the First Tier Markets.

Summary of Results

Dr. Hieronymus' analysis demonstrates that the Transaction does not raise any competitive issues. The results for each relevant geographic market are summarized below.

DUKE ENERGY CAROLINAS

Tables summarizing Dr. Hieronymus' AEC results for the Duke Energy Carolinas market are provided below.

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[32] Merger Regulations, 18 C.F.R § 33.3(c)(4)(i).

[33] *See, e.g., Great Plains Energy, Inc.*, 121 FERC ¶ 61,069 at P 34 & n.44 (2007) ("*Great Plains*"), *reh'g denied*, 122 FERC ¶ 61,177 (2008); *Nat'l Grid, plc.*, 117 FERC ¶ 61,080 at PP 27-28 (2006), *reh'g denied*, 122 FERC ¶ 61,096 (2008); *Westar Energy, Inc.*, 115 FERC ¶ 61,228 at P 72, *reh'g denied*, 117 FERC ¶ 61,011 at P 39 (2006); *Nev. Power Co.*, 113 FERC ¶ 61,265 at P 15 (2005).

[34] *See Energy East Corp.*, 96 FERC ¶ 61,322 at 62,227 (2001); *Sithe Energies, Inc.*, 93 FERC ¶ 61,244 at 61,806-07 & n.9 (2000).

Available Economic Capacity, DUK (no rate de-pancaking)[35]

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,082	26.6%	4,072	1,126	1
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,086	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,352	37.7%	3,587	1,575	-
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	809	23.5%	3,448	832	-
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,503	44.2%	7,922	2,180	-
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,067	25.3%	4,221	857	-
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	438	-
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,875	34.4%	5,457	1,427	-
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,187	434	-
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	21	0.9%	2,337	411	-

Available Economic Capacity, DUK (rate de-pancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,085	26.6%	4,072	1,129	5
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,085	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,349	37.6%	3,587	1,573	(2)
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	985	28.6%	3,448	1,073	241
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,505	44.2%	7,922	2,186	7
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,121	26.5%	4,223	926	69
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	436	(2)
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,874	34.4%	5,457	1,427	(1)
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,228	496	63
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	20	0.9%	2,337	414	3

As these tables illustrate, the Transaction does not raise any market power concerns in the Duke Energy Carolinas market. Dr. Hieronymus conducted his horizontal competitive analysis using a two-step approach. First, Dr. Hieronymus looked at the effects of merging Applicants' supply capabilities on market concentration in the Duke Energy Carolinas market. This is shown in the first of the tables above. Dr. Hieronymus found no competitive screen failure in the market resulting from the merger. Next, Dr. Hieronymus examined the effects on the

[35] "DUK" is the acronym given to the "Duke Energy Carolinas" balancing area authority by the North American Electric Reliability Corporation ("NERC").

competitive screens that result from eliminating pancaked transmission rates for service across the Applicants' transmission systems. This is shown in the second of the tables above.

As Dr. Hieronymus explains, the de-pancaking of transmission rates is a benefit to wholesale customers in the Duke Energy Carolinas balancing authority area because these customers gain access to certain wholesale supplies at lower transmission rates. Nonetheless, when Dr. Hieronymus revised his competitive screen analysis to consider the effect of transmission rate de-pancaking, the analysis showed that lowering transmission rates resulted in the creation of a summer off-peak screen failure in the Duke Energy Carolinas market. This screen failure came about because de-pancaking lowered the delivered costs of power entering from or through Progress Energy Carolinas, which increased the amount of Progress Energy power that is economic in the Duke Energy Carolinas market. The creation of a screen failure (in a single time period, summer off-peak) as a result of rate de-pancaking creates the false impression that de-pancaking leaves wholesale customers worse off, which clearly is not the case.[36]

In any event, the Commission has held on a number of occasions that isolated screen violations during off-peak load conditions do not reflect systematic market power problems.[37] This is because the generation that typically operates during off-peak load conditions is baseload nuclear and coal-fired generation that cannot easily or profitably be used to withhold capacity from the market in order to artificially raise market prices.[38] Such is the case here as well.

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[36] Exh. J-1 at 14.

[37] *See FirstEnergy*, 133 FERC ¶ 61,222 at PP 49-50; *Ohio Edison Co.*, 94 FERC ¶ 61,291 at 62,044 (2001); *Commonwealth Edison Co.*, 91 FERC ¶ 61,036 at 61,133-34 (2000).

[38] *Id. See also USGen New England, Inc.*, 109 FERC ¶ 61,361 at P 23 (2004).

PROGRESS ENERGY CAROLINAS–EAST

Progress Energy Carolinas operates two balancing authority areas, one located to the east of Duke Energy Carolinas and one located to the west of Duke Energy Carolinas. Most of the load and generation is located in Progress Energy Carolinas-East. The following tables summarize the results of Dr. Hieronymus' AEC analysis for Progress Energy Carolinas-East. As with the Duke Energy Carolinas' market, Dr. Hieronymus analyzed the markets in a two-step process.

Available Economic Capacity, CPLE (no rate de-pancaking)[39]

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	172	7.3%	2,343	438	1
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	98	4.0%	2,431	491	7
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	96	3.1%	3,136	364	-
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,472	33.8%	4,359	1,336	186
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	764	16.6%	4,606	555	-
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	267	5.2%	5,126	468	4
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	54	1.1%	5,113	474	-
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	732	17.4%	4,210	636	111
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	507	12
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	197	4.3%	4,624	415	7

[39] "CPLE" is the acronym given to the "Progress Energy Carolinas–East" balancing area authority by NERC.

Available Economic Capacity, CPLE (with de-pancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	213	9.1%	2,343	442	6
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	139	5.7%	2,431	444	(41)
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	296	9.4%	3,136	382	19
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,489	34.2%	4,359	1,364	214
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	912	19.8%	4,606	645	90
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	496	9.4%	5,272	430	(35)
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	60	1.2%	5,113	464	(11)
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	746	17.7%	4,210	598	73
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	499	4
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	196	4.2%	4,624	414	6

The results for Progress Energy Carolinas-East are very similar to the results for Duke Energy Carolinas. When Dr. Hieronymus examined the competitive effect of the merger in the Progress Energy Carolinas-East market (first of the tables above), he identified a single screen violation in the summer off-peak load condition (HHI change of 186 points). When Dr. Hieronymus then examined the effects of transmission rate de-pancaking on this market, the magnitude of the single screen failure increased (HHI change of 214 points). Again, this apparent worsening of the competitive effect is a misleading outcome, as the elimination of pancaked transmission rates has the pro-competitive effect of increasing supply options for wholesale customers in the market area.

As with Duke Energy Carolinas, this single off-peak screen failure is not a reflection of a systematic market power problem, but rather is an isolated screen violation during an off-peak load condition. Moreover, because Dr. Hieronymus' analysis shows that Progress Energy Carolinas requires almost all of its generation capacity to serve its retail and wholesales requirements customers, his analysis shows that it has very little economic energy available—less than 600 MW—in any time period other than the one in which the screen failure occurs.

Consequently, the Transaction does not raise any market power concerns in the Progress Energy Carolinas-East market.

PROGRESS ENERGY CAROLINAS–WEST

Progress Energy has no excess generation in the Progress Energy Carolinas-West and indeed is required to import capacity to serve its load in all time periods. As a consequence, the Transaction results in no screen violations in the Progress Energy Carolinas-West market for the AEC measure of capacity, as the following table shows.

Available Economic Capacity, CPLW [40]

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	65	8.2%	-	0.0%	799	398	64	8.0%	799	401	3
S_SP2	$ 55	39	4.8%	-	0.0%	799	449	63	7.9%	799	425	(23)
S_P	$ 40	24	3.1%	-	0.0%	770	373	99	12.4%	799	417	43
S_OP	$ 35	36	4.5%	-	0.0%	799	388	89	11.2%	799	451	63
W_SP	$ 80	78	13.3%	-	0.0%	585	415	78	13.3%	585	418	3
W_P	$ 40	3	0.5%	-	0.0%	712	442	62	8.5%	726	397	(45)
W_OP	$ 35	7	0.9%	-	0.0%	783	407	8	1.0%	783	405	(1)
SH_SP	$ 55	62	9.2%	-	0.0%	676	465	59	8.8%	676	440	(24)
SH_P	$ 35	5	0.7%	-	0.0%	676	450	5	0.7%	676	456	6
SH_OP	$ 33	8	1.2%	-	0.0%	676	380	8	1.1%	676	385	4

As this table shows, there are no screen violations in any of the 10 load periods analyzed, and, moreover, all of the post-Transaction HHIs are below 600.[41] Therefore, the Transaction does not raise any market power concerns in the Progress Energy Carolinas-West market.

[40] "CPLW" is the acronym given to the "Progress Energy Carolinas–West" balancing area authority by NERC.

[41] In some of the periods, the transmission rate de-pancaking causes Duke Energy's market share to increase at the expense of third parties that had larger shares than Duke Energy in the pre-merger case. As a consequence, in these periods, the post-merger HHI is actually reduced from the pre-merger HHI.

ANALYSIS OF 2015 AS A SENSITIVITY

Dr. Hieronymus testifies that Duke Energy Carolinas and Progress Energy Carolinas both have engaged in significant generation construction programs. In order to test whether the addition of the additional generation being constructed will have an effect on his results, Dr. Hieronymus performed an AEC analysis of the Duke Energy Carolinas and Progress Energy Carolinas markets in the year 2015 as a sensitivity. As Dr. Hieronymus explains, the results of his sensitivity analysis are not materially different from the results presented above.[42] As a consequence, there is no reason to conclude that the Transaction could have adverse competitive effects after the Applicants' construction program is completed.

FIRST TIER MARKETS

As noted above, Dr. Hieronymus analyzed all First Tier Markets in addition to the Applicants' three balancing authority areas. This analysis shows no screen violations in any of the First Tier Markets for AEC.[43] Consequently the Transaction raises no market power concerns in any First Tier Market.

Confirmation of Results Through Analysis of Sales Data

In order to confirm the validity of his results, Dr. Hieronymus analyzed Electric Quarterly Report ("EQR") data for Duke Energy Carolinas and Progress Energy Carolinas for the years 2008-2010. This analysis, which appears in Exhibit J-6 and is summarized in the following two charts, confirms Dr. Hieronymus' conclusion reached from his Competition Analysis Screen that the Transaction will not have an adverse effect on wholesale competition.

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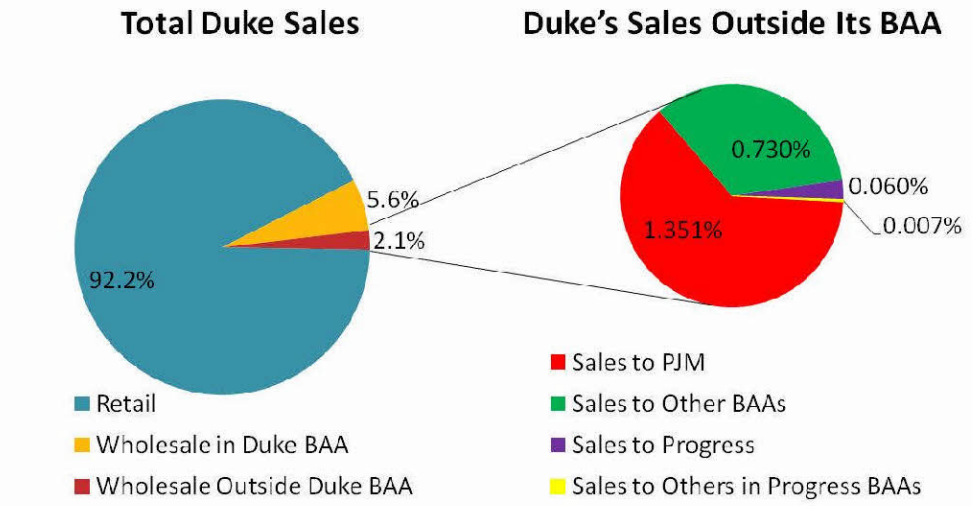
[42] Exh. J-1 at 56-58.

[43] *Id.* at 51-54.

The first chart illustrates Duke Energy Carolinas energy sales in 2008-2010.

Duke Energy Carolinas Energy Sales, 2008-2010

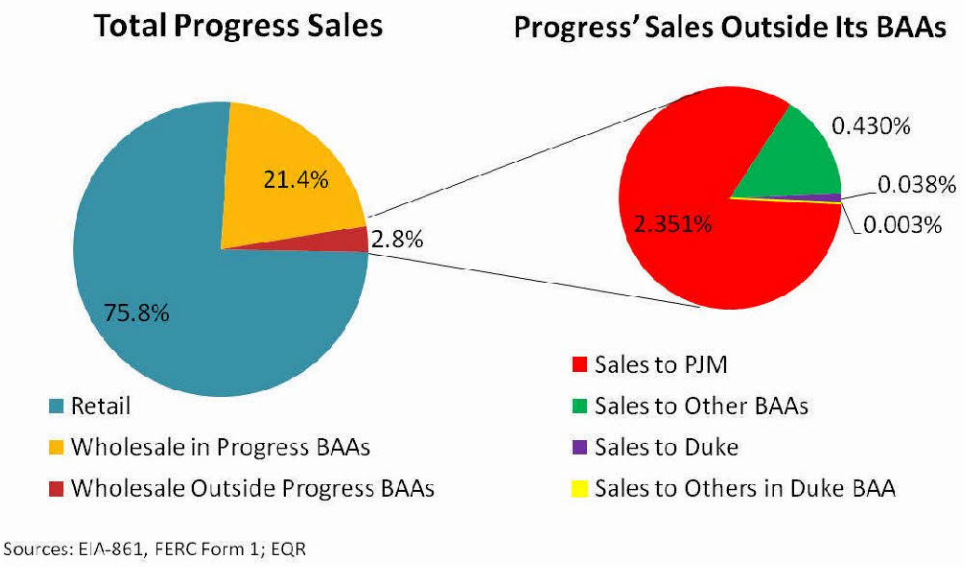


Sources: EIA-861, FERC Form 1; EQR

As this chart shows, Duke Energy Carolinas' total wholesale sales in 2008-2010 represented only 7.8% of its total sales over that two-year period, with remaining sales being sold at retail. Furthermore, only 0.067% of these total sales were sold in the Progress Energy Carolinas BAAs. Most relevant, only 0.007% of Duke Energy Carolinas' sales were made to entities in the Progress Energy BAAs other than Progress Energy.

The numbers are even smaller for Progress Energy Carolinas, as shown on the following table:

Progress Energy Carolinas Energy Sales, 2008-2010



Sources: EIA-861, FERC Form 1; EQR

As this chart shows, Progress Energy Carolinas' 2008-2010 wholesale sales were 24.2% of its total sales. However, this higher percentage of wholesale sales is due primarily to Progress Energy Carolinas' somewhat higher wholesale requirements load. Its sales into the Duke Energy Carolinas BAA were 0.041% of its total sales. Progress Energy Carolinas' sales into the Duke Energy Carolinas BAA to entities other than Duke Energy Carolinas were a miniscule 0.003% of its total sales.

The EQR sales data thus confirm what is shown in Dr. Hieronymus' AEC analysis for these markets. Duke Energy Carolinas is a small seller into Progress Energy Carolinas and Progress Energy Carolinas is an even smaller seller into Duke Energy Carolinas. What is more, the review of sales by the Applicants further illustrates that the two entities do not compete significantly to sell to third parties in the area in which their supply capabilities overlap (*i.e.*, the

Carolinas). The combination of the two companies therefore cannot have a significant effect on competition in these markets.

2. No Potential for the Exercise of Vertical Market Power

In Order No. 642, the Commission set out several vertical market power issues potentially arising from mergers with input suppliers. The principal issue identified is whether the merger may create or enhance the ability of the merged firm to exercise market power in downstream electricity markets by control over the supply of inputs used by rival producers of electricity. Three potential abuses have been identified: the upstream firm acts to raise rivals' costs or foreclose them from the market in order to increase prices received by the downstream affiliate; the upstream firm acts to facilitate collusion among downstream firms; or transactions between vertical affiliates are used to frustrate regulatory oversight of the cost/price relationship of prices charged by the downstream electricity supplier.[44]

The Commission has expressed its concern regarding vertical market power in three primary contexts: (1) "convergence mergers" between electric utilities and natural gas pipelines that "may create or enhance the incentive and/or ability for the merged firm to adversely affect prices and output in the downstream electricity market and to discourage entry by new generators;"[45] (2) mergers involving owners of electric transmission facilities that may use those facilities to benefit their electric generation facilities; and (3) mergers involving the ownership of other inputs to the generation of electricity. None of those concerns are raised here, as Dr. Hieronymus explains in detail.[46]

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[44] *See* Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,904.

[45] *Id.*

[46] Exh. J-1 at 59-61.

With respect to transmission, all of Duke Energy's Ohio, Kentucky and Indiana transmission assets are under the control of MISO now, and, subsequent to the integration of DEO and DEK into PJM, the transmission facilities of those companies will be under the control of PJM. The transmission facilities of DEC, PEC and PEF will be subject to a Joint OATT approved by the Commission.

With respect to other inputs to electricity, Duke Energy has local distribution companies ("LDCs") operating in Ohio and Kentucky, but owns no interstate gas pipelines.[47] Progress Energy does not own an LDC or any interstate or intrastate gas pipelines. There are no vertical concerns present in the Carolinas markets with respect to gas delivery systems.

B. No Adverse Impact On Rates

In considering the impacts of a merger on rates, the Commission looks primarily at impacts on transmission rates and on rates for captive long-term wholesale requirements customers. As an initial matter, Applicants note that the fuel savings resulting from the Joint Dispatch Agreement and from other fuel-related operating synergies will flow automatically to wholesale requirements customers, whose rates therefore should be reduced as a result of the Transaction even without any commitments by the Applicants. In addition, wholesale customers power and transmission customers will benefit from the elimination of pancaked transmission rates across the Applicants' transmission systems.

Notwithstanding the clear benefits to wholesale customers, the Applicants are willing to make commitments to ensure that the Transaction will not have an adverse effect on wholesale rates. Specifically, the Applicants commit for a period of five years to hold harmless wholesale

[47] Duke Energy owns a short interstate gas pipeline, K-O Transmission Company, which serves its own LDCs in the Midwest.

requirements and transmission customers from the costs of the Transaction. For that five-year period, the Applicants will not seek to include merger-related costs in their transmission revenue requirements or in their wholesale requirements rates, except to the extent they can demonstrate that merger-related savings are equal to or in excess of the transaction-related costs included in the rate filing. The Commission has approved this type of commitment in its Merger Policy Statement and in a number of subsequent cases.[48]

The Commission has full authority to monitor the Applicants' hold harmless provision.[49] If the Applicants seek to recover transaction-related costs through their wholesale power or transmission rates, they will submit a compliance filing that details how they are satisfying the hold harmless commitment. Moreover, the Applicants will comply with the Commission's directive in other proceedings involving a similar hold harmless provision:

> If Applicants seek to recover transaction-related costs in an existing formula rate that allows for such recovery, then that compliance filing must be filed in the section 205 docket in which the formula rate was approved by the Commission, as well as the instant section 203 docket.* We also note that, if Applicants seek to recover transaction-related costs in a filing whereby they are proposing a *new* rate (either a new formula rate or a new stated rate), then that filing must be made in a *new* section 205 docket as well as in the instant section 203 docket.** The Commission will [] notice such filings for public comment. In such a filing, Applicants must: (1) specifically identify the transaction-related costs they are seeking to recover, and (2) demonstrate that those costs are exceeded by the savings produced by the transaction, in addition to any requirements associated with filings made under section 205. Such a hold harmless commitment will protect customers' wholesale power and transmission rates from being adversely affected by the proposed transaction.[50]

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[48] Merger Policy Statement, FERC Stats. & Regs. ¶ 31,044 at 30,124; *see also Ameren Corp.*, 108 FERC ¶ 61,094 at PP 62-68 (2004); *Great Plains*, 121 FERC ¶ 61,069 at P 48 & n.63 (citing cases).

[49] *See, e.g.*, *ITC Midwest LLC*, 133 FERC ¶ 61,169 at P 24 (2010).

[50] *Id.* at P 25; *see also FirstEnergy*, 133 FERC ¶ 61,222 at P 63; *PPL Corp.*, 133 FERC ¶ 61,083 at PP 26-27 (2010).

* In this case the filing would be a compliance filing in both the section 203 and 205 dockets.

** In this case the filing would be a compliance filing in the section 203 docket, but a rate application in the section 205 docket.

C. No Adverse Impact On Regulation

Although the Commission requires merger applicants to evaluate the effect of a proposed transaction on regulation, both at the federal and state level, the Commission indicated in Order No. 642 that it would not ordinarily set a merger application for hearing with respect to the impact on regulation unless: (a) the proposed transaction involves public utility subsidiaries of a registered holding company under the Public Utility Holding Company Act of 1935 ("PUHCA 1935") and the relevant applicants do not commit to abide by the Commission's policies on pricing of non-power goods and services between affiliates, or (b) the affected state commissions lack authority over the proposed transaction and raise concerns about the effect on state regulation.[51] Neither of these concerns is raised by this Application.

The first requirement in the Merger Policy Statement no longer is applicable since the repeal of PUHCA 1935. Moreover, each of the public utility subsidiaries of Duke Energy and Progress Energy will remain jurisdictional public utilities subject to regulation by the Commission after the Transaction closes to the same extent each was regulated before the closing of the Transaction. As a result, there will be no impact on the Commission's jurisdiction over the post-Transaction Duke Energy.

Nor does the Transaction have effects on state regulation that need to be addressed by the Commission. The NCUC, the PSCSC, and the KPUC each will have the authority to review the

[51] *See* Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,914-15.

effect of the Transaction on their jurisdiction and thus, under the Merger Policy Statement, the Commission does not consider the effect of the Transaction on those commissions.[52] While the other state commissions do not have jurisdiction to review the Transaction, none of these commissions will have its jurisdiction affected by the Transaction.

D. No Improper Cross-Subsidization

Under the amendments to Section 203 implemented by the Energy Policy Act of 2005, the Commission "shall approve" a proposed transaction "if it finds that the proposed transaction . . . will not result in cross-subsidization of a non-utility associate company or the pledge or encumbrance of utility assets for the benefit of an associate company, unless . . . the cross-subsidization, pledge, or encumbrance will be consistent with the public interest."[53]

In Order Nos. 669, 669-A and 669-B, the Commission identified a four-factor test that applicants must satisfy in order to address the concerns identified in Section 203 regarding any possible cross-subsidization, pledge or encumbrance of utility assets associated with the proposed transaction.[54] Under this test, the Commission examines whether a proposed transaction, at the time of the transaction or in the future, results in:

> (1) transfers of facilities between a traditional utility associate company with wholesale or retail customers served under cost-based regulation and an associate company;
>
> (2) new issuances of securities by traditional utility associate companies with wholesale or retail customers served under cost-based regulation for the benefit of an associate company;

---

[52] *See* Merger Policy Statement, FERC Stats. & Regs. ¶ 31,044 at 30,125.

[53] FPA § 203(a)(4); 16 U.S.C. § 824b.

[54] Order No. 669, FERC Stats. & Regs. ¶ 31,200 at P 169; Order No. 669-A, FERC Stats. & Regs. ¶ 31,214 at P 144.

(3) new pledges or encumbrances of assets of a traditional utility associate company with wholesale or retail customers served under cost-based regulation for the benefit of an associate company; and

(4) new affiliate contracts between non-utility associate companies and traditional utility associate companies with wholesale or retail customers served under cost-based regulation, other than non-power goods and services agreements subject to review under Sections 205 and 206 of the FPA.[55]

In Exhibit M the Applicants demonstrate, based on facts and circumstances known to them or that are reasonably foreseeable, that the Transaction will not result in any of the above-outlined transfers of facilities, issuances or securities, pledges or encumbrance of assets or other agreements. Exhibit M also contains, as required by 18 C.F.R. § 33.2(j)(1)(i), a listing of the existing pledges and encumbrances of the Applicants' regulated utilities (the "Regulated Companies").

V. INFORMATION REQUIRED BY PART 33 OF THE COMMISSION'S REGULATIONS

Applicants submit the following information pursuant to Part 33 of the Commission's Regulations.

A. Section 33.2(a): Names and addresses of the principal business offices of the applicants.

The principal executive offices of the Applicants are located at:

Duke Energy Corporation	Progress Energy, Inc.
526 South Church Street	410 South Wilmington Street
Charlotte, NC 28202-1904	Raleigh, NC 27601

[55] 18 C.F.R. § 33.2(j)(1)(ii).

B. Section 33.2(b): Names and addresses of persons authorized to receive notices and communications in respect to the Application.

Catherine S. Stempien
Senior Vice President, Legal
Jeffrey M. Trepel
Deputy General Counsel
Duke Energy Corporation
550 South Tryon Street
Charlotte, NC 28202
(704) 382-0364
(704) 382-8131
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Counsel for Duke Energy Corporation

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William S. Scherman
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Mike.Naeve@skadden.com
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Counsel for Duke Energy Corporation and Progress Energy, Inc.

Kendal Bowman
Associate General Counsel
Danielle T. Bennett
Associate General Counsel
Progress Energy, Inc.
410 South Wilmington Street
Raleigh, NC 27601
(919) 546-6794
(919) 546-5941
Kendal.Bowman@pgnmail.com
Dani.Bennett@pgnmail.com

C. Section 33.2(c): Description of Applicants.

See Part II of this Application and Exhibits A through F, attached.

D. Section 33.2(d): Description of the jurisdictional facilities owned, operated or controlled by Applicants, their parents or affiliates.

See Section II and the testimony of Dr. Hieronymus attached as Exhibit J.

E. Section 33.2(e): Narrative description of the Transaction.

A narrative description of the Transaction is provided in Part III of this Application.

F. Section 33.2(f): Contracts with respect to the Transaction.

See Exhibit I.

G. Section 33.2(g): Facts relied upon to show that the Transaction is consistent with the public interest.

The facts relied upon to show that the Transaction is consistent with the public interest are set forth in Part IV of this Application and in the testimony of Dr. Hieronymus attached as Exhibit J.

H. Section 33.2(h): Physical property.

See Exhibit K.

I. Section 33.2(i): Status of actions before other regulatory bodies.

See Exhibit L.

J. Section 33.2(j): Explanation regarding cross-subsidization issues and disclosure of existing pledges and /or encumbrances of utility assets.

See Part IV.D of this Application and Exhibit M.

K. Section 33.5: Accounting Entries

Applicants do not intend to reflect any aspect of the Transaction on the books of any Applicant that is required to keep its books in accordance with the Commission's Uniform System of Accounts and therefore there are no pro forma accounting entries to provide. If, however, the Transaction were to impact the books of any such entity, the Applicants will submit the required accounting entries within six months of the consummation of the Transaction.

L. Section 33.9: Proposed Protective Order

See Appendix 1. In accordance with Section 388.112 of the Commission's regulations, 18 C.F.R. § 388.112, Applicants request confidential treatment of certain maps submitted in Exhibit K which contain Critical Energy Infrastructure Information ("CEII"). Each of the maps for which Applicants claim confidential treatment contains details about the production, generation, transportation, transmission, or distribution of energy that could be useful to a person in planning an attack on critical infrastructure. In accordance with Section 33.9 of the

Commission's regulations, 18 C.F.R. § 33.9, a proposed protective order has been included as Appendix 1 to the Application. The Applicants request that the CEII information they are submitting be subject to this protective order. Accordingly, as required by Section 33.8 of the Commission's regulations, the Applicants submit a non-public version of this Application, which is marked "CEII MATERIALS – DO NOT RELEASE," and a public version of this Application.

M. Section 33.7: Verifications

See Appendix 2.

VI. CONCLUSION

As demonstrated above, as well as in the attached testimony and exhibits, the Transaction is consistent with the public interest as defined by the Commission in its Merger Policy Statement, Part 33 of its regulations, and its merger precedents. The Applicants request that the Commission issue an order approving the Transaction under FPA Sections 203(a)(1) and 203(a)(2) on or before July 31, 2011, without condition and without conducting an evidentiary hearing.

Respectfully submitted,

/s/ *Mike Naeve*

Catherine S. Stempien
Senior Vice President, Legal
Jeffrey Trepel
Deputy General Counsel
Duke Energy Corporation
550 South Tryon Street
Charlotte, NC 28202

Counsel for Duke Energy Corporation

Mike Naeve
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Counsel for Duke Energy Corporation and Progress Energy, Inc.

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Danielle T. Bennett
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Progress Energy, Inc.
410 South Wilmington Street
Raleigh, NC 27601

Counsel for Progress Energy, Inc.

April 4, 2011

Appendix 1 – *Proposed Protective Order*

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

PROPOSED
PROTECTIVE ORDER

1. This Protective Order shall govern the use of all Protected Materials produced, by, or on behalf of, any Participant. Notwithstanding any order terminating this proceeding, this Protective Order shall remain in effect until specifically modified or terminated by the Presiding Administrative Law Judge ("Presiding Judge") or the Federal Energy Regulatory Commission ("Commission").

2. A Participant may designate as protected those materials which customarily are treated by that Participant as sensitive or proprietary, which are not available to the public, and which, if disclosed freely, would subject that Participant or its customers to risk of competitive disadvantage or other business injury. A Participant may also designate as protected those materials that should be treated as Critical Energy Infrastructure Information subject to protection under Sections 388.112 and 388.113 of the Commission's regulations.

3. Definitions -- For purposes of this Order:

(a) The term "Participant" shall mean a Participant as defined in 18 C.F.R. § 385.102(b).

(b) (1) The term "Protected Materials" means (A) materials (including depositions) provided by a Participant in response to discovery requests and designated by such participant as protected; (B) any information contained in or obtained from such materials; (C) any other materials which are made subject to this Protective Order by the Presiding Judge, by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Protected Materials; and (E) copies of Protected Materials. The Participant producing the Protected Materials shall physically mark them on each page as "PROTECTED MATERIALS" or with words of similar import as long as the term "Protected Materials" is included in that designation to indicate that they are Protected Materials.

(2) The term "Notes of Protected Materials" means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses materials described in Paragraph 3(b)(l). Notes of Protected Materials are subject to the same restrictions provided in this order for Protected Materials except as specifically provided in this order.

(3) Protected Materials shall not include (A) any information or document contained in the files of the Commission, or any other federal or state agency, or any federal or state court, unless the information or document has been determined to be protected by such agency or court, or (B) information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order.

(c) The term "Non-Disclosure Certificate" shall mean the certificate annexed hereto by which Participants who have been granted access to Protected Materials shall certify their understanding that such access to Protected Materials is provided pursuant to the terms and restrictions of this Protective Order, and that such Participants have read the Protective Order and agree to be bound by it. All Non-Disclosure Certificates shall be served on all parties on the official service list maintained by the Secretary in this proceeding.

(d) The term "Reviewing Representative" shall mean a person who has signed a Non-Disclosure Certificate and who is:

(1) Commission Litigation Staff;

(2) an attorney who has made an appearance in this proceeding for a Participant;

(3) attorneys, paralegals, and other employees associated for purposes of this case with an attorney described in (2);

(4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for or testifying in this proceeding;

(5) person designated as a Reviewing Representative by order of the Presiding Judge or the Commission; or

(6) employees or other representatives of Participants appearing in this proceeding with significant responsibility for this docket.

4. Protected Materials shall be made available under the terms of this Protective Order only to Participants and only through their Reviewing Representatives as provided in Paragraphs 7, 8, and 9.

5. Protected Materials shall remain available to Participants until the later of the date that an order terminating this proceeding becomes no longer subject to judicial review, or the date that any other Commission proceeding relating to the Protected Material is concluded and

no longer subject to judicial review. If requested to do so in writing after that date, the Participants shall, within fifteen days of such request, return the Protected Materials (excluding Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraph 6, below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraph 6. To the extent Protected Materials are not returned or destroyed, they shall remain subject to the Protective Order.

6. All Protected Materials shall be maintained by the Participant in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8 and 9. The Secretary shall place any Protected Materials filed with the Commission in a non-public file. By placing such documents in a non-public file, the Commission is not making a determination of any claim of privilege. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities.

For documents submitted to Commission Litigation Staff ("Staff"), Staff shall follow the notification procedures of 18 C.F.R. § 388.112 before making public any materials.

7. Protected Materials shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the certificate executed pursuant to Paragraph 9. Protected Materials shall not be used except as necessary for the conduct of this proceeding, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials.

8. (a) If a Reviewing Representative's scope of employment includes the marketing of energy, the direct supervision of any employee or employees whose duties include the marketing of energy, the provision of consulting services to any person whose duties include the marketing of energy, or the direct supervision of any employee or employees whose duties include the marketing of energy, such Reviewing Representative may not use information contained in any Protected Materials obtained in this proceeding to give any Participant or any competitor of any Participant a commercial advantage.

(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3(d) above, the Participant shall seek agreement from the Participant providing the Protected Materials. If an agreement is reached, that person shall be a Reviewing Representative pursuant to Paragraph 3(d) above with respect to

those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.

(c) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Materials pursuant to this Protective Order unless that Reviewing Representative has first executed a Non-Disclosure Certificate provided that if an attorney qualified as a Reviewing Representative has executed such a certificate, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not do so. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant asserting confidentiality prior to disclosure of any Protected Material to that Reviewing Representative.

9. Attorneys qualified as Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this order.

10. Any Reviewing Representative may disclose Protected Materials to any other Reviewing Representative as long as the disclosing Reviewing Representative and the receiving Reviewing Representative both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Protected Materials are disclosed ceases to be engaged in these proceedings, or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraphs 3(d), access to Protected Materials by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Order and the certification.

11. Subject to Paragraph 17, the Presiding Judge shall resolve any disputes arising under this Protective Order. Prior to presenting any dispute under this Protective Order to the Presiding Judge, the parties to the dispute shall use their best efforts to resolve it.

12. If a Participant tenders for filing any written testimony, exhibit, brief or other submission that includes, incorporates, or refers to Protected Materials, all portions thereof referring to such materials shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Order. Such documents shall be marked "PROTECTED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. For anything filed under seal, redacted versions or, where an entire document is protected, a letter indicating such, will also be filed with the Commission and served on all parties on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such material. Counsel shall take all reasonable precautions necessary to assure that Protected Materials are not distributed to unauthorized persons.

If any Participant desires to include, utilize or refer to any Protected Materials in such a manner that might require disclosure of such material, such Participant shall first notify both counsel for the producing Participant and the Presiding Judge of such desire, identifying with particularity each of the Protected Materials and the proposed manner of their use, and shall

provide to both counsel for the producing Participant and the Presiding Judge, in a sealed envelope bearing the caption "PROTECTED MATERIALS" copies of the Protected Materials in the form they are intended to be used. Notification of the desire to use protected materials at trial without in camera restrictions shall be provided to counsel for the producing Participant not more than 10 calendar days prior to the date established for the oral argument to show cause. If the producing Participant is unwilling to waive objection to disclosure of such Protected Materials, the producing Participant shall provide to the Presiding Judge, not later that five days after the receipt of the Reviewing Participant's notification, affidavits[1] with respect to each of the identified Protected Materials demonstrating the reasons for maintaining the confidentiality of the Protected Materials, and a Master Index of the Protected Materials, and/or within the same time period the Participants shall file a trial stipulation waiving application of the Protective Order to the use at and after trial of Protected Material relative to adjudication of the stipulated issues, other than any Protected Materials applicable to Critical Energy Infrastructure information. The affidavit shall set forth facts delineating that the information designated as Protected Materials has been maintained in a confidential manner and the precise nature and justification for the monetary injury that would result from the disclosure of such information. The affidavit shall specify the name and corporate position of the person or persons supplying or preparing or assisting in the preparation of the information designated as Protected Materials and the name and corporate position of the person or persons to whom such information has been communicated. The producing Participant shall provide copies of the affidavits and Master Index of Protected Materials to each Reviewing Participant. Oral argument to show cause why such Protected Materials should remain protected shall be held in accordance with the procedural schedule in this proceeding. All objections and arguments related to the Protected Materials shall be conducted in camera, closed to all parties except the Reviewing Representatives as described in Paragraph 3(d), hereof. That portion of the hearing transcript which refers to such Protected Materials shall be sealed and subject to this Protective Order. All Protected Materials which ultimately may be admitted into evidence, shall be filed in sealed, confidential envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Order.

13. Nothing in this Protective Order shall be construed as precluding any Participant from objecting to the use of Protected Materials on any legal grounds.

14. Nothing in this Protective Order shall preclude any Participant from requesting the Presiding Judge, the Commission, or any other body having appropriate authority, to find that this Protective Order should not apply to all or any materials previously designated as Protected Materials pursuant to this Protective Order. The Presiding Judge may alter or amend this Protective Order as circumstances warrant at any time during the course of this proceeding.

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[1] The affidavits shall comply with International Paper Company v. Fireboard Corp., 63 FRD 88, 93-94 (D. Del. 1974) and Parsons v. General Motors Corp., 85 FRD 724, 726 (N.D. Ga 1980), and, if claims of work-product are concerned, with Cajun Electric Power Coop., Inc. v. Gulf States Utilities Co., 43 FERC ¶ 63,012 at 65,129 (1988).

15. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the Presiding Judge or the Commission.

16. All Protected Materials filed with the Commission, the Presiding Judge, or any other judicial or administrative body, in support of, or as a part of, a motion, other pleading, brief, or other document, shall be filed and served in sealed envelopes or other appropriate containers bearing prominent markings indicating that the contents include Protected Materials subject to this Protective Order.

17. In the event that the Presiding Judge at any time in the course of this proceeding finds that all or part of the Protected Materials are not confidential, those materials nevertheless shall continue to be subject to the protection afforded by this Protective Order for three (3) business days from the date of issuance of the Presiding Judge's decision, and if the Participant seeking protection files an interlocutory appeal or requests that the issue be certified to the Commission, for an additional seven (7) business days. None of the Participants waives its rights to seek additional administrative or judicial remedies after the Presiding Judge's decision respecting Protected Materials or Reviewing Representatives, or the Commission's denial of any appeal thereof. The provisions of 18 C.F.R. § 388.112 shall apply to any requests for Protected Materials in the files of the Commission under the Freedom of Information Act. (5 USC § 552).

18. Nothing in this Protective Order shall be deemed to preclude any Participant from independently seeking through discovery in any other administrative or judicial proceeding information or materials produced in this proceeding under this Protective Order.

19. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Protected Materials.

20. The contents of Protected Materials or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with this Protective Order and shall be used only in connection with this (these) proceeding(s). Any violation of this Protective Order and of any Non-Disclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Protected Materials is provided to me pursuant to the terms and restrictions of the Protective Order in this proceeding, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.

By: _____
Title: _____
Representing: _____

Appendix 2 – *Verifications*

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

VERIFICATION

State of North Carolina	)	
	)	ss.
County of Mecklenburg	)	

NOW, BEFORE ME, the undersigned authority, personally came and appeared, Marc E. Manly, who, after first being duly sworn by me, did say:

That he is the Chief Legal Officer, Group Executive, and Corporate Secretary of Duke Energy Corporation; that he has the authority to verify the foregoing application and exhibits on behalf of Duke Energy Corporation; that he has knowledge of the matters therein; and that to the best of his knowledge, information and belief, the representations made are true and correct.

By: Marc E. Manly
Marc E. Manly

SUBSCRIBED AND SWORN to before me this 4th day of April, 2011.

PATRICIA C. ROSS NOTARY PUBLIC MECKLENBURG CO., NC

Patricia C. Ross
Notary Public
Commission Expires: 10-19-2014

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

VERIFICATION

State of North Carolina	)	
	)	ss.
County of Wake	)	

NOW, BEFORE ME, the undersigned authority, personally came and appeared, John R. McArthur, who, after first being duly sworn by me, did say:

That he is Executive Vice President, General Counsel and Corporate Secretary of Progress Energy, Inc.; that he has the authority to verify the foregoing application and exhibits on behalf of Progress Energy Inc.; that he has knowledge of the matters therein; and that to the best of his knowledge, information and belief, the representations made are true and correct.

John R. McArthur

SUBSCRIBED AND SWORN to before me this 4th day of April 2011.

Notary Public

County of Wake
Commission expires 7-5-2012

Appendix 3 –Comparison of Global Utility Companies

Comparison of Global Utility Companies		
Company	Country	Assets ($bil)
EDF Group	France	278.76
GDF Suez	France	232.71
E.ON	Germany	215.15
ENEL	Italy	177.21
Tokyo Electric Power	Japan	132.79
RWE Group	Germany	127.64
Iberdrola	Spain	114.81
Korea Electric Power	South Korea	86.48
Duke + Progress	USA	82.95
Asset Value Source: http://www.forbes.com/lists/2009/18/global-09_The-Global-2000_IndName_20.html		

Exhibit A: Business Activities of Applicants

The business activities of the Applicants are further described in Part II of this Application and in the testimony of Dr. Hieronymus attached as Exhibit J-1.

Exhibit B: List of Energy Subsidiaries and Affiliates

Duke Energy

A list of Duke Energy's energy subsidiaries and affiliates is attached as Exhibit B-1.

Progress Energy

A list of Progress Energy's energy subsidiaries and affiliates is attached as Exhibit B-2.

Exhibit B-1 Duke Energy's Energy Subsidiaries and Affiliates:

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
APOG, LLC	20%	Provides technical, engineering, and procurement support services to and for the benefit of member-owned or operated nuclear facilities.
Cincap IV, LLC*	10%	Markets electricity at wholesale.
CinCap V, LLC*	10%	Markets electricity at wholesale.
DEGS O&M, LLC	100%	Operates and maintains a power plant owned by BTEC New Albany LLC.
DEGS of Boca Raton, LLC	100%	Operates and maintains certain thermal energy facilities located in Boca Raton, Florida and sells associated thermal and other energy-related products and services.
DEGS of Cincinnati, LLC	100%	Owns and operates a district cooling business in downtown Cincinnati, Ohio.
DEGS of Narrows, LLC	100%	Owns, operates, maintains and manages the existing utility system at the Celanese Acetate manufacturing facility located in Narrows, Virginia.
DEGS of Philadelphia, LLC	100%	Provides various utility services and distribution system operation and maintenance to the Philadelphia Navy Yard which is a location of an industrial park that contains several commercial business and is managed by the Philadelphia Industrial Development Corp.
DEGS of San Diego, Inc.	100%	Supervises the construction of, operates and maintains an energy facility at Children's Hospital in San Diego, California.

* This entity has been granted market-based rate authority from the Commission.

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
DEGS of South Charleston, LLC	100%	Designed, built, owns, operates and maintains certain steam generating equipment and ancillary water treatment equipment to be located at the UCC Technical Center in South Charleston, West Virginia.
DEGS of St. Bernard, LLC	100%	Operates, maintains and manages the existing utility system and designed, developed, constructed and owns system improvements at Proctor & Gamble's chemical manufacturing facility located in St. Bernard, Ohio.
DEGS of Tuscola, Inc.	100%	Oversees the operations and staffing of a qualifying facility located in Tuscola, Illinois.
Delta Township Utilities II, LLC	100%	Provides assets to service General Motors' assembly plant located in Delta Township, Michigan, including the design, construction, ownership, operations and maintenance of such assets.
Delta Township Utilities, LLC	51%	Constructs, owns, operates and maintains energy-related facilities for a General Motors metal stamping facility located in Delta Township, Michigan.
Duke Energy Business Services LLC*	100%	Centralized service company and provides services to all Duke entities.
Duke Energy Carolinas, LLC*	100%	Engaged in the production, transmission, distribution and sale of electricity in the central and western portions of North Carolina and South Carolina.
Duke Energy Commercial Asset Management, Inc.*	100%	Holds assets of divested or other non-regulated power plants.
Duke Energy Commercial Enterprises, Inc.*	100%	Engaged in the business of marketing energy commodities at wholesale.
Duke Energy Fayette II, LLC*	100%	Owns and sells power from a natural gas-fired combined cycle generating facility located near Masontown, Pennsylvania.

* This entity has been granted market-based rate authority from the Commission.

Exhibit B-1

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
Duke Energy Hanging Rock II, LLC*	100%	Owns and sells power from a natural gas-fired electric generation plant located in Lawrence County, Ohio.
Duke Energy Indiana, Inc.*	100%	Engaged in the production, transmission, distribution and sale of electricity in North Central, Central and Southern Indiana.
Duke Energy Kentucky, Inc.*	100%	Engaged in the transmission, distribution and sale of electricity and the sale and transportation of natural gas in northern Kentucky.
Duke Energy Lee II, LLC*	100%	Owns and sells power from a natural gas-fired, simple cycle electric generation plant in Lee County, Illinois.
Duke Energy Marketing America, LLC	100%	Wholesale power marketer that also markets natural gas and other energy-related products in the United States.
Duke Energy Merchants, LLC	100%	Inactive company. Formerly provided financial, risk management and asset management services to producers, transporters and users of global energy commodities and derivative products such as crude oil, refined products, liquefied petroleum gas, residual fuels, coal, and fertilizer.
Duke Energy Murray Operating, LLC	100%	Operates and maintains an energy facility owned by a subsidiary of KGen, LLC.
Duke Energy Ohio, Inc.*	100%	Engaged in the production, distribution, transmission, and sale of electricity in the MISO and PJM regions and the sale and transportation of natural gas in southern Ohio.
Duke Energy Retail Sales, LLC*	100%	Sells electricity to retail customers in Ohio.
Duke Energy Saltville Gas Storage, LLC	50%	Owns 50% of Saltville Storage Company L.L.C. which owns and operates an underground gas storage facility in Virginia.
Duke Energy Storage Company, LLC	100%	Natural gas marketer.

* This entity has been granted market-based rate authority from the Commission.

Exhibit B-1

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
Duke Energy Trading and Marketing, L.L.C.*	60%	Engaged in wholesale power marketing and the marketing of natural gas and other energy-related products in the United States.
Duke Energy Vermillion II, LLC*	100%	Owns and sells power from a natural gas-fired electric generation plant located in Vermillion County, Indiana.
Duke Energy Washington II, LLC*	100%	Owns and sells power from a natural gas-fired electric generation plant located in Beverly, Ohio. Has been granted exempt wholesale generator status from the Commission.
Energy Equipment Leasing LLC	49%	Leases, sells or finances energy-related equipment.
Environmental Wood Supply, LLC	50%	Handles all fuel and fuel procurement-related costs for St. Paul Cogeneration LLC.
GPM Gas Gathering L.L.C.	50%	Owns and operates natural gas gathering facilities in Texas.
Happy Jack Windpower, LLC*	100%	Owns and sells power from a wind generation facility located in Cheyenne, Wyoming.
Kit Carson Windpower, LLC*	100%	Owns and sells power from a wind generation facility located in Kit Carson County, Colorado.
KO Transmission Company	100%	Engaged in the transportation of natural gas in interstate commerce between Kentucky and Ohio.
Martins Creek Solar NC, LLC	100%	Owns and sells power from a solar generation facility located in North Carolina.
Miami Power Corporation	100%	Owns an electric transmission line in Kentucky and Indiana.

* This entity has been granted market-based rate authority from the Commission.

Exhibit B-1

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
North Allegheny Wind, LLC*	100%	Owns and sells power from a wind generation facility located in Blair and Cambria Counties, Pennsylvania.
Notrees Windpower, LP	100%	Owns and sells power from a wind generation facility located in Ector and Winkler Counties, Texas. Has been granted exempt wholesale generator status by the Commission.
NuStart Energy Development, LLC	10%	Has been awarded a contract from the Department of Energy to implement a plan to obtain Nuclear Regulatory Commission approval and issuance of a construction and operating license for an advanced nuclear power plant. In furtherance of its plan, NuStart will implement specific tasks supportive of deploying at least one advanced nuclear reactor design. These tasks will include a full range of engineering and technical tasks, analyses, and licensing activities.
Ocotillo Windpower, LP	100%	Owns and sells power from a wind generation facility located in Howard County, Texas. Has been granted exempt wholesale generator status by the Commission.
Ohio Valley Electric Corporation*	9%	Owns and sells power from an electric generating facility named Clifty Creek located in Indiana.
Owings Mills Energy Equipment Leasing LLC	49%	Leases energy equipment.
Pioneer Transmission, LLC	50%	Formed to build, own, and operate 240 miles of high-voltage transmission lines and related facilities in Indiana.
RP-Orlando, LLC	100%	Developing a solar photovoltaic electric generation project to be located on property owned by the Orlando Utilities Commission in Orlando, FL.
Ryegate Associates	33.1126%	Owns and sells power from a biomass facility in Vermont.

* This entity has been granted market-based rate authority from the Commission.

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
SEC Bellefonte SD Solar One, LLC	100%	Owns certain solar photovoltaic rooftop generating facilities serving the Bellefonte school district Pennsylvania.
SEC BESD Solar One, LLC	100%	Owns certain solar photovoltaic rooftop generating facilities serving the Bald Eagle school district in Pennsylvania.
Shreveport Red River Utilities, LLC	40.8%	Constructs, owns, operates and maintains energy-related facilities located at a General Motors vehicle assembly plant in Shreveport, Louisiana.
Silver Sage Windpower, LLC*	100%	Owns and sells power from a wind generation facility located in Laramie County, Wyoming.
Solar Star North Carolina I, LLC	100%	Owns and sells power from a solar generation facility located in North Carolina. Has been granted qualifying facility status from the Commission.
Solar Star North Carolina II, LLC	100%	Owns and sells power from a solar generation facility located in North Carolina. Has been granted qualifying facility status from the Commission.
St. Paul Cogeneration, LLC*	50%	Owns, operates and maintains an exempt wholesale generator in downtown St. Paul, Minnesota.
SUEZ/VWNA/DEGS of Lansing, LLC	40.8%	Develops, constructs and operates certain energy facilities located at a General Motors facility in Lansing, Michigan.

* This entity has been granted market-based rate authority from the Commission.

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
SUEZ-DEGS of Ashtabula, LLC	49%	Operates and maintains a qualifying facility located in Ashtabula, Ohio and provides other energy-related products and services.
SUEZ-DEGS of Lansing, LLC	51%	Provides management services for SUEZ/VWNA/DEGS of Lansing, LLC.
SUEZ-DEGS of Owings Mills, LLC	49%	Leases energy equipment.
SUEZ-DEGS of Rochester, LLC	49%	Provides energy-related services to Kodak Park in Rochester, New York.
SUEZ-DEGS of Silver Grove, LLC	49%	Provides energy-related services to the Lafarge gypsum manufacturing plant in Silver Grove, Kentucky. These services include the design, installation and operation of a combined heat and power system.
SUEZ-DEGS of Tuscola, LLC	49%	Owns, operates and maintains a qualifying facility in Tuscola, Illinois and provides other energy-related products and services.
Sweetwater Wind 1 LLC	13.59%	Owns and sells power from a wind generation facility located in Nolan County, Texas.
Sweetwater Wind 2 LLC	13.14%	Owns and sells power from a wind generation facility located in Nolan County, Texas.

* This entity has been granted market-based rate authority from the Commission.

Name of Energy Subsidiary or Affiliate	Ownership Percentage by Duke Energy Corp.	Primary Business
Sweetwater Wind 3 LLC	13.18%	Owns and sells power from a wind generation facility located in Nolan County, Texas.
Sweetwater Wind 4 LLC	18.717%	Owns and sells power from a wind generation facility located in Nolan County, Texas.
Sweetwater Wind 5 LLC	18.717%	Owns and sells power from a wind generation facility located in Nolan County, Texas.
Taylorsville Solar, LLC	100%	Owns and sells power from a solar generation facility located in North Carolina. Has been granted qualifying facility status from the Commission.
Three Buttes Windpower, LLC*	100%	Owns and sells power from a wind generation facility located in Converse County, Wyoming.
Top of the World Wind Energy LLC*	100%	Owns and sells power from a wind generation facility located in Wyoming.
TX Solar I LLC	100%	Owns and sells power from a solar generation facility located in Texas. Has been granted exempt wholesale generator status from the Commission.

* This entity has been granted market-based rate authority from the Commission.

Exhibit B-2 - Progress Energy's Energy Subsidiaries and Affiliates

Progress Energy has two energy affiliates, PEC and PEF. Information for these affiliates follow.

PEC:

PEC is an investor-owned, vertically integrated electric utility organized and existing under the laws of the State of North Carolina. PEC provides electric generation, transmission and distribution services to wholesale and retail customers in North and South Carolina. PEC sells electricity to retail customers within its service territory and to wholesale customers within and outside its service territory.

PEF:

PEF is an investor-owned, vertically integrated electric utility organized and existing under the laws of the State of Florida. PEF provides electric generation, transmission and distribution services to wholesale and retail customers in the State of Florida. PEF sells electricity to retail customers within its service territory and to wholesale customers within and outside its service territory.

APOG, LLC:

PEC and PEF each hold a 10% interest in APOG, LLC, an organization which provides technical, engineering and procurement support services to and for the benefit of its member owned or operated nuclear facilities. Members include owners and prospective owners of AP1000 nuclear plants.

NuStart Energy Development, LLC

Progress Energy Service Company, LLC, a wholly owned subsidiary of Progress Energy, Inc., holds a 10% interest in NuStart Energy Development, LLC ("NuStart"). The purpose of NuStart is to submit a proposal in response to DOE Solicitation DE-PS07-041D14435, and to negotiate, enter into and perform the implementation of the cooperative agreement with DOE that results from the proposal. The DOE Solicitation was issued in order to seek applications for financial assistance from power generation companies for projects that enable a new nuclear power plant to be ordered and licensed for deployment United States within the decade.

Exhibit C: Organizational Charts Depicting Current and Post-Transaction Structure

Attached are organizational charts that depict the pertinent corporate structure both before and after the Transaction.

C-1 (Duke Energy Pre-Transaction)

C-2 (Progress Pre-Transaction)

C-3 (Duke Energy Post Transaction)

DUKE ENERGY CORPORATION
CORPORATE STRUCTURE

- Duke Energy Corporation (DE 5.3.2005)
  - Diamond Acquisition Corporation (100%)(DE 1.26.2011)
  - Duke Energy Registration Services, Inc. (100%)(DE 11.18.1998)
    - (see Appendix A for subsidiaries)
  - Bison Insurance Company Limited (100%)(Bermuda 12.11.1968)
    - NorthSouth Insurance Company Limited (100%)(Bermuda 12.2.2002)
  - Cinergy Corp. (100%)(DE 6.30.1993)
    - (see Appendix B for subsidiaries)
  - DEGS NC Solar, LLC (100%)(DE 02.25.2010)
    - Martins Creek Solar NC, LLC (100%)(NC 04.08.2010)
    - Solar Star North Carolina I, LLC (100%)(DE 11.07.2008)
    - Solar Star North Carolina II, LLC (100%)(DE 12.16.2009)
    - Taylorsville Solar, LLC (100%)(DE 4.29.2010)
  - Duke Energy Carolinas, LLC (100%)(NC 11.27.1963)
    - APOG, LLC (20%)(DE 6.22.2007) (1)
    - Advance SC LLC (100%)(SC 7.9.2004)
    - Caldwell Power Company (100%)(NC 7.28.1921)
    - Carolinas Virginia Nuclear Power Associates, Inc. (25%)(NC 10.4.1956) (2)
    - Catawba Manufacturing and Electric Power Company (100%)(NC 10/15/1901)
    - Claiborne Energy Services, Inc. (100%)(LA 3.1.1990)
    - Duke Energy Receivables Finance Company, LLC (100%)(DE 7.16.2003)
    - Eastover Land Company (100%)(KY 6.30.1970)
    - Eastover Mining Company (100%)(KY 7.15.1970)
    - Greenville Gas and Electric Light and Power Company (100%)(SC 1.28.1861)
    - MCP, LLC (100%)(SC 8.18.2000)
    - NuStart Energy Development, LLC (10%)(DE 4.19.2004) (3)
    - Piedmont Venture Partners Limited Partnership (10.64%)(NC 10/3/1996)
    - Sandy River Timber, LLC (100%)(SC, 10.26.2007)
    - Southern Power Company (100%)(NC 12.30.1927)
    - TBP Properties, LLC (100%)(SC 12.11.2006)
    - TRES Timber, LLC (100%)(SC 12.11.2006)
    - Wateree Power Company (100%)(SC)
    - Western Carolina Power Company (100%)(NC 9.10.1907)
  - Duke Energy Corporate Services, Inc. (100%)(DE 06.26.2008)
    - Duke Energy Business Services LLC (100%)(DE 11.18.1998)

(1) Duke Energy Carolinas, LLC 20%, Florida Power Corporation 10%, Carolina Power & Light Company 10%, South Carolina Electric & Gas Company 20%, Georgia Power Company 20%, Florida Power & Light Company 20%

(2) Duke Energy Carolinas, LLC 25%, Progress Energy fka Carolina Power & Light Company 25%, South Carolina Electric & Gas Company 25%, Virginia Electric Power Company 25%

(3) Duke Energy Carolinas, LLC 10%, DTE Energy 10%, EDF International North America, Inc. 10%, Entergy Nuclear 10%, Exelon Corporation 10%, FPL Group 10%, Progress Energy 10%, SCANA Corporation 10%, Southern Company 10%, Tennessee Valley Authority 10%

Information contained in the GEMS database takes precedence over information disclosed in this document.

Duke Energy Corporation
- Duke Energy Registration Services, Inc. (100%)

Duke Energy Registration Services, Inc. (100%)(DE 11.18.1998)
- PanEnergy Corp. (100%) (DE 1.26.1981)
  - (see Appendix A (cont'd.) for subsidiaries)
- Duke Energy Americas, LLC (100%)(DE 7.2.2004)
  - Duke Energy International, LLC(DE 9.18.1997)
    - *(See separate chart for subsidiaries)*
  - Duke Energy Merchants, LLC (100%)(DE 4.23.1999)
  - Duke Energy North America, LLC (100%)(DE 9.18.1997)
    - DENA Partners Holding, LLC (100%)(DE 11.30.2001)
    - Duke Energy Marketing America, LLC (100%)(DE 1.3.2001)
    - Duke Energy Moapa, LLC (100%)(DE 4.11.2000)
- Duke Energy Carolinas Plant Operations, LLC (100%)(DE 5.29.2001)
  - DE Nuclear Engineering, Inc. (100%)(NC 3.17.1969)
  - Duke Energy Fossil-Hydro, LLC (100%)(DE 7.6.2001)
    - Duke Energy Fossil-Hydro California, Inc. (100%)(DE 8.1.2001)
- Duke Energy Royal, LLC (100%)(DE 3.13.2002)
  - Duke Engineering & Services (Europe) Inc. (100%)(DE 10.13.1993)
  - Duke Engineering & Services International, Inc. (100%)(Cayman Islands 5.8.1996)
- Duke/Louis Dreyfus L.L.C. (50%)(NV 3.1.1995) [1]
- Duke Project Services, Inc. (100%)(NC 7.1.1966)
  - D/FD Operating Services LLC (50.0001%)(DE 3.7.1996) [2]
  - Duke/Fluor Daniel (50.0001%)(NC 9.1.1997) [3]
    - D/FD Holdings, LLC (100%)(DE 12.15.2005)
  - Duke/Fluor Daniel El Salvador S.A. de C.V. (50%)(El Salvador) [4]
  - Duke/Fluor Daniel International (50.0001%)(NV 9.1.1994) [5]
    - Duke/Fluor Daniel Caribbean, S.E. (99%)(Puerto Rico 12.6.1996) [6]
  - Duke/Fluor Daniel International Services (50.0001%)(NV 9.1.1994) [7]
    - Duke/Fluor Daniel Caribbean, S.E. (0.50%)(Puerto Rico 12.6.1996) [6]
    - Duke/Fluor Daniel International Services (Trinidad) Ltd. (100%)(Trinidad and Tobago 12.3.1998)
- Duke Energy Murray Operating, LLC (100%)(DE 8.7.2001)

(1) Duke Energy Registration Services, Inc., 50%, Duke Energy Marketing Corp. 50%
(2) Duke Project Services, Inc. 50.0001%, Fluor Daniel Illinois, Inc. 49.9999%
(3) Duke Project Services, Inc. 50.0001%, Fluor Daniel Illinois, Inc. 49.9999%
(4) Duke Project Services, Inc. 50%, Fluor Daniel Coal Services International, Inc. 50%
(5) Duke Project Services, Inc. 50.0001%, Fluor Daniel Coal Services International, Inc. 49.9999%
(6) Caribbean Architects & Engineers 0.25%, Duke/Fluor Daniel International 99%, Duke/Fluor Daniel International Services .5%, Fluor Daniel Caribbean, Inc. 0.25%
(7) Duke Project Services, Inc. 50.0001%, Fluor Daniel Asia, Inc. 49.9999%

Duke Energy Corporation
- Duke Energy Registration Services, Inc. (100%)
  - PanEnergy Corp. (100%) (DE 1.26.1981)

PanEnergy Corp. (100%) (DE 1.26.1981)
- Duke Energy Services, Inc. (100%)(DE 6.8.1959)
  - Duke Energy Marketing Corp. (100%)(NV 11.7.1994)
    - Duke/Louis Dreyfus L.L.C. (50%)(NV 3.1.1995) (1)
  - DETMI Management, Inc. (100%)(CO 6.21.1994)
    - DTMSI Management Ltd. (100%)(British Columbia 12.18.2009)
      - Duke Energy Services Canada ULC (31%)(British Columbia 09.17.2009) (2)
      - DE Marketing Canada Ltd. (60%)(British Columbia 12.18.2009) (3)
        - Duke Energy Marketing Limited Partnership (1%)(Alberta 8.1.1996) (4)
    - Duke Energy Trading and Marketing, L.L.C. (60%)(DE 7.10.1996) (5)
    - Duke Ventures, LLC (100%)(NV 12.19.2000)
      - Duke Capital Partners, LLC (100%)(DE 3.14.2000)
      - Duke Ventures Real Estate, LLC (100%)(DE 6.09.2009)
  - Dixilyn-Field Drilling Company (100%)(DE 1.31.1977)
    - Dixilyn-Field (Nigeria) Limited (100%)(Nigeria 11.14.1977)
    - Dixilyn-Field International Drilling Company, S.A. (100%)(Panama 6.10.1970)
  - Duke Energy Services Canada ULC (69%)(British Columbia 09.17.2009) (2)
    - Duke Energy Marketing Limited Partnership (59.40%)(Alberta Canada 8.1.1996) (4)
  - DukeNet VentureCo, Inc. (100%)(DE 05.18.2010)
    - DukeNet Communications Holdings, LLC (50%)(DE 05.18.2010) (6)
      - DukeNet Communications, LLC (100%)(DE 05.18.2010)
- Eastman Whipstock do Brasil Ltda (100%)(Brazil, 5.21.1979)
- Eastman Whipstock S.A. (100%)(Argentina 10.13.1981)
- Energy Pipelines International Company (100%)(DE 4.28.1975)
- Duke Energy China Corp. (100%)(DE 8.13.1976)
- Seahorse do Brasil Servicos Maritimos Ltda. (100%)(Brazil 3.30.1979)

(1) Duke Energy Marketing Corp. 50%, Duke Energy Registration Services, Inc. 50%
(2) DTMSI Management Ltd. 31%, Duke Energy Services, Inc. 69%
(3) 3946231 Canada Inc. 40%, DTMSI Management Ltd. 60%
(4) 3946231 Canada Inc. 39.6%, DE Marketing Canada Ltd. 1%, Duke Energy Services Canada ULC 59.4%
(5) DETMI Management, Inc. 60%, Mobil Natural Gas, Inc. 40%
(6) Alinda Telecom Investor I, L.P. 29.65%, Alinda Telecom Investor II, L.P. 20.35%, DukeNet VentureCo, Inc. 50%

Duke Energy Corporation
- Cinergy Corp. (100%)

Cinergy Corp. (100%)(DE 6.30.1993)
- Cinergy Global Resources, Inc. (100%)(DE 5.15.1998)
  - *(See Appendix C for subsidiaries)*
- Cinergy Investments, Inc. (100%)(DE 10.24.1994)
  - Duke Energy Commercial Enterprises, Inc. (100%)(IN 10.8.1992)
    - *(see Appendix D for subsidiaries)*
  - Cinergy-Centrus, Inc. (100%)(DE 4.23.1998)
  - Cinergy-Centrus Communications, Inc. (100%)(DE 7.17.1998)
  - Cinergy Technology, Inc. (100%)(IN 12.12.1991)
  - Duke-Cadence, Inc. (100%)(IN 12.27.1989)
  - Duke Communications Holdings, Inc. (100%)(DE 9.20.1996)
    - Conterra Ultra Broadband Holdings, Inc. (11%)(DE 12.31.2009) (1)
  - Duke Energy Engineering, Inc. (100%)(OH 3.28.1997)
  - Duke Energy Generation Services Holding Company, Inc. (100%)(DE 2.11.1997)
    - *(see Appendix E for subsidiaries)*
  - Duke-Reliant Resources, Inc. (100%)(1.14.1998)
- Cinergy Receivables Company, LLC (100%)(DE 1.10.2002)
- Cinergy Wholesale Energy, Inc. (100%)(OH 11.27.2000)
  - Cinergy Origination & Trade, LLC (100%)(DE 10.19.2001)
  - Cinergy Power Generation Services, LLC (100%)(DE 11.22.2000)
- Duke Energy Indiana, Inc. (100%)(IN 9.6.1941)
  - South Construction Company, Inc. (100%)(IN 5.31.1934)
- Duke Energy Transmission Holding Company (100%)(DE 7.16.2008)
  - Pioneer Transmission, LLC (50%)(IN 7.31.2008) (2)
- DukeTec LLC (100%)(DE 11.16.2000)
  - DukeTec I LLC (100%)(DE 11.16.2000)
    - eVent Resources I LLC (80%)(DE 11.17.2000) (3)
      - eVent Resources Holdings LLC (100%)(DE 12.13.2000)
  - DukeTec II LLC (100%)(DE 12.23.2003)
    - eVent Resources I LLC (20%)(DE 11.17.2000) (3)
      - eVent Resources Holdings LLC (100%)(DE 12.13.2000)
- Duke Technologies, Inc. (100%)(DE 7.26.2000)
  - Duke Broadband, LLC (100%)(DE 9.22.2003)
  - Duke Energy One, Inc. (100%)(DE 9.5.2000)
    - Cinergy Solutions – Utility, Inc. (100%)(DE 9.27.2004)
  - Duke Investments, LLC (100%)(DE 7.25.2000)
    - Current Group, LLC (O.395%)(DE 10.24.2000) (4)
  - Duke Supply Network, LLC (100%)(DE 8.10.2000)
  - Duke Ventures II, LLC (100%)(DE 9.1.2000)

(1) Duke Communications Holdings, Inc. 11%; Other private investors 89%
(2) AEP Transmission Holding Company, LLC 50%, Duke Energy Transmission Holding Company, LLC 50%
(3) DukeTec I LLC 80%, DukeTec II LLC 20%
(4) Other shareholders include: B-ETC Current Holdings, LP, ECP II Holdings, LLC, Goldman, Sachs & Co., Hearst Communications, Inc., LAP Current Holdings, LLC%

Duke Energy Corporation
- Cinergy Corp. (100%)

Cinergy Corp. (100%)
- Duke Energy Ohio, Inc. (100%)(OH 4,3,1837)
  - Duke Energy Commercial Asset Management, Inc. (100%)(OH 12.5.2000)
  - Duke Energy Kentucky, Inc. (100%)(KY 3.20.1901)
  - Duke Energy Fayette II, LLC (100%)(DE 10.14.2010)
  - Duke Energy Hanging Rock II, LLC (100%)(DE 10.14.2010)
  - Duke Energy Lee II, LLC (100%)(DE 10.14.2010)
  - Duke Energy Vermillion II, LLC (100%)(DE 10.14.2010)
  - Duke Energy Washington II, LLC (100%)(DE 10.14.2010)
  - KO Transmission Company (100%)(KY 4.11.1994)
  - Miami Power Corporation (100%)(IN 3.25.1930)
  - Ohio Valley Electric Corporation (9%) (1)
  - Sugartree Timber, LLC (100%)(DE 7.24.2008)
  - Tri-State Improvement Company (100%)(OH 1.14.1964)

(1) Allegheny Energy, Inc. 12.5%, American Electric Power Company, Inc. 39.9%, Columbus Southern Power Company 4.3%, Dayton Power and Light Company 4.9%, Duke Energy Ohio, Inc. 9%, Kentucky Utilities Company 2.5%, Louisville Gas and Electric Company 4.9%, Ohio Edison Company 16.5%, Southern Indiana Gas and Electric Company 1.5%, The Toledo Edison Company 4%

Duke Energy Corporation
- Cinergy Corp. (100%)
  - Cinergy Global Resources, Inc. (100%)

Cinergy Global Resources, Inc. (100%)(DE 5.15.1998)
- Cinergy Global Power, Inc. (100%)(DE 9.4.1997)
  - CGP Global Greece Holdings, SA (99.99%)(Greece 8.10.2001) [1]
    - Attiki Denmark ApS (51%)(Denmark 10.1.2000) [2]
      - Attiki Gas Supply Company, SA (49%)(Greece 11.2.2001) [3]
  - Cinergy Global (Cayman) Holdings, Inc. (100%)(Cayman Islands 9.4.1997)
    - Cinergy Global Tsavo Power (100%)(Cayman Islands 9.4.1997)
      - IPS-Cinergy Power Limited (48.2%)(Kenya 4.28.1999) [4]
        - Tsavo Power Company Limited (49.9%)(Kenya 1.22.1998) [5]
  - Cinergy Global Holdings, Inc. (100%)(DE 12.18.1998)
    - CGP Global Greece Holdings, SA (.01%) (Greece 8.10.2001) [1]
  - Cinergy Global Power Africa (Proprietary) Limited (100%)(South Africa 8.3.1999)

(1) Cinergy Global Power, Inc. 99.99%, Cinergy Global Holdings, Inc. 0.01%
(2) CGP Global Greece Holdings, SA 51%, Shell Gas B.V. 49%
(3) Attiki Denmark ApS 49%, Attiki Gas Distribution Company SA 51%
(4) Cinergy Global Tsavo Power Limited 48.2%, Industrial Promotion Services (Kenya) Limited 51.8%
(5) IPS-Cinergy Power Limited 49.9%, Other Investors 50.1%

Duke Energy Corporation
- Cinergy Corp. (100%)
  - Cinergy Investments, Inc. (100%)
    - Duke Energy Commercial Enterprises, Inc. (100%)

Duke Energy Commercial Enterprises, Inc. (100%)(IN 10.8.1992)
- Brownsville Power I, L.L.C. (100%)(DE 7.13.1998)
- CinCap IV, LLC (10%)(DE 12.3.1997) (1)
- CinCap V, LLC (10%)(DE 7.21.1998) (2)
- Cinergy Climate Change Investments, LLC (100%)(DE 6.9.2003)
- Cinergy General Holdings, LLC (100%)(DE 12.14.2001)
- Cinergy Limited Holdings, LLC (100%)(DE 12.14.2001)
- Cinergy Retail Power General, Inc. (100%)(TX 8.7.2001)
- CinFuel Resources, Inc. (100%)(DE 1.10.2002)
  - Spruce Mountain Investments, LLC (1%)(DE 11.8.2006) (3)
    - Spruce Mountain Products, LLC (100%)(DE 10.27.2006)
  - LH1, LLC (1%)(DE 1.10.2002) (4)
    - Oak Mountain Products, LLC (100%)(DE 7.9.2001)
- CinPower I, LLC (100%)(DE 6.12.1998)
- Duke Energy Retail Sales, LLC (100%)(DE 12.9.2003)
- LH1, LLC (99%)(DE 1.10.2002) (4)
  - Oak Mountain Products, LLC (100%)(DE 7.9.2001)
- Ohio River Valley Propane, LLC (100%)(DE 10.18.2001)
- Spruce Mountain Investments, LLC (99%)(DE 11.8.2006) (3)
- SynCap II, LLC (100%)(DE 10.13.2000)

(1) Duke Energy Commercial Enterprises, Inc. 10%, Other Investors via 1998 CinPower Trust 90%
(2) Duke Energy Commercial Enterprises, Inc. 10%, Other Investors via 1999 CinPower Trust 90%
(3) Duke Energy Commercial Enterprises, Inc. 99%, CinFuel Resources, Inc. 1%
(4) Duke Energy Commercial Enterprises, Inc. 99%, CinFuel Resources, Inc. 1%

Duke Energy Corporation
- Cinergy Corp. (100%)
  - Cinergy Investments, Inc. (100%)
    - Duke Energy Generation Services Holding Company, Inc. (100%)

Duke Energy Generation Services Holding Company, Inc. (100%)(DE 2.11.1997)
- DEGS Biomass, LLC (100%)(DE 9.22.2008)
  - ADAGE LLC (50%)(DE 9.9.2008) [1]
  - ADAGE Hamilton LLC (50%)(DE 5.6.2009) [2]
  - ADAGE Mason LLC (50%)(DE 12.17.2009) [2]
- DEGS of Boca Raton, LLC (100%)(DE 9.4.1998)
- DEGS of Cincinnati, LLC (100%)(OH 7.29.1997)
- DEGS Solar, LLC (100%)(DE 05.13.2010)
  - INDU Solar Holdings, LLC (50%) (DE 10.14.2010) [2]
    - SEC BESD Solar One, LLC (100%)(DE 12.07.2009)
    - SEC Bellefonte SD Solar One, LLC (100%)(DE 03.04.2010)
  - RP-Orlando, LLC (100%)(DE 3.5.2010)
  - TX Solar I LLC (100%)(DE 05.27.2009)
- DEGS of St. Paul, LLC (100%)(DE 8.13.1998)
  - Environmental Wood Supply, LLC (50%)(MN 8.10.2000) [4]
  - St. Paul Cogeneration, LLC (50%)(MN 12.18.1998) [4]
- DEGS of Tuscola, Inc. (100%)(DE 10.13.1998)
- DEGS Wind I, LLC (100%)(DE 5.23.2007)
  - *(see Appendix (E cont'd) for subsidiaries)*
- Delta Township Utilities, LLC (51%)(DE 7.5.2001) [5]
- Delta Township Utilities II, LLC (46%)(DE 3.25.2004) [6]
- Duke Energy Generation Services, Inc. (100%)(DE 6.2.2000)
  - (See Appendix G for subsidiaries)
- Energy Equipment Leasing LLC (49%)(DE 11.12.1998) [7]
- Owings Mills Energy Equipment Leasing, LLC (49%)(DE 10.20.1999) [7]
- SUEZ-DEGS, LLC (50%)(DE 2.18.1997) [8]
- SUEZ-DEGS of Ashtabula, LLC (49%)(DE 4.21.1999) [7]
- SUEZ-DEGS of Lansing, LLC (51%)(DE 11.3.1999) [9]
  - SUEZ/WWNA/DEGS of Lansing, LLC (80%)(DE 11.3.1999) [10]
- SUEZ-DEGS of Orlando, LLC (100%)(DE 6.12.1998)
- SUEZ-DEGS of Owings Mills, LLC (49%)(DE 9.20.1999) [7]
- SUEZ-DEGS of Rochester, LLC (49%)(DE 10.20.1999) [7]
- SUEZ-DEGS of Silver Grove, LLC (49%)(DE 3.18.1999) [7]
- SUEZ-DEGS of Tuscola, LLC (49%)(DE 8.21.1998) [7]

(1) DEGS Biomass, LLC 50%, AREVA Bioenergies Inc. 50%
(2) DEGS Biomass, LLC 50%, AREVA Renewable Inc. 50%
(3) DEGS Solar, LLC 50%, TEGE Solar, LLC 50%
(4) DEGS of St. Paul, LLC 50%, Market Street Energy Company, LLC 50%
(5) Duke Energy Generation Services Holding Company, Inc. 51%, SUEZ Energy Solutions, Inc. 49%
(6) Duke Energy Generation Services Holding Company, Inc. 46%, Veolia Water North America Operating Services, Inc. 44%, York International Corporation 10%
(7) Duke Energy Generation Services Holding Company, Inc. 49%, SUEZ Energy Solutions, Inc. 51%
(8) Duke Energy Generation Services Holding Company, Inc. 50%, SUEZ Energy Solutions, Inc. 50%
(9) Duke Energy Generation Services Holding Company, Inc. 51%, SUEZ Energy Solutions, Inc. 49%
(10) SUEZ-DEGS of Lansing, LLC 80%, U.S. Filter Operating Services, Inc. 20%

Duke Energy Corporation
- Cinergy Corp. (100%)
  - Cinergy Investments, Inc. (100%)
    - Duke Energy Generation Services Holding Company, Inc. (100%)
      - DEGS Wind I, LLC (100%)

DEGS Wind I, LLC (100%)(DE 5.23.2007)
- Ball Hill Windpark, LLC (100%)(DE 9.29.2006)
- Catamount Energy Corporation (100%)(VT 6.23.1992) — (see Appendix F for subsidiaries)
- DEGS Wind Supply, LLC (100%)(DE, 12.11.2007)
- DEGS Wind Supply II, LLC (100%)(DE 8.26.2008)
- Green Frontier Windpower Holdings, LLC (100%)(DE 02.22.2010)
  - Green Frontier Windpower, LLC (100%)(DE 05.13.2010)
    - Three Buttes Windpower, LLC (100%)(DE 8.26.2008)
    - Silver Sage Windpower, LLC (100%)(DE 4.16.2007)
    - Happy Jack Windpower, LLC (100%)(DE 10.27.2006)
    - Kit Carson Windpower, LLC (100%)(DE 6.23.09)
    - North Allegheny Wind, LLC (100%)(DE 5.31.06)
- Ironwood Windpower Holdings, LLC (100%)(DE 12.8.2010)
  - Ironwood Windpower, LLC (100%)(DE 12.8.2010)
- Los Vientos Windpower I Holdings, LLC (100%)(DE 1.27.2011)
  - Los Vientos Windpower I, LLC (100%)(DE 1.27.2011)
- Notrees Windpower, LP (99%)(DE 9.30.2005) (1)
- Ocotillo Windpower, LP (99%)(DE 12.22.2004) (2)
- TE Notrees, LLC (100%)(DE 9.30.2005)
  - Notrees Windpower, LP (1%)(DE 9.30.2005) (1)
- TE Ocotillo, LLC (100%)(DE 12.21.2004)
  - Ocotillo Windpower, LP (1%)(DE 12.22.2004) (2)

(1) DEGS Wind I, LLC 99%, TE Notrees, LLC 1%
(2) DEGS Wind I, LLC 99%, TE Ocotillo, LLC 1%

- Duke Energy Corporation
  - Cinergy Corp. (100%)
    - Cinergy Investments, Inc. (100%)
      - Duke Energy Generation Services Holding Company, Inc. (100%)
        - DEGS Wind I, LLC (100%)(DE 5.23.2007)
          - Catamount Energy Corporation (100%)

- Catamount Energy Corporation (100%)(VT 6.23.1992)
  - Equinox Vermont Corporation (100%)(VT 5.1.1990)
    - Catamount Rumford Corporation (100%)(VT 4.11.1989)
    - Ryegate Associates (33.1126%)(UT 4.30.1990) (1)
  - Catamount Sweetwater Corporation (100%)(VT 6.17.2003)
    - Sweetwater Development LLC (100%)(TX 11.5.2002)
    - Sweetwater Wind 6 LLC (100%)(DE 4.29.2004)
    - Sweetwater Wind Power L.L.C. (100%) (TX 11.5.2002)
  - Catamount Sweetwater Holdings LLC (100%)(VT 6.20.2005)
    - Catamount Sweetwater 1 LLC (100%)(VT 12.12.2003)
      - Sweetwater Wind 1 LLC (13.59%)(DE 6.24.2003) (2)
    - Catamount Sweetwater 2 LLC (100%)(VT 5.5.2004)
      - Sweetwater Wind 2 LLC (13.14%)(DE 4.19.2004) (3)
    - Catamount Sweetwater 3 LLC (100%)(VT 6.3.2004)
      - Sweetwater Wind 3 LLC (13.18%)(DE 4.29.2004) (4)
  - Catamount Sweetwater 4-5 LLC (100%)(VT 3.8.2005)
    - Sweetwater 4-5 Holdings LLC (18.72%)(DE 4.18.2007) (5)
      - Sweetwater Wind 4 LLC (100%) (DE 4.29.2004)
      - Sweetwater Wind 5 LLC (100%)(DE 4.29.2004)
  - Laurel Hill Wind Energy, LLC (100%)(PA 12.14.2004)
  - CEC Wind Development LLC (100%)(VT 1.12.2007)
  - Searchlight Wind Energy LLC (100%)(NV 1.17.2008)
  - Willow Creek Wind Energy LLC (100%)(DE 6.18.2007)
  - Top of the World Wind Energy Holdings LLC (100%)(DE 11.15.2010)
    - Top of the World Wind Energy LLC (100%)(DE 3.13.2008)
  - Catamount Sweetwater 6 LLC (100%)(VT 9.7.2005)
  - CEC UK1 Holding Corp. (100%)(VT 9.11.2002)
    - Catamount Energy SC 1 (1%)(Scotland 10.8.2002) (6)
      - Catamount Energy SC 2 (99%)(Scotland 10.8.2002) (7)
    - Catamount Energy SC 2 (1%)(Scotland 10.8.2002) (7)
      - Catamount Energy SC 3 (99%)(Scotland 10.8.2002) (8)
    - Catamount Energy SC 3 (1%)(Scotland 10.8.2002) (8)
      - Barmoor Wind Power Limited (50%)(England and Wales, 9.10.2010) (9)
      - Catamount Celtic Energy Limited (100%)(Scotland 6.8.2007)
      - Catamount Energy Limited (50%)(UK 8.15.2002) (10)
  - CEC UK2 Holding Corp. (100%)(VT 9.11.2002)
    - Catamount Energy SC 1 (99%)(Scotland 10.8.2002) (6)

(1) Equinox Vermont Corporation 33.1126%, ATC Ryegate LLC 66.8874%
(2) Catamount Sweetwater 1 LLC 13.59%, Sweetwater 1 Member LLC 13.59%, Other Investors 72.82%
(3) Catamount Sweetwater 2 LLC 13.14%, Sweetwater 2 Member LLC 13.14%, Other Investors 73.72%
(4) Catamount Sweetwater 3 LLC 13.18%, Sweetwater 3 Member LLC 13.18%, Other Investors 73.64%
(5) Catamount Sweetwater 4-5 Holdings LLC 18.72%, Sweetwater 4-5 Member LLC 21.10%, Other Investors 60.18%
(6) CEC UK 2 Holding Corp. 99%, CEC UK 1 Holding Corp. 1%
(7) Catamount Energy SC 1 99%, CEC UK 1 Holding Corp. 1%
(8) Catamount Energy SC 2 99%, CEC UK 1 Holding Corp. 1%
(9) Catamount Energy SC 3 50%, Statkraft UK Limited 50%
(10) Catamount Energy SC 3 50%, Statkraft UK Limited 50%

Duke Energy Corporation
- Cinergy Corp. (100%)
  - Cinergy Investments, Inc. (100%)
    - Duke Energy Generation Services Holding Company, Inc. (100%)
      - Duke Energy Generation Services, Inc. (100%)

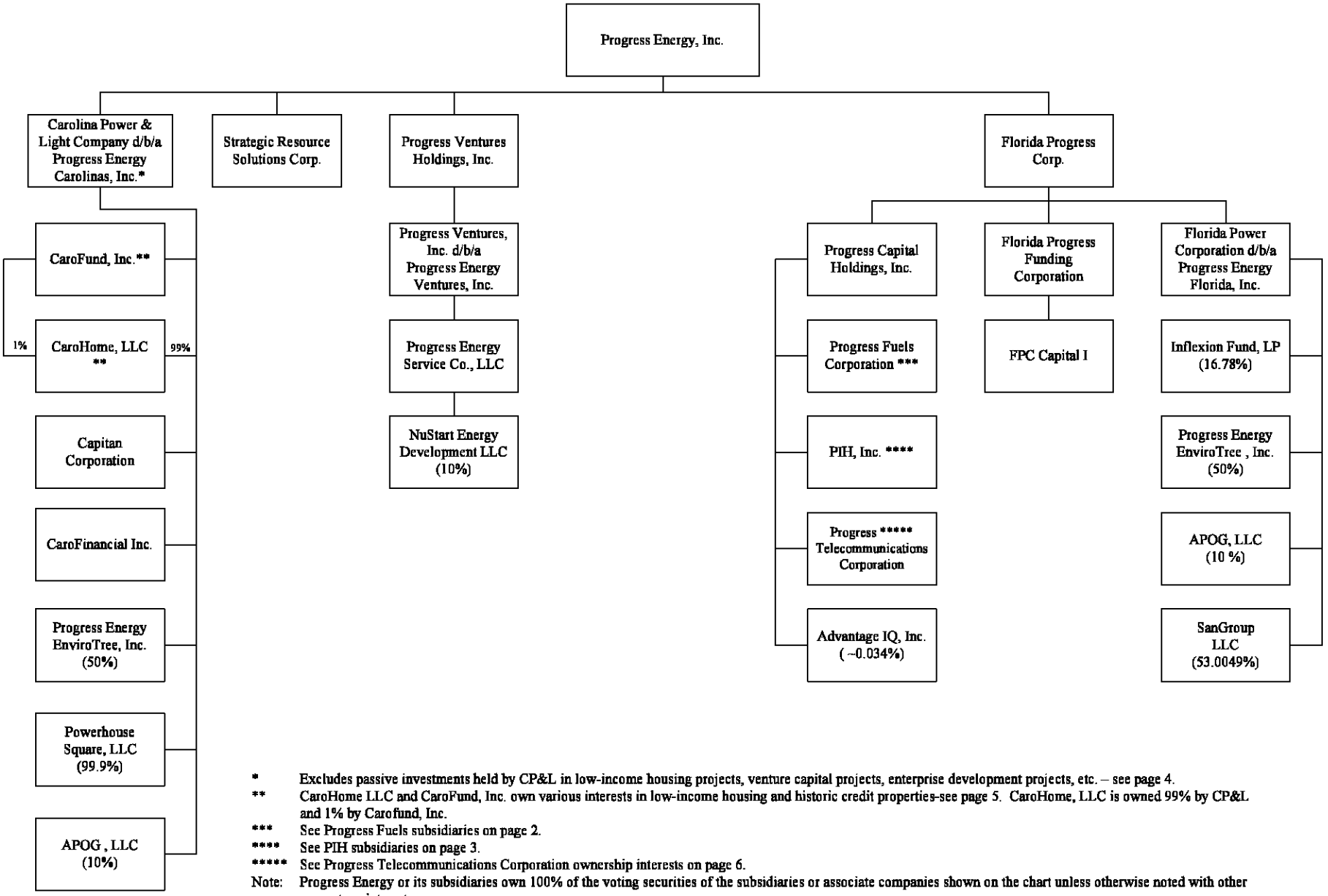
Duke Energy Generation Services, Inc. (100%)(DE 6.2.2000)
- Cinergy Solutions Partners, LLC (100%)(DE 9.12.2000)
  - CST Limited, LLC (100%)(DE 5.18.2001)
    - CST Green Power, L.P. (99%)(DE 5.23.2001) (1)
  - CST General, LLC (100%)(TX 5.22.2001)
    - CST Green Power, L.P. (1%)(DE 5.23.2001) (1)
- CSGP General, LLC (100%)(TX 4.5.2001)
- CSGP Limited, LLC (100%)(DE 4.5.2001)
- DEGS O&M, LLC (100%)(DE 8.30.2004)
- DEGS of Delta Township, LLC (100%)(DE 12.15.2004)
- DEGS of Lansing, LLC (100%)(DE 6.25.2002)
- DEGS of Monaca, LLC (100%)(DE 12.16.2003)
- DEGS of Narrows, LLC (100%)(DE 3.17.2003)
- DEGS of Philadelphia, LLC (100%)(DE 5.11.2001)
- DEGS of San Diego, Inc. (100%)(DE 1.9.2004)
- DEGS of Shreveport, LLC (100%)(DE 6.28.2002)
- DEGS of South Charleston, LLC (100%)(DE 8.24.2004)
- DEGS of St. Bernard, LLC (100%)(DE 1.6.2003)
- Duke Energy Industrial Sales, LLC (100%)(DE 6.6.2006)
- Oklahoma Arcadian Utilities, LLC (40.8%)(DE 12.5.2000) (2)
- Shreveport Red River Utilities, LLC (40.8%)(DE 10.16.2000) (2)
- Teak Mountain Products, LLC (100%)(DE 5.1.2007)
- Willow Mountain Products, LLC (100%)(DE 5.1.2007)

(1) CST Limited, LLC 99%, CST General, LLC 1%
(2) Duke Energy Generation Services, Inc. 40.8%, SUEZ Energy Solutions, Inc. 39.20%, U.S. Filter Operating Services, Inc. 20%

PENDING AUTHORIZED BUT NOT IMPLEMENTED CHANGES:

Dissolution
DENA Partners Holding, LLC (100%)(DE 11.30.2001)
Duke Energy Fossil-Hydro, LLC (100%)(DE 7.6.2001)
Duke Energy Fossil-Hydro California, Inc. (100%)(DE 8.1.2001)
Duke Engineering & Services (Europe) Inc. (100%)(DE 10.13.1993)
Duke Engineering & Services International, Inc. (100%)(Cayman Islands 5.8.1996)
Cinergy Retail Power General, Inc. (100%)(TX 8.7.2001)

Progress Energy, Inc.
Corporate Legal Entity Structure



* Excludes passive investments held by CP&L in low-income housing projects, venture capital projects, enterprise development projects, etc. – see page 4.

** CaroHome LLC and CaroFund, Inc. own various interests in low-income housing and historic credit properties-see page 5. CaroHome, LLC is owned 99% by CP&L and 1% by Carofund, Inc.

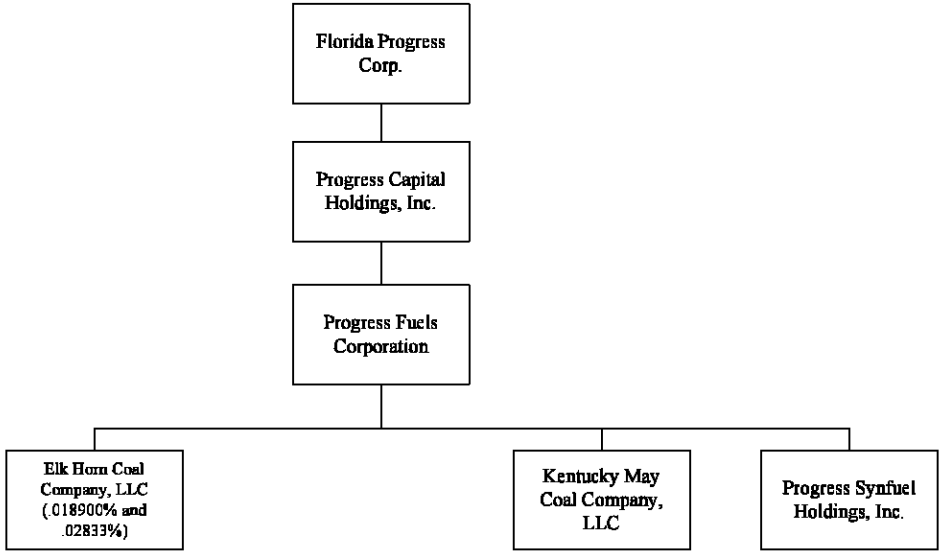
*** See Progress Fuels subsidiaries on page 2.

**** See PIH subsidiaries on page 3.

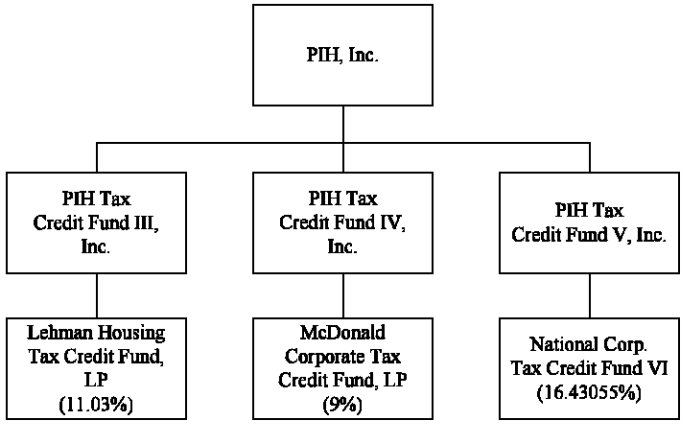
***** See Progress Telecommunications Corporation ownership interests on page 6.

Note: Progress Energy or its subsidiaries own 100% of the voting securities of the subsidiaries or associate companies shown on the chart unless otherwise noted with other percentage interests.

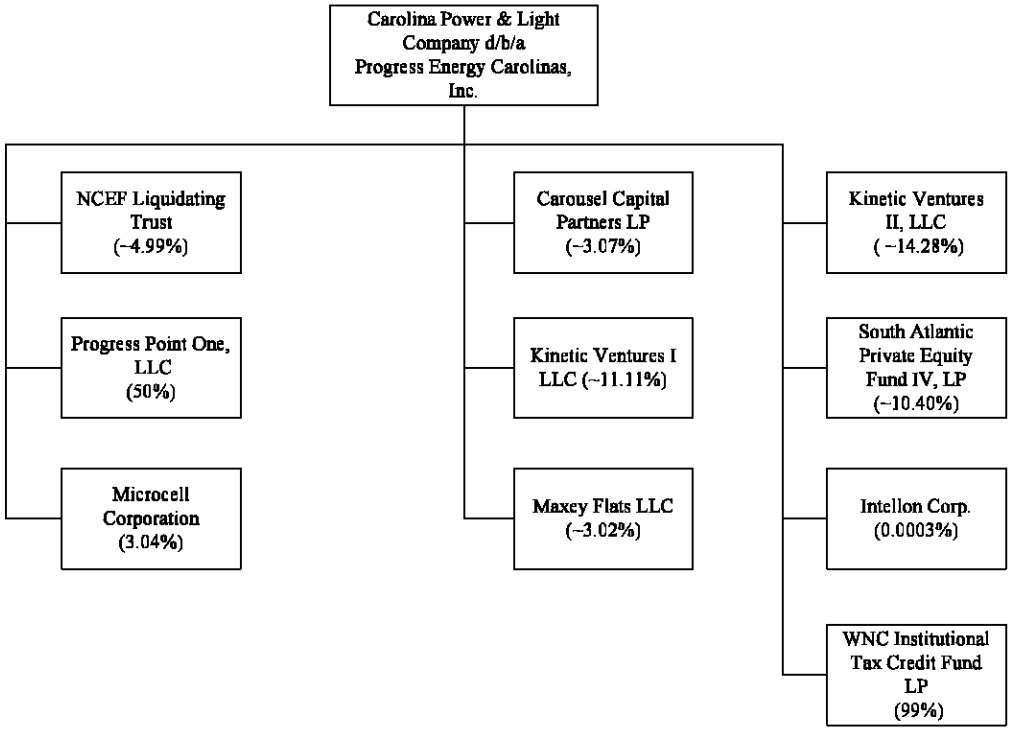
Progress Fuels Corporation
Subsidiaries



PIH, Inc.

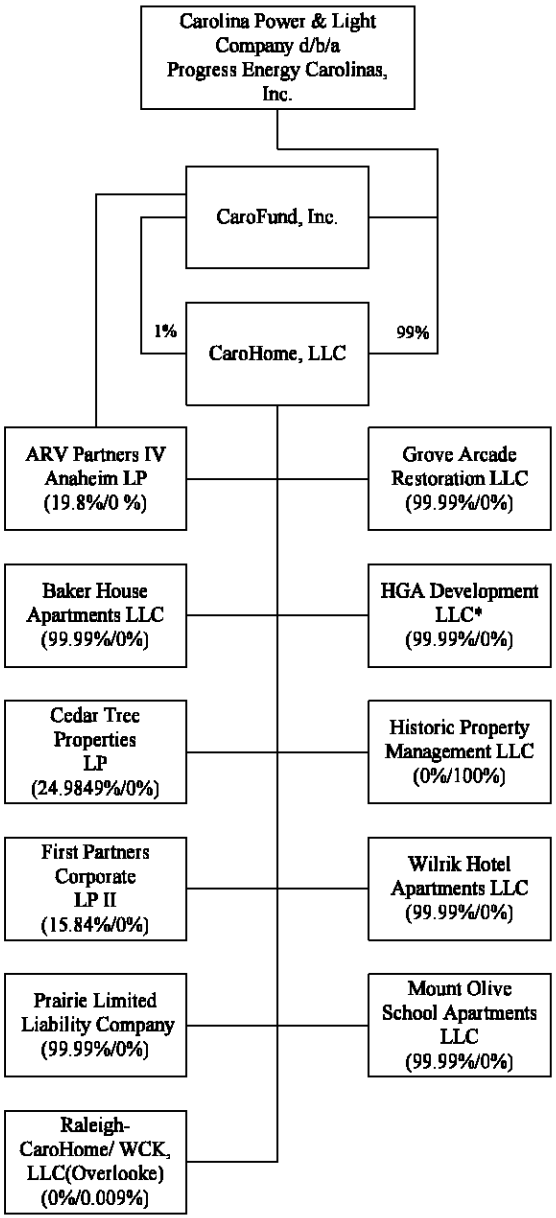

PIH, Inc.
PIH Tax Credit Fund III, Inc.
PIH Tax Credit Fund IV, Inc.
PIH Tax Credit Fund V, Inc.
Lehman Housing Tax Credit Fund, LP (11.03%)
McDonald Corporate Tax Credit Fund, LP (9%)
National Corp. Tax Credit Fund VI (16.43055%)

Progress Energy Carolinas (CP&L)
Other Investments **



**PEC is beneficial owner of several entities that were generally acquired through bankruptcy proceedings. These entities are not shown separately on the legal entity chart due to PEC's minor ownership interest (generally <1%).
As of December 31, 2009, it is believed PEC owns a beneficial interest in the following entities:
Air Nail Unsecured Creditors Liquid Trust, Creditors Reserve Trust, Heilig-Meyers Liquidating Trust, Estate of Jillian Entertainment, HA2003 Liquidating Trust, CFC Trust, Fleming Post Confirmation Trust, Bombay Liquidation Trust, USOP Liquidating LLC, ZB Company Liquidation Trust, and ANC Liquidating Trust.

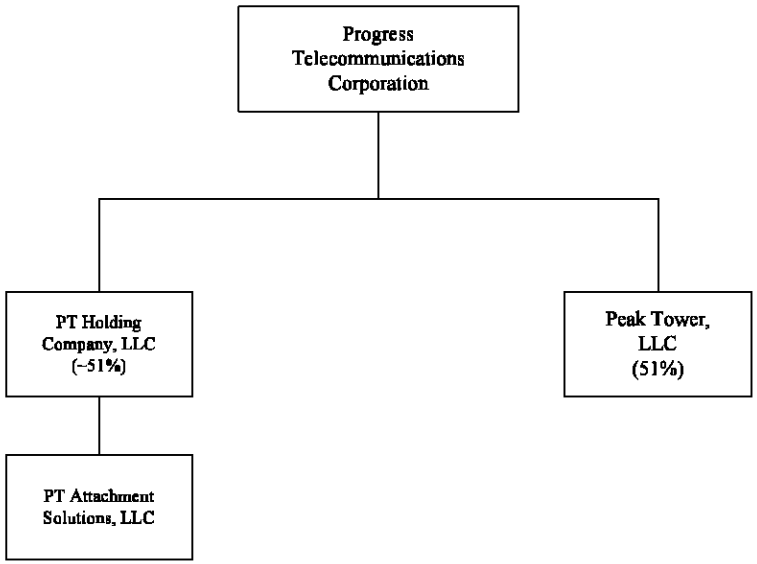
CaroHome / CaroFund Investments



Note: CaroHome % listed first, then CaroFund %

*Also owned 0.01% by Historic Property Management LLC

Progress Energy, Inc
Corporate Legal Entity Structure



DUKE ENERGY CORPORATION

PARENTS AND SUBSIDIARIES

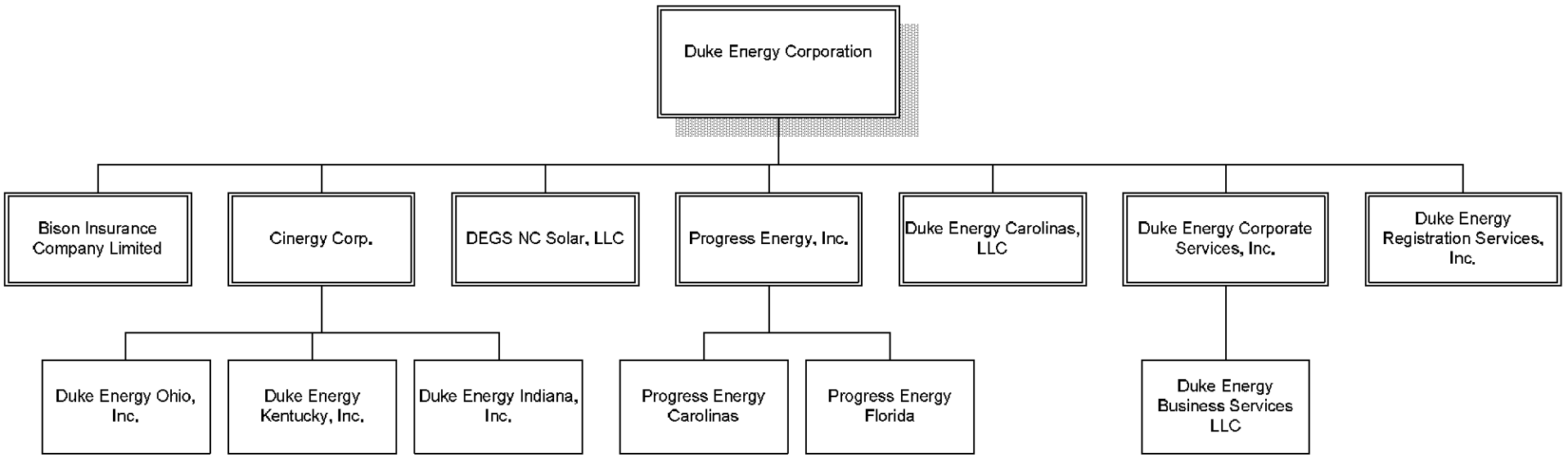


Exhibit C-3

Exhibit D: Description of All Joint Ventures, Strategic Alliances, Tolling Arrangements or Other Business Ventures

The Joint Dispatch Agreement and the Joint Open Access Transmission Tariff of the Applicants are described in Part III of the Application.

A description of all of the Applicants' joint ventures, strategic alliances, tolling arrangements and other business ventures appears below.

Duke Energy:

A. Joint Ventures

Duke Energy's joint ownership interests in its energy subsidiaries and affiliates are reflected in Exhibit B. Duke Energy's joint ownership interests in entities other than its energy subsidiaries and affiliates are reflected in Exhibit C.

B. Agreements

The agreements described below pertain to Duke Energy's use of generation assets in geographic markets relevant to the Transaction. These Energy agreements will not be altered by the Transaction, but are described below to assist the Commission in its analysis. Routine operational agreements have been excluded from this exhibit.

1. The North Carolina Transmission Planning Participation Agreement

In May, 2005 Duke Power, Progress Energy Carolinas, ElectriCities of North Carolina, Inc. ("ElectriCities") and North Carolina Electric Membership Corporation ("NCEMC") entered into "The North Carolina Participation Agreement" which establishes a collaborative transmission planning process for the Duke and Progress control areas in North Carolina. ElectriCities and NCEMC are load-serving entities and transmission dependent utilities with delivery points embedded within the systems of both Duke and Progress. The Agreement had its genesis in a series of public meetings held by the North Carolina Utilities Commission ("NCUC") in 2004 to discuss transmission planning within the state. The NCUC requested that the major load-serving entities to address the issues raised in the meetings in a collaborative manner. In addition, modifications were made to the agreement for Duke and Progress to be in compliance with FERC Order No. 890 and FERC accepted the Duke and Progress Order No. 890 compliance filings on February 2, 2010. The purpose of the North Carolina Participation Agreement is to implement a process to enhance collaborative transmission planning in North Carolina. The process, which is coordinated with the integrated resource planning process conducted by the NCUC, is administered by an Oversight and Steering Committee ("OSC") and a Planning and Working Group ("PWG") staffed by the four entities. The process is facilitated by an independent third party entity. The process

also includes a Transmission Advisory Group ("TAG") which is composed of interested stakeholders.

2. The Catawba Agreements

Duke and three groups of municipal and cooperative organizations are co-owners of the Catawba Nuclear Station pursuant to three agreements entered into between Duke and each of the other co-owners between 1978 and 1980. These agreements are the Purchase, Construction, and Ownership Agreements, the Interconnection Agreements, and the Operating and Fuel Agreements (together known as the "Catawba Agreements").

Duke owns a 38.492% interest in Unit 1. The four groups of municipal and cooperative organizations are:

- North Carolina Electric Membership Corporation ("NCEMC") – owns 61.508% of Unit 1[1]
- North Carolina Municipal Power Agency No. 1 ("NCMPA") – owns 75% of Unit 2
- Piedmont Municipal Power Agency (SC) ("PMPA") – owns 25% of Unit 2

Duke is licensed by the United States Nuclear Regulatory Commission ("NRC") as the operator for both Catawba units. The Catawba Agreements initially contained provisions for Duke to supply certain backup services, as well as supplemental power, to the co-owners to serve their participating members. The original Catawba Interconnection Agreements also contained transmission provisions. In addition, the Interconnection Agreements provide for two nuclear reliability exchanges, the first between Unit 1 and Unit 2 of Catawba and the second between the two Catawba Units and Duke's McGuire Nuclear Station.

The Catawba Agreements were amended several times between 1980 and 2000. In October 2000, as a result of negotiations between Duke and each of NCEMC and NCMPA, Duke filed with the FERC revised Catawba Interconnection Agreements which effectively "unbundled" the Interconnection Agreements by transferring transmission service to network service under Duke Power's Open Access Transmission Tariff, and by eliminating the supplemental power provisions, among other things. The two entities now by their power requirements above their Catawba ownership share from various market sources sometimes including Duke.

[1] Saluda River Electric Coop., Inc. owned 18.75% of Unit 1 but sold a portion of such interest to Duke and a portion of such interest to NCEMC in 2008.

PMPA chose not to "unbundle" its Interconnection Agreement in 2000. However, prior to that, in 1997, PMPA gave notice to Duke that it wished to terminate its Catawba Interconnection Agreement effective January 1, 2006. Thereafter, Duke and PMPA entered into two new agreements effective beginning January 1, 2006. These agreements continue the Catawba and McGuire nuclear reliability exchanges referenced above, and also contain various provisions which are necessary for the continuation of the co-owner relationship.

3. The SEPA Contract

The Southeastern Power Administration of the United States Department of Energy ("SEPA") is responsible for marketing the energy generated at hydroelectric plants operated by the United States Army Corps of Engineers in the southeastern United States to various "preference customers" which are mostly municipal power systems and some electric cooperatives. The Duke Energy Carolinas, LLC balancing authority area is interconnected to two SEPA hydroelectric facilities, Hartwell and Thurmond. SEPA has about 1,500 MW of generation directly interconnected with the Duke balancing authority area, and a portion of that power is delivered to SEPA preference customers located within the Duke balancing authority area. Under an agreement known as the "SEPA Contract" (FERC Rate Schedule No. 308), Duke delivers SEPA-generated power to some of these preference customers and provides power services such as scheduling. This contract was unbundled in 1999 and transmission service for these deliveries is provided pursuant to Duke's Open Access Transmission Tariff. The SEPA Contract has been amended on various occasions at the request of SEPA and/or preference customers to adjust the allocations of power to be delivered to the preference customers.

4. Carolinas Transmission Planning Coordination Arrangement

The Carolinas Transmission Planning Coordination Arrangement ("CTPCA") refers to a collection of two-party interchange agreements between the entities listed below (respectively):

- Duke Energy Corporation and Progress Energy Carolinas
- Duke Energy Corporation and South Carolina Electric & Gas Company
- Duke Energy Corporation and South Carolina Public Service Authority
- Progress Energy Carolinas and South Carolina Electric & Gas Company
- Progress Energy Carolinas and South Carolina Public Service Authority
- South Carolina Electric & Gas Company and South Carolina Public Service Authority

The purpose of the CTPCA is to establish a forum for coordinating certain transmission planning and assessment activities among the parties to the two-party interchange agreements listed above. Accordingly, the following committees and groups within the CTPCA have been formed in furtherance of the purpose of the forum: (1) steering committee, (2) power flow studies group, and (3) stability studies group. The principals and planning representatives from each of the parties to the two-party interchange agreements referred to above meet once a year to review the manual created to administer the CTPCA forum. The committees and groups that have been established

within the CTPCA meet as necessary to carry out assigned responsibilities specific to those committees and groups.

C. Transfer of Operational Control of Transmission Facilities

Certain affiliates of Duke Energy Carolinas, LLC – Duke Energy Indiana, Inc. ("DEI"), Duke Energy Ohio, Inc. ("DEO") and Duke Energy Kentucky, Inc. ("DEK") – are transmission and generation owning members of the Midwest ISO. DEO owns several gas-fired generating stations in the footprint of PJM Interconnection, L.L.C. ("PJM"). On June 25, 2010, DEO and DEK submitted a filing to the Federal Energy Regulatory Commission (the "Commission") requesting permission to transfer DEO/DEK transmission, generation and load to effect a Regional Transmission Organization realignment from the Midwest ISO to PJM. The Commission issued an order on October 21, 2010 which authorized Duke Energy Ohio and Duke Energy Kentucky to terminate their existing obligations to the Midwest ISO, subject to certain conditions.

Progress Energy Ownership Interests in Joint Ventures:

PEC, PEF, Progress Energy Service Company, LLC and Progress Telecommunications Corporation participate in the following joint ventures:

PEC:

Name of Joint Venture: APOG, LLC
Purpose: To provide technical, engineering and procurement support services to and for the benefit of its member owned or operated nuclear facilities. Members include owners and prospective owners of AP1000 nuclear plants.
State of Formation: Delaware
Date of Formation: June 22, 2007
Ownership Interest: 10%
Other Members: PEF, Duke Energy Carolinas, LLC, South Carolina Electric & Gas Company, Georgia Power Company and Florida Power & Light Company

Name of Joint Venture: Carolinas Virginia Nuclear Power Associates, Inc.
Purpose: A non-profit organization to do research and development of nuclear fuel, and to hold the Carolinas Virginia Tube Reactor, a nuclear test facility which was shut down in 1967 and has since been decommissioned.
State of Formation: North Carolina
Date of Formation: October 4, 1956
Ownership Interest: 25%
Other Members: Duke Energy Carolinas, LLC, South Carolina Electric & Gas Company and Virginia Electric Power Company

PEF:

Name of Joint Venture: APOG, LLC
Purpose: To provide technical, engineering and procurement support services to and for the benefit of its member owned or operated nuclear facilities. Members include owners and prospective owners of AP1000 nuclear plants.
State of Formation: Delaware
Date of Formation: June 22, 2007
Ownership Interest: 10%
Other Members: PEC, Duke Energy Carolinas, LLC, South Carolina Electric & Gas Company, Georgia Power Company and Florida Power & Light Company

PROGRESS ENERGY SERVICE COMPANY, LLC

Name of Joint Venture: NuStart Energy Development, LLC
Purpose: To submit a proposal in response to DOE Solicitation DE-PS07-041D14435, and to negotiate, enter into and perform the implementation of the cooperative agreement with DOE that results from the proposal. The DOE Solicitation was issued in order to seek applications for financial assistance from power generation companies for projects that enable a new nuclear power plant to be ordered and licensed for deployment United States within the decade.
State of Formation: Delaware
Date of Formation: April 19, 2004
Ownership Interest: 10%
Other Members: Duke Energy Carolinas, LLC, DTE Energy, EDF International North America, Inc., Entergy Nuclear, Exelon Corporation, FPL Group, Progress Energy, SCANA Corporation, Southern Company and Tennessee Valley Authority

PROGRESS TELECOMMUNICATIONS CORPORATION:

Name of Joint Venture: PT Holding Company, LLC
Purpose: To own assets related to wireless attachments primarily installed on transmission towers for which wireless providers make lease payments.
State of Formation: Delaware
Date of Formation: January 25, 2006
Ownership Interest: 53%
Other Members: OT Holding LLC

Name of Joint Venture: Peak Tower, LLC
Purpose: To build and lease stand alone towers (monopoles).
State of Formation: Delaware
Date of Formation: June 1, 2010
Ownership Interest: 51%
Other Members: Peak Tower Investor, LLC

JOINT OWNERSHIP IN GENERATING UNITS

Carolina Power & Light Company d/b/a Progress Energy Carolinas, LLC ("PEC")

Joint Owner	Generating Unit Ownership Percentage				
	Roxboro Unit #4	Brunswick Nuclear Plant Unit #1	Brunswick Nuclear Plant Unit #2	Mayo	Harris Nuclear Plant
PEC	87.06%	81.67%	81.67%	83.83%	83.83%
North Carolina Eastern Municipal Power Agency	12.94%	18.33%	18.33%	16.17%	16.17%

Florida Power Corporation d/b/a Progress Energy Florida, LLC ("PEF)

Joint Owner	Generating Unit Ownership Percentage	
	Crystal River Unit #3	Intercession City
PEF	91.78%	66.67%
City of Alachua	0.08%	
City of Bushnell	0.04%	
City of Gainesville	1.41%	
Kissimmee Utility Authority	0.68%	
City of Leesburg	0.82%	
Utilities Commission of the City of New Smyrna Beach	0.56%	
City of Ocala	1.33%	
Orlando Utilities Commission	1.60%	
Seminole Electric Cooperative, Inc.	1.70%	
Georgia Power Company		33.33%

Exhibit E: Common Officers or Directors of the Parties to the Transaction

There are no common officers or directors between Duke Energy and Progress Energy.

Exhibit F: Description and Location of Wholesale Power Customers and Unbundled Transmission Service Customers Served by Applicants or Their Affiliates

Duke:

Description and Location of Wholesale Power Customers

Wholesale power sales to customers served by Duke Energy Carolinas, LLC are filed with the Commission in the Electric Quarterly Reports ("EQRs"). Accordingly, Duke requests a waiver of this requirement with respect to wholesale power sales reported through the EQRs made to customers served by Duke Energy Carolinas, LLC. Duke also requests a waiver of this requirement with respect to wholesale power sales made to customers located in regions other than North Carolina and South Carolina since the arrangements with such wholesale power sales customers will not be affected by the proposed Transaction.

Description and Location of Unbundled Transmission Service Customers

The description and location of unbundled transmission service customers served by Duke Energy Carolinas, LLC are set forth below. Duke requests a waiver of this requirement with respect to unbundled transmission service customers located in regions other than North Carolina and South Carolina since the arrangements with such transmission service customers will not be affected by the proposed Transaction.

Alcoa Power Generating, Inc.
d/b/a Alcoa Trading
900 South Gary Street
Knoxville, TN 37902

Ameren Energy Marketing Company
1710 Singleton Street
St. Louis, MO 63103

American Electric Power Service Corp.
1 Riverside Plaza
Columbus, OH 43215

ArcLight Energy Marketing, LLC
200 Clarendon Street
Boston, MA 02117

Blue Ridge Electric Membership Corporation
1216 Blowing Rock Blvd. NE
Lenoir, NC 28645

BP Energy
301 Westlake Park Boulevard
Houston, TX 77079

Broad River Energy, LLC
1124 Victory Trail Road
Gaffney, SC 29340

Calpine Energy Services, L.P.
717 Texas Avenue
Houston, TX 77002

Cargill Power Markets, LLC
9350 Excelsior Boulevard
Hopkins, MN 55343

Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc.
411 Fayetteville Street
Raleigh, NC 27602

Cherokee Cogeneration Partners, L.P.
132 Peoples Creek Road
Gafney, SC 29340

Cinergy Marketing & Trading, LP
1100 Louisiana Street, Ste. 4900
Houston, TX 77002

Citigroup Energy Inc.
390 Greenwich Street
New York, NY 10013

City of Concord, NC
PO Box 308
Concord, NC 28025

City of Greenwood, SC
810 Bypass 225 South
Greenwood, SC 29646

City of Kings Mountain
1013 N. Piedmont Avenue
Kings Mountain, NC 28086

City of Seneca, SC
250 E. N. 2nd Street
Seneca, SC 29679

Cobb EMC
1000 EMC Parkway
Marietta, GA 30060

Conoco, Inc.
600 North Dairy Ashford
Houston, TX 77079

Constellation Power Source, Inc.
111 Marketplace, Suite 500
Baltimore, MD 21202

Consumers Energy Co.
1945 West Parnell Road
Jackson, MI 49201

Coral Power, L.L.C.
909 Fannin, Suite 700
Houston, TX 77010

DTE Energy Trading, Inc.
414 South Main Street
Ann Arbor, MI 48176

Duke Energy Carolinas, LLC
Bulk Power Marketing – Charlotte
526 S. Church Street
Charlotte, NC 28202

Duke Energy Indiana, Inc.
221 East Fourth Street
AT II-6th Floor
Cincinnati, OH 45202

Duke Energy Kentucky, Inc.
221 East Fourth Street
AT II-6th Floor
Cincinnati, OH 45202

Duke Energy Ohio, Inc.
221 East Fourth Street
AT II-6th Floor
Cincinnati, OH 45202

Duke Energy Trading & Marketing LLC
139 East Fourth Street, EA 600
Cincinnati, OH 45202

Dynegy Power Marketing, Inc.
1000 Louisiana, Suite 5800
Houston, TX 77002

Eagle Energy Partners I, L.P.
4201 FM 1960 West
Houston, TX 77068

Edison Mission Marketing & Trading, Inc.
160 Federal Street, 4th Floor
Boston, MA 02110

Endure Energy, LLC
7300 College Blvd.
Overland Park, KS 66210

EnergyUnited Electric Membership Corporation
567 Mocksville Highway
Statesville, NC 28625

Engage Energy US, L.P.
5400 Westheimer Court
Houston, TX 77056

Exelon Generation Co., Inc.
300 Exelon Way
Kennett Square, PA 19348

Florida Power & Light Co.
700 Universe Boulevard
Juno Beach, FL 33408

Florida Power Corp d/b/a Progress Energy Florida
411 Fayetteville Street Mall
Raleigh, NC 27601

FPL Energy Power Marketing, Inc.
700 Universe Boulevard
Juno Beach, FL 33408

Greenwood County
600 Monument Street, Box P-103
Greenwood, SC 29646

Haywood Electric Membership Corporation
1560 Asheville Road
Waynesville, NC 28786

H.Q. Energy Services, Inc.
75 Boulevard Rene-Levesque Ouest, 18 etage
Montreal, Quebec – Canada H2Z1A4

Illinois Power Co.
500 South 27th Street
Decatur, IL 62521

J. Aron & Company
85 Broad Street
New York, NY 10004

Jacksonville Electric Authority
7720 Ramona Boulevard
Jacksonville, FL 32221

JP Morgan Ventures Energy Corporation
270 Park Avenue
New York, NY 10017

Kansas Energy LLC
17795 W. 106th Street, Suite 204
Olathe, KS 66061

Kansas City Power & Light, Co.
P.O. Box 418679
Kansas City, MO 64141

Lehman Brothers Commodity Services, Inc.
745 Seventh Avenue
New York, NY 10019

LG&E Energy Marketing, Inc.
220 W. Main Street
Louisville, KY 40202

Lockhart Power Company
420 River Street
Lockhart, SC 29364

Louisville Gas & Electric Co.
220 W. Main Street
Louisville, KY 40202

Merrill Lynch Commodities, Inc.
20 E. Greenway Plaza, Suite 700
Houston, TX 77046

Morgan Stanley Cap Group, Inc.
2000 Westchester Avenue
Purchase, NY 10577

Municipal Electric Authority of Georgia
1470 Riveredge Parkway, NW
Atlanta, GA 30328

New York State Electric & Gas Corp.
18 Link Drive
Binghamton, NY 13902

North Carolina Electric Membership Corporation
3400 Sumner Boulevard
Raleigh, NC 27604

North Carolina Municipal Power Agency No. 1
3400 Sumner Boulevard
Raleigh, NC 27604

Northern States Power
414 Nicollet Mall
Minneapolis, MN 55401

Occidential Power Services, Inc.
5 Greenway Plaza
Houston, TX 77046

OGE Energy Resources, Inc.
420 South Boulevard
Oklahoma City, OK 73109

Oglethorpe Power Corp.
2100 East Exchange Place
Tucker, GA 30084

Ohio Edison System Operating Companies
395 Ghent Road
Akron, OH 44333

PacifiCorp Power Marketing, Inc.
825 N.E. Multnomah, Suite 600
Portland, OR 97232

Piedmont Electric Membership Corporation
2500 N.C. 86 South, Post Office Drawer 1179
Hillsborough, NC 27278

Piedmont Municipal Power Agency
121 Village Drive
Greer, SC 29651

Powerex Corporation
666 Burrard Street
Vancouver, BC V6C2X8

PP&L EnergyPlus Co.
Two North Ninth Street, GENTW20
Allentown, PA 18101

PSEG Energy Resources & Trade LLC
80 Park Plaza, T19
Newark, NJ 07102

Public Service Co. of Colorado
1099 18th Street
Denver, CO 80202

Public Service Electric & Gas Co.
80 Park Plaza, T19
Newark, NJ 07102

Public Works Department of the Town of
Forest City NC
PO Box 728
Forest City, NC 28043

Rainbow Energy Marketing Corp.
Kirkwood Tower, 919 South 7th Street
Suite 405
Bismark, ND 58504

Reliant Energy Services, Inc.
1111 Louisiana, Suite 800
Houston, TX 77002

Rowan County Power, LLC
5755 NC 801 Highway
Salisbury, NC 28147

Rutherford Electric Membership
Corporation
186 Hudlow Road
Forest City, NC 28043

Sempra Energy Trading Corp.
58 Commerce Road
Stamford, CT 06902

South Carolina Electric & Gas Co.
246 Stoneridge Drive, Suite 300
Columbia, SC 29210

South Carolina Public Service Authority
One Riverwood Drive
Monks Corner, SC 29461

Southeastern Power Administration
1166 Athens Tech Road
Elberton, GA 30635

Southern Company Services, Inc.
600 N. 18th Street
Birmingham, AL 35202

Southern Power Company
600 N. 18th Street
Birmingham, AL 35202

Tenaska Power Services Co.
1701 East Lamar, Suite 100
Arlington, TX 76006

Tennessee Valley Authority
1101 Market Street, MRBA

The Commissioners of Public Works of the
City of Greenwood, SC
810 Bypass 225 South
Greenwood, SC 29646

The Dayton Power & Light Co.
1065 Woodman Drive
Dayton, OH 45432

The Empire District Electric Company
602 Joplin Street
Joplin, MO 64802

The Energy Authority, Inc.
76 South Laura Street, Suite 1500
Jacksonville, FL 32202

The Town of Highlands, NC
210 North Fourth Street
Highlands, NC 28741

Town of Dallas
210 North Fourth Street
Highlands, NC 28741

Town of Due West
103 Main Street
Due West, SC 29639

Town of Prosperity
PO Box 36
Prosperity, SC 29127

TransAlta Energy Marketing Corp.
1202 Centre St. S
Calgary, AB T2P2M1

UBS AG, London Branch
677 Washington Boulevard
Stamford, CT 06901

Virginia Electric & Power Co.
701 E. Cary Street
Glen Allen, VA 23219

West Penn Power d/b/a Allegheny Energy
4350 Northern Pike
Monroeville, PA 15146

Western Carolina University
301 H.F. Robinson Administration Building,
Old Highway 10
Cullowhee, NC 28723

Western Power Services, Inc.
12200 N. Pecos
Denver, CO 80234

Western Resources, Inc. d/b/a Westar
Energy
818 S. Kansas Avenue
Topeka, KS 66601

Yadkin, Inc.
300 North Hall Road
Alcoa, TN 37701

Progress Energy:

Description and Location of Wholesale Power Customers

Wholesale power sales to customers served by Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. ("PEC") and Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF") are filed with the Commission in the Electric Quarterly Reports ("EQRs"). Accordingly, PEC and PEF request a waiver of this requirement with respect to wholesale power sales reported through the EQRs made to customers served by PEC and PEF.

Description and Location of Unbundled Transmission Service Customers

The description and location of unbundled transmission service customers served by PEC and PEF are set forth below.

Bill Winget
Sempra Energy Trading
58 Commerce Road
Stanford, CT 06902

Alcoa Power Marketing, LLC
Attn: President of APMLLC
900 South Gay Street
1200 Riverview Tower
Knoxville, TN 37902

Ms. Dana E. Horton
American Electric Power Company
1 Riverside Plaza
Columbus, OH 43215

Kenneth L. Hegeman
American Municipal Power-Ohio
2600 Airport Drive
Columbus, OH 43219

Merrill Lynch Commodities, Inc.
Attn: John Clowney and Randy Garcia
20 E. Greenway Plaza, Suite 700
Houston, TX 77046-2002

Ron Davies, VP Operations
FibroMont & FibroCoast
One Summit Square, Suite 200
1717 Langhorne-Newton Road
Langhorne, PA 19047

Public Works Commission of City of Fayetteville
Attn: Public Works Director
955 Old Wilmington Road
Fayetteville, NC 28301

Craven County Wood Energy, LP
Attn: Plant Manager
201 Executive Parkway, Industrial Park
New Bern, North Carolina 28562

Amerada Hess Corporation
Energy Marketing – 12th Floor
One Hess Plaza
Woodbridge, NJ 07095

Cargill Power Markets, LLC
12700 Whitewater Drive
Mail Stop FMG-53
Minnetonka, MN 55343

BP Energy Company
501 Westlake Park Blvd
Houston, TX 77079

Cobb Electric Membership Corp
1000 EMC Parkway
Marietta, GA 30060

Contract Administrator
CMS Energy Resource Management
One Energy Plaza
Jackson, MI 49201

Fort Pierce Utilities Authority
206 South 6th Road
P.O. Box 3191
Fort Pierce, FL 34948-3191

Eagle Energy Partners I, LP
7904 N Sam Houston Pkwy West, Suite 200
Houston, Texas 77064

Calpine Energy Services, L.P.
Contract Administration
717 Texas St., Suite 1000
Houston, TX 77002-2743

Constellation Energy Commodities Group, Inc.
111 Market Place, Suite 500
Baltimore, MD 21202

Gainesville Regional Utilities
Ed Reagan
Assistant General Manager
301 SE 4th Avenue
Gainesville, FL 32601

Power Contract Manager
Shell Energy North America
(U.S.) L.P.
2 Houston Center
909 Fannin, Plaza Level 1
Houston, TX 77010

City of Alachua
P.O. Box 9
15001 NW 140th Street
Alachua, FL 32615

David F. Ronk
Consumers Energy Company
1945 W. Parnall Road
Jackson, MI 49201

Michael E. Champley
The Detroit Edison Company
2000 Second Ave
Room 102 WCB
Detroit, MI 48226

Contract Administration
DTE Energy Trading, Inc.
414 South Main St., Suite 200
Ann Arbor, MI 48104

Honorable Preston Bass
Town of Stantonsburg
108 E. Commercial Ave.
Stantonsburg, NC 27883

Ms. Charlotte Glassman
Duke Energy Carolinas, LLC
526 S. Church St., EC 012A
Charlotte, NC 28201-1006

City of Lake Worth Utilities
Asst. City Manager/Utilities Director
1900 2nd Avenue, North
Lake Worth, FL 33461

R.G. Brecheisen
Piedmont EMC
P.O. Drawer 1179
Hillsborough, NC 28278-1179

Edison Source
18101 Von Karman Avenue
Suite 1700
Irvine, CA 92612-0178

Mike Purmort
Endure Energy, LLC
7300 College Blvd., Ste. 600
Overland Park, KS 66210

Betsy R. Carr
Dynegy Power Marketing
1000 Louisiana St, Suite 5800
Houston, TX 77002

The Energy Authority, Inc.
Attn: Mark Kinevan
301 West Bay St.
Suite 2600
Jacksonville, FL 32202

Exelon Generation Company LLC
Exelon Power Team
300 Exelon Way
Kennett Square, PA 19348

Enron Power Marketing, Inc.
1400 Smith St
Houston, TX 77002-7361

Contract Administration
Duke Energy Kentucky, Inc.
139 East Fourth Street
Mail Location EA503
Cincinnati, OH 45202

Charles F. Revell, P.E.
Electric Utility Manager
City of Mount Dora
1250 North Highland Street
Mount Dora, FL 32757

Lance Stotts
Duke Energy Carolinas, LLC
Bulk Power Marketing
526 S. Church St., EC01X
Charlotte, NC 28202

City of Vero Beach
P.O. Box 1389
Vero Beach, FL 32961-1389

J. Aron & Company
85 Broad Street
New York, NY 10004

A. J. Olivera
Florida Power & Light Company
9250 West Flagler St.
Miami, FL 33174

Shawn E. Schukar
Illinois Power
P. O. Box 511
Decatur, IL 62525-0511

Santee Cooper
Wholesale Markets Manager
PO Box 2946101
Moncks Corner, SC 29461

Progress Energy - Regulated
Commercial Operations
Gary Freeman
P. O. Box 1551, PEB 10A
Raleigh, NC 27602

Mark Sercek
Duke Energy Carolinas, LLC
Bulk Power Marketing
526 S. Church St., EC 01K
Charlotte, NC 28202

General Manager
French Broad EMC
PO Box 9
Marshall, NC 28753-0009

Rick Beam
Old Dominion Electric
Cooperative
4201 Dominion Boulevard
Glen Allen, VA 23060

NC Eastern Mun. Power Agency
Division Director – Planning
P.O. Box 29513
Raleigh, NC 27626-0513

Robert Himlin
Michigan Electric Coordinated System
Michigan Electric Pwr Coord Ctr
1901 South Wagner Road
Ann Arbor, MI 48103

L. McKinney
New York State Elec & Gas Corp
P. O. Box 5224
Binghamton, NY 13902-5224

Simon Greenshields
Morgan Stanley & Co. Inc.
1585 Broadway
New York, NY 10036-8293

NESI Power Marketing Inc.
1500 165th Street
Hammond, IN 46324

Occidental Power Services, Inc.
5 Greenway Plaza
Houston, TX 77046

LG&E Energy Marketing, Inc.
Contract Admin
220 West Main Street, 7th Floor
Louisville, KY 40202

Charles W. Terrill
N. C. Electric Membership Corp.
3400 Summer Blvd
P.O. Box 27306
Raleigh, NC 27604

Northern Indiana Pub. Service Co.
EDCC
1500 165th Street
Hammond, IN 46324

Paul R. Norris
North American Energy Conservation
100 Clinton Square, Suite 400
126 North Salina St
Syracuse, NY 13202-1012

Delbert L. Roberts
The Legacy Energy Group, LLC
32 Waterloo Street
Warrenton, VA 20186

G. B. Taylor
Oglethorpe Power
2100 East Exchange Place
P.O. Box 1349
Tucker, GA 30085-1349

City of Homestead
790 North Homestead Boulevard
Homestead, FL 33030

Donald J. Winslow
PPM Energy, Inc.
650 NE Holladay, Suite 700
Portland, OR 97232

J.P. Morgan Ventures Energy Corp.
Paul Tramonte
700 Louisiana Street, Suite 1000
Houston, TX 77002

Coastal Carolina Clean Power LLC
Plant Manager Ralph Smith
1838 NC Highway 11 North
Kenansville, NC 28349

The Honorable Philip Minges
City of Camden
1000 Lyttleton Street
Camden, SC 29020-7002

Roger M. Dolan, Jr.
PPL EnergyPlus LLC
2 North 9th St
Allentown, PA 18101

Steven R. Teitelman
PSEG ER&T
80 Park Plaza
Newark, NJ 07102-4194

Rainbow Energy Marketing Corp
ATTN: Joe Wolfe
919 S. 7th Street, Suite 405
Bismarck, ND 58504

Andrew C. Smith
South Carolina Electric & Gas Co.
Manager – Trading Operations
1426 Main Street, Mail Code 156
Columbia, SC 29201

W.L. Marshall, Jr.
Southern Company Services, Inc.
P. O. Box 2625
Birmingham, AL 35202

Honorable Shelia Williams
Town of Sharpsburg
Post Office Box 1759
Sharpsburg, NC 27878

Central Power & Lime, Inc.
P.O. Box 1508
Brooksville, FL 34605-1508

Tenaska Power Services Co.
1701 East Lamar
Suite 100
Arlington, TX 76006

Strategic Energy, LLC
Attn: Legal / Regulatory
Two Gateway Center, 9th Floor
Pittsburgh, PA 15222-1458

Ms. Michele Gold
Lehman Brothers Commodity Service
745 Seventh Avenue
New York, NY 10019

Transalta Energy Marketing (U.S.) Inc.
P O Box 1900, Station M
110-12 Avenue, SW
Calgary, Alberts T2P 2M1

Michael R. Knauff
Tennessee Power Co.
4612 Maria St
Chattanooga, TN 37411-1209

Tennessee Valley Authority
Sr. VP, Commercial Op. & Fuels
1101 Market St. SP6A
Chattanooga, TN 37402-2801

Transmission Manager
Virginia Power
Innsbrook Technical Center
5000 Dominion Blvd – 3 North
Glen Allen, VA 23060

Conoco Phillips Company
600 N. Dairy Ashford, Ch1081
Houston, TX 77079-1175

TransCanada Power Corp
450 1st St SW
Calgary Alberta T2P5H1
CANADA

Westar Energy
Transmission Manager
P. O. Box 889
Topeka, KS 66601

Glenn B. Ross
Dominion Virginia Power
2400 Grayland Ave.
Richmond, VA 23220

Duke Energy Ohio
Senior Contract Administrator
221 East Fourth Street, ATII
6th Floor EA602
Cincinnati, OH 45202

UBS AG, London Branch
c/o Valerie Hebert
201 Tresser Blvd, 2nd Floor
Stamford, CT 06901

City of Winter Park
Jerry Warren
Director of Electric Utilities
401 Park Avenue South
Winter Park, FL 37289-4386

Kansas Energy LLC
Attn: Ms. Amanda Kenly
Director, Credit and Contracts
17795 W. 106th Street, Suite 204
Olathe, KS 66061

Honorable Virginia Johnson
Town of Lucama
111 South Main St.
Lucama, NC 27851

JEA Operations
21 West Church Street
Jacksonville, FL 32202

Town of Black Creek
Honorable Howard Moore
112 West Center St.
Black Creek, NC 27813

Norman Sloan, P.E.
Executive VP and Gen. Mgr.
Haywood EMC
1560 Asheville Road
Waynesville, NC 28786

Georgia Transmission Corp.
2100 E. Exchange Plaza
Tucker, GA 20084

Tampa Electric Company
Administrator, Reg. Coordination
P.O. Box 111
Tampa, FL 33601-0111

Town Manager
Town of Winterville
PO Box 1459
Winterville, NC 28590

Steven T. Naumann
Commonwealth Edison Co.
10 South Dearborn Street, 35 FNE
Chicago, IL 60603

William L. Brown
Tampa Electric Company
1400 Channelside Drive
Tampa, FL 33605

Town Manager
Town of Waynesville
PO Box 100
Waynesville, NC 28786

Edward F. Tancer
NextEra Energy Power Marketing
700 Universe Blvd.
Juno Beach, FL 33408

Ms. Emily Smith
Energy Transfer Group
2838 Woodside Street
Dallas, TX 75204

Nathan L. Wilson
Conectiv Energy Supply, Inc.
P.O. Box 6066
Newark, DE 19714

Kenneth M. Raber
ElectriCities of North Carolina
1427 Meadowwood Blvd.
Raleigh, NC 27604

Brian McGee
MIECO Inc.
301 East Ocean Blvd. Suite 1100
Long Beach, CA 90802

Duke Energy Indiana, Inc.
Contract Administration
139 East Fourth Street, EA606
Cincinnati, OH 45202

Louisville Gas & Electric/KU
ATTN: Contract Admin
220 W. Main Street, 7th floor
Louisville, KY 40202

Transmission Manager
Dayton Power & Light Company
1900 Dryder Road
Dayton, OH 45439

J.E. Flick
First Energy Solutions
395 Ghent Road, Room 114
Akron, OH 44333

Lumberton Energy LLC and
Elizabethtown Energy LLC
Commercial Relations
2705 Bee Caves Road, #340
Austin, TX 78746

Benoit Goyette
HQ Energy Services Inc.
75 Rene-Levesque Boulevard West
17th Floor
Montreal, Quebec CANADA

City of Bartow
City Manager
PO Box 1069
Bartow, FL 33830

Director – Bulk Power
PECO Energy Company
2301 Market Street
Philadelphia, PA 19103

Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Chief Clerk
North Carolina Utilities
Commission
4325 Mail Service Center
Raleigh, NC 27699-4325

Hon. Charles Terreni
Chief Clerk & Administrator
SC Public Service Commission
P.O. Drawer 11649
Columbia, SC 29211

Northern Star Generation
Orange Cogeneration LP
Vandolah Power Co. LLC
2929 Allen Parkway, Ste. 2200
Houston, TX 77019

Xcel Energy
Attn: Bill Raihala
414 Nicollet Mall, Marquette
Plaza,
7th Floor
Minneapolis, MN 55401

Dukes Scott
Executive Director
SC Office of Regulatory Staff
PO Box 11263
Columbia, SC 29201

City of Seneca, SC
Town Manager
PO Box 4773
Seneca, SC 29679

City of Williston
Marcus Collins
City Manager
50 N.W. Main Street
Williston, FL 32696

BNP Paribas Energy Trading GP
Ms. Deborah T. Flores
Contract Administration
1100 Louisiana, Suite 4900
Houston, TX 77002

Toledo Edison Co.
c/o First Energy Corporation
76 South Main Street
Akron, OH 44308

Cleveland Electric Illuminating Co.
c/o FirstEnergy Corporation
76 South Main Street
Akron, OH 44308

Edison Mission Marketing & Trading
One International Place, 9th Floor
Boston, MA 02110

Joseph Pokalsky
Mirant Americas Energy Marketing
Shady Hills Power Co.
900 Ashwood Parkway, Suite 500
Atlanta, GA 30338

Florida Municipal Power Agency
8553 Commodity Circle
Orlando, FL 32819-9002

City of St. Cloud
1300 9th Street
Saint Cloud, FL 34769-3339

Citigroup Energy, Inc.
Attn: Kolby P. Kettler
2800 Post Oak Blvd, Suite 500
Houston, TX 77056-6156

Alcoa Power Generating Inc.
Attn: James C. Nixon, VP
1200 Riverview Tower
Knoxville, TN 37902

Split Rock Energy LLC
VP - Trading & Marketing
301 4th Ave. S, Suite 860N
Minneapolis, MN 55415

Ron Hampton
Georgia Power Company
Bin# 10090
241 Ralph McGill Blvd.
Atlanta, GA 30308

EPCOR USA North Carolina, LLC
Attn: General Counsel
2000 York Road – Suite 129
Oak Brook, Illinois 60523

ArcLight Energy Marketing, LLC
Attn: Contract Administration
100 East Davie St., Suite 900
Raleigh, NC 27613

CP Energy Marketing (US) Inc
505 - 2nd Street SW – 8th Floor
Calgary, Alberta T2P 1N8

Kansas City Power & Light Co.
Attn: Rusty Smith
Director, Power Sales & Service
P.O. Box 418679
Kansas City MO 64141-9679

Dominion Energy Marketing, Inc.
5000 Dominion Blvd.
Glen Allen, VA 23060

RRI Energy Florida, LLC
1000 Main Street
Houston, TX 77002

RRI Energy Services, Inc.
Manager – Contract Administration
Rhonda Alphin
1000 Main Street
Houston, TX 77002

Jacksonville Electric Authority
21 West Church Street
Jacksonville, FL 32202

Powerex Corp.
666 Burrand St., Suite 1400
Vancouver, BC V6C2X8
Canada

Kissimmee Utility Authority
Larry Mattern, Vice President of Power Supply
1701 West Carroll Street
Kissimmee, FL 34741

Orlando Utilities Commission
500 South Orange Avenue
Orlando, FL 32801

City of Lakeland
Attn: Contract Administrator
Lakeland Electric
501 E. Lemon Street, Mail Code A-91
Lakeland, FL 33801

Utilities Commission of New Smyrna Beach
P.O. Box 100
New Smyrna Beach, FL 32170-0100

Reedy Creek Improvement District
Attn: Utility Business Affairs
5300 Center Drive
Lake Buena Vista, FL 32830

Southern Company – Florida LLC
Transmission Coordinator
PO Box 2641
Birmingham, AL 35291

Seminole Electric Coop., Inc.
Attn: Senior Director, Bulk
Power & Generation Planning
16313 North Dale Mabry
Highway
Tampa, FL 33688-2000

City of Starke
209 N. Thompson Street
P.O. Drawer C
Starke, FL 32091

City of Tallahassee
Assistant City Manager
Rick Fernandez
2602 Jackson Bluff Road
Tallahassee, FL 32304

Exhibit G: Description of Jurisdictional Facilities of Applicants and Their Affiliates

The Applicants' and their affiliates' jurisdictional facilities are described in Parts II and IV of this Application and in the testimony of Dr. Hieronymus attached as Exhibit J.

Exhibit H: Jurisdictional Facilities and Securities Associated with or Affected by the Transaction

The jurisdictional facilities and securities associated with or affected by the Transaction are described in Parts II and IV of this Application and in the testimony of Dr. Hieronymus attached as Exhibit J.

Exhibit I: Contracts with Respect to the Disposition of Facilities

The Agreement and Plan of Merger among Duke Energy Corporation, Diamond Acquisition Corporation and Progress Energy, Inc. dated as of January 8, 2011 is attached as Exhibit I.

EXECUTION COPY

AGREEMENT AND PLAN OF MERGER

by and among

DUKE ENERGY CORPORATION,

DIAMOND ACQUISITION CORPORATION

and

PROGRESS ENERGY, INC.

Dated as of January 8, 2011

TABLE OF CONTENTS

DEFINED TERMS INDEX

AGREEMENT AND PLAN OF MERGER, dated as of January 8, 2011 (this "Agreement"), by and among DUKE ENERGY CORPORATION, a Delaware corporation ("Duke"), DIAMOND ACQUISITION CORPORATION, a North Carolina corporation and a direct wholly-owned subsidiary of Duke ("Merger Sub"), and PROGRESS ENERGY, INC., a North Carolina corporation ("Progress").

WHEREAS, the respective Boards of Directors of Duke and Merger Sub have approved this Agreement, and deem it advisable and in the best interests of their respective stockholders to consummate the merger of Merger Sub with and into Progress on the terms and conditions set forth herein (the "Merger"), and the Board of Directors of Duke has determined to recommend to the stockholders of Duke that they approve an amendment to the Amended and Restated Certificate of Incorporation of Duke providing for a reverse stock split and that they approve the issuance of shares of Duke Common Stock in connection with the Merger as set forth in this Agreement;

WHEREAS, the Board of Directors of Progress has adopted this Agreement, and deems it in the best interest of Progress to consummate the merger of Merger Sub with and into Progress on the terms and conditions set forth herein and has determined to recommend to the shareholders of Progress that they approve this Agreement and the Merger;

WHEREAS, Duke and Progress desire to make certain representations, warranties, covenants and agreements in connection with the Merger and the transactions contemplated by this Agreement and also to prescribe various conditions to the Merger; and

WHEREAS, for United States federal income tax purposes, it is intended that the Merger shall qualify as a reorganization under Section 368(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and this Agreement is intended to be, and is hereby, adopted as a plan of reorganization within the meaning of Section 368(a) of the Code.

NOW, THEREFORE, in consideration of the foregoing and of the representations, warranties, covenants and agreements contained in this Agreement, the parties agree as follows:

ARTICLE I

THE MERGER

Section 1.01. The Merger. Upon the terms and subject to the conditions set forth in this Agreement, at the Effective Time, Merger Sub shall be merged with and into Progress in accordance with the North Carolina Business Corporation Act (the "NCBCA"). At the Effective Time, the separate corporate existence of Merger Sub shall cease, and Progress shall be the surviving corporation in the Merger (the "Surviving Corporation") and shall continue its corporate existence under the laws of the State of North Carolina and shall succeed to and assume all of the rights and obligations of Progress and Merger Sub in accordance with the NCBCA and shall become, as a result of the Merger, a direct wholly-owned subsidiary of Duke.

Section 1.02. Closing. Unless this Agreement shall have been terminated pursuant to Section 7.01, the closing of the Merger (the "Closing") will take place at 10:00 a.m., local time, on a date to be specified by the parties (the "Closing Date"), which, subject to Section 4.06 of this Agreement, shall be no later than the second business day after satisfaction or waiver of the

conditions set forth in Article VI (other than those conditions that by their terms are to be satisfied at the Closing, but subject to the satisfaction or waiver (to the extent permitted by applicable law) of such conditions at such time), unless another time or date is agreed to by the parties hereto. The Closing shall be held at such location as is agreed to by the parties hereto.

Section 1.03. Effective Time of the Merger. Subject to the provisions of this Agreement, as soon as practicable after 10:00 a.m., local time, on the Closing Date the parties thereto shall file articles of merger (the "Articles of Merger") executed in accordance with, and containing such information as is required by, Section 55-11-05 of the NCBCA with the Secretary of State of the State of North Carolina and on or after the Closing Date shall make all other filings or recordings required under the NCBCA. The Merger shall become effective at such time as the Articles of Merger are duly filed with the Secretary of State of the State of North Carolina or at such later time as is specified in the Articles of Merger (the time the Merger becomes effective being hereinafter referred to as the "Effective Time").

Section 1.04. Effects of the Merger. The Merger shall generally have the effects set forth in this Agreement and the applicable provisions of the NCBCA.

Section 1.05. Articles of Incorporation and By-laws of the Surviving Corporation.

(a) At the Effective Time, the articles of incorporation of Merger Sub as in effect immediately prior to the Effective Time shall be the articles of incorporation of the Surviving Corporation until thereafter amended in accordance with the provisions thereof and hereof and applicable Law, in each case consistent with the obligations set forth in Section 5.08.

(b) At the Effective Time, the by-laws of Merger Sub as in effect immediately prior to the Effective Time shall be the by-laws of the Surviving Corporation until thereafter amended in accordance with the provisions thereof and hereof and applicable Law, in each case consistent with the obligations set forth in Section 5.08.

Section 1.06. Directors and Officers of the Surviving Corporation.

(a) The directors of Merger Sub at the Effective Time shall, from and after the Effective Time, be the directors of the Surviving Corporation in the Merger until their successors have been duly elected or appointed and qualified, or their earlier death, resignation or removal.

(b) The officers of Progress at the Effective Time shall, from and after the Effective Time, be the initial officers of the Surviving Corporation until their successors have been duly elected or appointed and qualified, or their earlier death, resignation or removal.

Section 1.07. Post-Merger Operations.

(a) Board Matters. Duke shall take all necessary corporate action to cause the following to occur as of the Effective Time: (i) the number of directors constituting the Board of Directors of Duke shall be as set forth in **Exhibit A** hereto, with the identities of the Duke Designees (as defined in **Exhibit A** hereto) as set forth in **Exhibit A** hereto and the identities of the Progress Designees (as defined in **Exhibit A** hereto) as identified by Progress after the date hereof in accordance with the provisions of **Exhibit A** hereto, subject to such individuals' ability and

willingness to serve; (ii) the committees of the Board of Directors of Duke shall be as set forth in **Exhibit A** hereto, and the chairpersons of each such committee shall be designated in accordance with the provisions of **Exhibit A** hereto, subject to such individuals' ability and willingness to serve; and (iii) the lead independent director of the Board of Directors of Duke shall be designated in accordance with the provisions of **Exhibit A** hereto, subject to such individual's ability and willingness to serve. In the event any Duke Designee or any Progress Designee becomes unable or unwilling to serve as a director on the Board of Directors of Duke, or as a chairperson of a committee or as lead independent director, a replacement for such designee shall be determined in accordance with the provisions of **Exhibit A** hereto.

(b) Chairman of the Board; President and Chief Executive Officer; Executive Officers.

(i) Duke's Board of Directors shall cause the current Chief Executive Officer of Progress (the "Progress CEO") to be appointed as the President and Chief Executive Officer of Duke, and cause the current Chief Executive Officer of Duke (the "Duke CEO") to be appointed as the Chairman of the Board of Directors of Duke, in each case, effective as of, and conditioned upon the occurrence of, the Effective Time, and subject to such individuals' ability and willingness to serve. The roles and responsibilities of such officers shall be as specified on **Exhibit B** to this Agreement. In the event that the Progress CEO is unwilling or unable to serve as the President and Chief Executive Officer of Duke as of the Effective Time, Progress and Duke shall confer and mutually designate a President and Chief Executive Officer of Duke, who shall be appointed by Duke in accordance with the Amended and Restated Certificate of Incorporation and Amended and Restated By-laws of Duke as in effect as of the Effective Time. In the event that the Duke CEO is unwilling or unable to serve as the Chairman of the Board of Directors of Duke as of the Effective Time, Progress and Duke shall confer and mutually designate a Chairman of the Board of Directors of Duke, who shall be appointed by Duke in accordance with the Amended and Restated Certificate of Incorporation and Amended and Restated By-laws of Duke as in effect as of the Effective Time.

(ii) The material terms of the Progress CEO's employment with Duke as the President and Chief Executive Officer of Duke to be in effect as of the Effective Time are set forth on **Exhibit C** hereto. The parties shall use their commercially reasonable efforts to cause an employment agreement reflecting such terms to be executed by Duke and the Progress CEO as promptly as practicable after the date hereof, effective as of, and conditioned upon the occurrence of, the Effective Time.

(iii) The material terms of the Duke CEO's employment with Duke as the Chairman of the Board of Directors of Duke to be in effect as of the Effective Time are set forth on **Exhibit D** hereto. The parties shall use their commercially reasonable efforts to cause an amendment to the employment agreement of the Duke CEO reflecting such amended terms to be executed by Duke and the Duke CEO as promptly as practicable after the date hereof, effective as of, and conditioned upon the occurrence of, the Effective Time.

(iv) Subject to such individuals' ability and willingness to so serve, Duke shall take all necessary corporate action so that the individuals identified on **Exhibit E** and designated for the Duke senior executive officer positions specified on such Exhibit shall hold such officer positions as of the Effective Time. In the event that any such individual(s) is(are) unwilling or unable to serve in such officer position(s) as of the Effective Time, Progress and Duke shall confer and mutually appoint other individual(s) to serve in such officer position(s).

(c) Name, Headquarters and Operations. Following the Effective Time, Duke shall retain its current name, and shall maintain its headquarters and principal corporate offices in Charlotte, North Carolina, none of which shall change as a result of the Merger, and, taken together with its subsidiaries following the Effective Time, shall maintain substantial operations in Raleigh, North Carolina.

(d) Community Support. The parties agree that provision of charitable contributions and community support in their respective service areas serves a number of their important corporate goals. During the two-year period immediately following the Effective Time, Duke and its subsidiaries taken as a whole intend to continue to provide charitable contributions and community support within the service areas of the parties and each of their respective subsidiaries in each service area at levels substantially comparable to the levels of charitable contributions and community support provided, directly or indirectly, by Duke and Progress within their respective service areas prior to the Effective Time.

Section 1.08. Transition Committee. As promptly as practicable after the date hereof and to the extent permitted by applicable law, the parties shall create a special transition committee to oversee integration planning, including, to the extent permitted by applicable law, consulting with respect to operations and major regulatory decisions. This transition committee shall be co-chaired by the Progress CEO and the Duke CEO, and shall be composed of such chief executive officers and two other designees of Duke and two other designees of Progress.

ARTICLE II

CONVERSION OF SHARES; EXCHANGE OF CERTIFICATES

Section 2.01 Effect on Capital Stock. At the Effective Time, by virtue of the Merger and without any action on the part of holders of any shares of Progress Common Stock or any capital stock of Merger Sub:

(a) Cancellation of Certain Progress Common Stock. Each share of Progress Common Stock that is owned by Progress (other than in a fiduciary capacity), Duke or Merger Sub shall automatically be canceled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor.

(b) Conversion of Progress Common Stock. Subject to Sections 2.02(e) and 2.02(k), each issued and outstanding share of Progress Common Stock (other than shares to be canceled in accordance with Section 2.01(a)) shall be converted into the right to receive 2.6125 (the "Exchange Ratio") fully paid and nonassessable shares of Duke Common Stock (such aggregate amount, the "Merger Consideration"). As of the Effective Time, all such shares of Progress Common Stock shall no longer be outstanding and shall automatically be canceled and retired and shall cease to exist, and each holder of a certificate representing any such shares of Progress Common Stock shall cease to have any rights with respect thereto, except the right to receive the Merger Consideration as contemplated by this Section 2.01(b) (and cash in lieu of fractional shares

of Duke Common Stock payable in accordance with Section 2.02(e)) to be issued or paid in consideration therefor upon the surrender of certificates in accordance with Section 2.02, without interest, and the right to receive dividends and other distributions in accordance with Section 2.02.

(c) Conversion of Merger Sub Common Stock. At the Effective Time, by virtue of the Merger and without any action on the part of the holder thereof, each share of common stock, par value $0.01 per share, of Merger Sub issued and outstanding immediately prior to the Effective Time shall be converted into and become one validly issued, fully paid and nonassessable share of common stock, par value $0.01 per share, of the Surviving Corporation and shall constitute the only outstanding capital stock of the Surviving Corporation. From and after the Effective Time, all certificates representing the common stock of Merger Sub shall be deemed for all purposes to represent the number of shares of common stock of the Surviving Corporation into which they were converted in accordance with the immediately preceding sentence.

Section 2.02 Exchange of Certificates.

(a) Exchange Agent. Prior to the Effective Time, Duke shall enter into an agreement with such bank or trust company as may be mutually agreed by Duke and Progress (the "Exchange Agent"), which agreement shall provide that Duke shall deposit with the Exchange Agent at or prior to the Effective Time, for the benefit of the holders of shares of Progress Common Stock, for exchange in accordance with this Article II, through the Exchange Agent, certificates representing the shares of Duke Common Stock representing the Merger Consideration (or appropriate alternative arrangements shall be made by Duke if uncertificated shares of Duke Common Stock will be issued). Following the Effective Time, Duke shall make available to the Exchange Agent, from time to time as needed, cash sufficient to pay any dividends and other distributions pursuant to Section 2.02(c) (such shares of Duke Common Stock to be deposited, together with any dividends or distributions with respect thereto with a record date after the Effective Time, being hereinafter referred to as the "Exchange Fund").

(b) Exchange Procedures. As soon as reasonably practicable after the Effective Time and in any event not later than the fifth Business Day following the Effective Time, Duke shall cause the Exchange Agent to mail to each holder of record of a certificate or certificates that immediately prior to the Effective Time represented outstanding shares of Progress Common Stock (the "Certificates") whose shares were converted into the right to receive shares of Duke Common Stock pursuant to Section 2.01(b), (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Certificates shall pass, only upon delivery of the Certificates to the Exchange Agent and shall be in such form and have such other provisions as Duke and Progress may reasonably specify) and (ii) instructions for use in surrendering the Certificates in exchange for certificates representing whole shares of Duke Common Stock (or appropriate alternative arrangements shall be made by Duke if uncertificated shares of Duke Common Stock will be issued), cash in lieu of fractional shares pursuant to Section 2.02(e) and any dividends or other distributions payable pursuant to Section 2.02(c). Upon surrender of a Certificate for cancellation to the Exchange Agent, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto, and such other documents as may reasonably be required by the Exchange Agent, the holder of such Certificate shall be entitled to receive in exchange therefor that number of whole shares of Duke Common Stock (which shall be in uncertificated book entry form unless a physical certificate is requested),

that such holder has the right to receive pursuant to the provisions of this Article II, certain dividends or other distributions in accordance with Section 2.02(c) and cash in lieu of any fractional share of Duke Common Stock in accordance with Section 2.02(e), and the Certificate so surrendered shall forthwith be canceled. In the event of a transfer of ownership of Progress Common Stock that is not registered in the transfer records of Progress, the proper number of shares of Duke Common Stock may be issued to a person other than the person in whose name the Certificate so surrendered is registered if such Certificate shall be properly endorsed or otherwise be in proper form for transfer and the person requesting such issuance shall pay any transfer or other taxes required by reason of the issuance of shares of Duke Common Stock to a person other than the registered holder of such Certificate or establish to the satisfaction of Duke that such tax has been paid or is not applicable. Until surrendered as contemplated by this Section 2.02, each Certificate shall be deemed at any time after the Effective Time to represent only the right to receive upon such surrender the Merger Consideration, which the holder thereof has the right to receive in respect of such Certificate pursuant to the provisions of this Article II, certain dividends or other distributions in accordance with Section 2.02(c) and cash in lieu of any fractional share of Duke Common Stock, in accordance with Section 2.02(e). No interest shall be paid or will accrue on the Merger Consideration or any cash payable to holders of Certificates pursuant to the provisions of this Article II.

(c) Distributions with Respect to Unexchanged Shares. No dividends or other distributions with respect to Duke Common Stock with a record date after the Effective Time shall be paid to the holder of any unsurrendered Certificate with respect to the shares of Duke Common Stock issuable hereunder in respect thereof and no cash payment in lieu of fractional shares shall be paid to any such holder pursuant to Section 2.02(e), and all such dividends and other distributions shall be paid by Duke to the Exchange Agent and shall be included in the Exchange Fund, in each case until the surrender of such Certificate in accordance with this Article II. Subject to the effect of applicable escheat or similar laws, following surrender of any such Certificate there shall be paid to the recordholder thereof, (i) without interest, the number of whole shares of Duke Common Stock issuable in exchange therefor pursuant to this Article II, the amount of dividends or other distributions with a record date after the Effective Time theretofore paid with respect to such whole shares of Duke Common Stock and the amount of any cash payable in lieu of a fractional share of Duke Common Stock to which such holder is entitled pursuant to Section 2.02(e) and (ii) at the appropriate payment date, the amount of dividends or other distributions with a record date after the Effective Time but prior to such surrender and with a payment date subsequent to such surrender payable with respect to such whole shares of Duke Common Stock.

(d) No Further Ownership Rights in Progress Common Stock; Closing of Transfer Books. All shares of Duke Common Stock issued upon the surrender for exchange of Certificates in accordance with the terms of this Article II (including any cash paid pursuant to this Article II) shall be deemed to have been issued (and paid) in full satisfaction of all rights pertaining to the shares of Progress Common Stock theretofore represented by such Certificates, subject, however, to Progress's obligation to pay any dividends or make any other distributions with a record date prior to the Effective Time that may have been declared or made by Progress on such shares of Progress Common Stock that remain unpaid at the Effective Time. As of the Effective Time, the stock transfer books of Progress shall be closed, and there shall be no further registration of transfers on the stock transfer books of Progress of the shares of Progress Common Stock that were outstanding immediately prior to the Effective Time. If, after the Effective Time, Certificates are presented to Progress, Duke or the Exchange Agent for any reason, they shall be canceled and exchanged as provided in this Article II, except as otherwise required by law.

(e) No Fractional Shares.

(i) No certificates or scrip representing fractional shares of Duke Common Stock shall be issued upon the surrender for exchange of Certificates, no dividend or distribution of Duke shall relate to such fractional share interests and such fractional share interests will not entitle the owner thereof to vote or to any rights of a shareholder of Duke but, in lieu thereof, each holder of such Certificate will be entitled to a cash payment in accordance with the provisions of this Section 2.02(e).

(ii) As promptly as practicable following the Effective Time, the Exchange Agent shall determine the excess of (A) the number of whole shares of Duke Common Stock delivered to the Exchange Agent by Duke pursuant to Section 2.02 (a) representing the Merger Consideration over (B) the aggregate number of whole shares of Duke Common Stock to be distributed to former holders of Progress Common Stock pursuant to Section 2.02(b) (such excess being herein called the "Excess Shares"). Following the Effective Time, the Exchange Agent shall, on behalf of former shareholders of Progress, sell the Excess Shares at then-prevailing prices on the New York Stock Exchange, Inc. ("NYSE"), all in the manner provided in Section 2.02(e)(iii). The parties acknowledge that payment of the cash consideration in lieu of issuing fractional shares of Duke Common Stock was not separately bargained for consideration but merely represents a mechanical rounding off for purposes of avoiding the expense and inconvenience to Duke that would otherwise be caused by the issuance of fractional shares of Duke Common Stock.

(iii) The sale of the Excess Shares by the Exchange Agent shall be executed on the NYSE through one or more member firms of the NYSE and shall be executed in round lots to the extent practicable. The Exchange Agent shall use reasonable efforts to complete the sale of the Excess Shares as promptly following the Effective Time as, in the Exchange Agent's sole judgment, is practicable consistent with obtaining the best execution of such sales in light of prevailing market conditions. Until the net proceeds of such sale or sales have been distributed to the holders of Certificates formerly representing Progress Common Stock, the Exchange Agent shall hold such proceeds in trust for holders of Progress Common Stock (the "Common Shares Trust"). The Surviving Corporation shall pay all commissions, transfer taxes and other out-of-pocket transaction costs, including the expenses and compensation of the Exchange Agent incurred in connection with such sale of the Excess Shares. The Exchange Agent shall determine the portion of the Common Shares Trust to which each former holder of Progress Common Stock is entitled, if any, by multiplying the amount of the aggregate net proceeds composing the Common Shares Trust by a fraction, the numerator of which is the amount of the fractional share interest to which such former holder of Progress Common Stock would otherwise be entitled (after taking into account all shares of Progress Common Stock held at the Effective Time by such holder) and the denominator of which is the aggregate amount of fractional share interests to which all former holders of Progress Common Stock would otherwise be entitled.

(iv) As soon as practicable after the determination of the amount of cash, if any, to be paid to holders of Certificates formerly representing Progress Common Stock with respect to any fractional share interests, the Exchange Agent shall make available such amounts to such holders of Certificates formerly representing Progress Common Stock, without interest, subject to and in accordance with the terms of Section 2.02(c).

(f) Termination of Exchange Fund. Any portion of the Exchange Fund that remains undistributed to the holders of the Certificates for one year after the Effective Time shall be delivered to Duke, upon demand, and any holders of the Certificates who have not theretofore complied with this Article II shall thereafter look only to Duke for payment of their claim for Merger Consideration, any dividends or distributions with respect to Duke Common Stock and any cash in lieu of fractional shares of Duke Common Stock.

(g) No Liability. None of Duke, Progress, Merger Sub, the Surviving Corporation or the Exchange Agent or any of their respective directors, officers, employees and agents shall be liable to any person in respect of any shares of Duke Common Stock, any dividends or distributions with respect thereto, any cash in lieu of fractional shares of Duke Common Stock or any cash from the Exchange Fund, in each case delivered to a public official pursuant to any applicable abandoned property, escheat or similar law. If any Certificate shall not have been surrendered prior to five years after the Effective Time (or immediately prior to such earlier date on which any Merger Consideration, any dividends or distributions payable to the holder of such Certificate or any cash payable to the holder of such Certificate formerly representing Progress Common Stock pursuant to this Article II, would otherwise escheat to or become the property of any Governmental Authority), any such Merger Consideration, dividends or distributions in respect of such Certificate or such cash shall, to the extent permitted by applicable law, become the property of Duke, free and clear of all claims or interest of any person previously entitled thereto.

(h) Investment of Exchange Fund. The Exchange Agent shall invest any cash included in the Exchange Fund, as directed by Duke, on a daily basis, provided that no gain or loss thereon shall affect the amounts payable to the holders of Progress Common Stock pursuant to the other provisions of this Article II. Any interest and other income resulting from such investments shall be paid to Duke.

(i) Withholding Rights. Duke and the Exchange Agent shall be entitled to deduct and withhold from any consideration payable pursuant to this Agreement to any person who was a holder of Progress Common Stock immediately prior to the Effective Time such amounts as Duke and the Exchange Agent may be required to deduct and withhold with respect to the making of such payment under the Code or any other provision of applicable federal, state, local or foreign tax law. To the extent that amounts are so withheld by Duke or the Exchange Agent and duly paid over to the applicable taxing authority, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the person to whom such consideration would otherwise have been paid.

(j) Lost, Stolen or Destroyed Certificates. If any Certificate shall have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming such Certificate to be lost, stolen or destroyed and, if required by Duke, the posting by such person of a bond in such reasonable amount as Duke may direct as indemnity against any claim that may be made against it with respect to such Certificate, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Certificate, the Merger Consideration and, if applicable, any unpaid dividends and distributions on shares of Duke Common Stock deliverable in respect thereof and any cash in lieu of fractional shares, in each case pursuant to this Agreement.

(k) Adjustments to Prevent Dilution. In the event that Progress changes the number of shares of Progress Common Stock or securities convertible or exchangeable into or exercisable for shares of Progress Common Stock, or Duke changes the number of shares of Duke Common Stock or securities convertible or exchangeable into or exercisable for shares of Duke Common Stock, issued and outstanding prior to the Effective Time, in each case as a result of a reclassification, stock split (including a reverse stock split), stock dividend or distribution, subdivision, exchange or readjustment of shares, or other similar transaction, the Exchange Ratio shall be equitably adjusted; provided, however, that nothing in this Section 2.02(k) shall be deemed to permit or authorize any party hereto to effect any such change that it is not otherwise authorized or permitted to undertake pursuant to this Agreement. Without limiting the generality of the foregoing, upon Duke's implementation of the reverse stock split as described in Section 5.01(c), the Exchange Ratio will be reduced by multiplying the then-current Exchange Ratio by a ratio, the numerator of which is the number of shares of Duke Common Stock outstanding immediately following such reverse stock split, and the denominator of which is the number of shares of Duke Common Stock outstanding immediately prior to such reverse stock split.

(l) Uncertificated Shares. In the case of outstanding shares of Progress Common Stock that are not represented by Certificates, the parties shall make such adjustments to this Section 2.02 as are necessary or appropriate to implement the same purpose and effect that this Section 2.02 has with respect to shares of Progress Common Stock that are represented by Certificates.

ARTICLE III

REPRESENTATIONS AND WARRANTIES

Section 3.01 Representations and Warranties of Progress. Except as set forth in the letter dated the date of this Agreement and delivered to Duke by Progress concurrently with the execution and delivery of this Agreement (the "Progress Disclosure Letter") or, to the extent the qualifying nature of such disclosure is readily apparent therefrom and excluding any forward-looking statements, risk factors and other similar statements that are cautionary and non-specific in nature, as set forth in the Progress SEC Reports filed on or after January 1, 2009 and prior to the date hereof, Progress represents and warrants to Duke as follows:

(a) Organization and Qualification.

(i) Each of Progress and its subsidiaries is duly organized, validly existing and in good standing (with respect to jurisdictions that recognize the concept of good standing) under the laws of its jurisdiction of organization and has full power and authority to conduct its business as and to the extent now conducted and to own, use and lease its assets and properties, except for such failures to be so organized, existing and in good standing (with respect to jurisdictions that recognize the concept of good standing) or to have such power and authority that, individually or in the aggregate, have not had and could not be reasonably expected to have a material adverse effect on Progress. Each of Progress and its subsidiaries is duly qualified, licensed or admitted to

do business and is in good standing (with respect to jurisdictions that recognize the concept of good standing) in each jurisdiction in which the ownership, use or leasing of its assets and properties, or the conduct or nature of its business, makes such qualification, licensing or admission necessary, except for such failures to be so qualified, licensed or admitted and in good standing (with respect to jurisdictions that recognize the concept of good standing) that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Section 3.01(a) of the Progress Disclosure Letter sets forth as of the date of this Agreement the name and jurisdiction of organization of each subsidiary of Progress. No subsidiary of Progress owns any stock in Progress. Progress has made available to Duke prior to the date of this Agreement a true and complete copy of Progress's articles of incorporation and by-laws, each as amended through the date hereof.

(ii) Section 3.01(a) of the Progress Disclosure Letter sets forth a description as of the date of this Agreement, of all Progress Joint Ventures, including (x) the name of each such entity and (y) a brief description of the principal line or lines of business conducted by each such entity. For purposes of this Agreement:

(A) "Joint Venture" of a person or entity shall mean any person that is not a subsidiary of such first person, in which such first person or one or more of its subsidiaries owns directly or indirectly an equity interest, other than equity interests held for passive investment purposes that are less than 5% of each class of the outstanding voting securities or equity interests of such second person;

(B) "Progress Joint Venture" shall mean any Joint Venture of Progress or any of its subsidiaries in which the invested capital associated with Progress's or its subsidiaries' interest, as of the date of this Agreement exceeds $50,000,000; and

(C) "Duke Joint Venture" shall mean any Joint Venture of Duke or any of its subsidiaries in which the invested capital associated with Duke's or its subsidiaries' interest, as of the date of this Agreement, exceeds $100,000,000.

(iii) Except for interests in the subsidiaries of Progress, the Progress Joint Ventures and interests acquired after the date of this Agreement without violating any covenant or agreement set forth herein, neither Progress nor any of its subsidiaries directly or indirectly owns any equity or similar interest in, or any interest convertible into or exchangeable or exercisable for, any equity or similar interest in, any person, in which the invested capital associated with such interest of Progress or any of its subsidiaries exceeds, individually as of the date of this Agreement, $50,000,000.

(b) Capital Stock.

(i) The authorized capital stock of Progress consists of:

(A) 500,000,000 shares of common stock, no par value (the "Progress Common Stock"), of which 293,150,141 shares were outstanding as of November 2, 2010; and

(B) 20,000,000 shares of preferred stock, no par value per share, none of which were outstanding as of the date of this Agreement.

As of the date of this Agreement, no shares of Progress Common Stock were held in the treasury of Progress. As of the date of this Agreement, 1,418,447 shares of Progress Common Stock were subject to outstanding stock options granted under the Progress Employee Stock Option Plans (collectively, the "Progress Employee Stock Options"), 1,194,888 shares of Progress Common Stock were subject to outstanding awards of restricted stock units or phantom shares of Progress Common Stock ("Progress Restricted Stock Units"), 1,875,087 shares of Progress Common Stock were subject to outstanding awards of performance shares of Progress Common Stock, determined at maximum performance levels ("Progress Performance Shares") and 1,651,047 additional shares of Progress Common Stock were reserved for issuance pursuant to the Progress Energy, Inc. 1997 Equity Incentive Plan, the Progress Energy, Inc. 2002 Equity Incentive Plan, the Progress Energy, Inc. 2007 Equity Incentive Plan, the Amended and Restated Progress Energy, Inc. Non-Employee Director Stock Unit Plan, and any other compensatory plan, program or arrangement under which shares of Progress Common Stock are reserved for issuance (collectively, the "Progress Employee Stock Option Plans"). Since November 2, 2010, no shares of Progress Common Stock have been issued except pursuant to the Progress Employee Stock Option Plans and Progress Employee Stock Options issued thereunder and the Progress Energy, Inc. Investor Plus Plan, and from November 2, 2010 to the date of this Agreement, no shares of Progress Common Stock have been issued other than 17,367 shares of Progress Common Stock issued pursuant to the Progress Employee Stock Option Plans or Progress Employee Stock Options issued thereunder and 62,489 shares of Progress Common Stock issued pursuant to the Progress Energy, Inc. Investor Plus Plan. All of the issued and outstanding shares of Progress Common Stock are, and all shares reserved for issuance will be, upon issuance in accordance with the terms specified in the instruments or agreements pursuant to which they are issuable, duly authorized, validly issued, fully paid and nonassessable. Except as disclosed in this Section 3.01(b), as of the date of this Agreement there are no outstanding subscriptions, options, warrants, rights (including stock appreciation rights), preemptive rights or other contracts, commitments, understandings or arrangements, including any right of conversion or exchange under any outstanding security, instrument or agreement (together, "Options"), obligating Progress or any of its subsidiaries (A) to issue or sell any shares of capital stock of Progress, (B) to grant, extend or enter into any Option with respect thereto, (C) redeem or otherwise acquire any such shares of capital stock or other equity interests or (D) provide a material amount of funds to, or make any material investment (in the form of a loan, capital contribution or otherwise) in, any of their respective subsidiaries.

(ii) Except as permitted by this Agreement, all of the outstanding shares of capital stock of each subsidiary of Progress are duly authorized, validly issued, fully paid and nonassessable and are owned, beneficially and of record, by Progress or a subsidiary of Progress, free and clear of any liens, claims, mortgages, encumbrances, pledges, security interests, equities and charges of any kind (each a "Lien"), except for any of the foregoing that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. There are no (A) outstanding Options obligating Progress or any of its subsidiaries to issue or sell any shares of capital stock of any subsidiary of Progress or to grant, extend or enter into any such Option or (B) voting trusts, proxies or other commitments, understandings, restrictions or arrangements in favor of any person other than Progress or a subsidiary

wholly-owned, directly or indirectly, by Progress with respect to the voting of or the right to participate in dividends or other earnings on any capital stock of Progress or any subsidiary of Progress.

(iii) Progress is a "holding company" as defined under Section 1262 of the Public Utility Holding Company Act of 2005, as amended (the "2005 Act").

(iv) As of the date of this Agreement, no bonds, debentures, notes or other indebtedness of Progress or any of its subsidiaries having the right to vote (or which are convertible into or exercisable for securities having the right to vote) (collectively, "Progress Voting Debt") on any matters on which Progress shareholders may vote are issued or outstanding nor are there any outstanding Options obligating Progress or any of its subsidiaries to issue or sell any Progress Voting Debt or to grant, extend or enter into any Option with respect thereto.

(v) There have been no repricings of any Progress Employee Stock Options through amendments, cancellation and reissuance or other means during the current or prior two (2) calendar years. None of the Progress Employee Stock Options, Progress Restricted Stock Units or Progress Performance Shares (A) have been granted since November 2, 2010, except as permitted by this Agreement, or (B) have been granted in contemplation of the Merger or the transactions contemplated in this Agreement. None of the Progress Employee Stock Options was granted with an exercise price below the per share closing price on the NYSE on the date of grant. All grants of Progress Employee Stock Options, Progress Restricted Stock Units and Progress Performance Shares were validly made and properly approved by the Board of Directors of Progress (or a duly authorized committee or subcommittee thereof) in compliance with all applicable laws and recorded on the consolidated financial statements of Progress in accordance with GAAP, and no such grants of Progress Employee Stock Options involved any "back dating," "forward dating" or similar practices.

(c) Authority. Progress has full corporate power and authority to enter into this Agreement, to perform its obligations hereunder and, subject to obtaining Progress Shareholder Approval, to consummate the transactions contemplated hereby. The execution, delivery and performance of this Agreement by Progress and the consummation by Progress of the transactions contemplated hereby have been duly and validly adopted and unanimously approved by the Board of Directors of Progress, the Board of Directors of Progress has recommended approval of this Agreement by the shareholders of Progress and directed that this Agreement be submitted to the shareholders of Progress for their approval, and no other corporate proceedings on the part of Progress or its shareholders are necessary to authorize the execution, delivery and performance of this Agreement by Progress and the consummation by Progress of the Merger and the other transactions contemplated hereby, other than obtaining Progress Shareholder Approval. This Agreement has been duly and validly executed and delivered by Progress and, assuming this Agreement constitutes the legal, valid and binding obligation of Duke and Merger Sub, constitutes a legal, valid and binding obligation of Progress enforceable against Progress in accordance with its terms, except that such enforcement may be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws, now or hereafter in effect, relating to creditors' rights generally and to general equitable principles.

(d) No Conflicts; Approvals and Consents.

(i) The execution and delivery of this Agreement by Progress does not, and the performance by Progress of its obligations hereunder and the consummation of the Merger and the other transactions contemplated hereby will not, conflict with, result in a violation or breach of, constitute (with or without notice or lapse of time or both) a default under, result in or give to any person any right of payment or reimbursement, termination, cancellation, modification or acceleration of, or result in the creation or imposition of any Lien upon any of the assets or properties of Progress or any of its subsidiaries or any of the Progress Joint Ventures under, any of the terms, conditions or provisions of (A) the certificates or articles of incorporation or by-laws (or other comparable organizational documents) of Progress or any of its subsidiaries or any of the Progress Joint Ventures, or (B) subject to the obtaining of Progress Shareholder Approval and the taking of the actions described in paragraph (ii) of this Section 3.01(d), including the Progress Required Statutory Approvals, (x) any statute, law, rule, regulation or ordinance (together, "laws"), or any judgment, order, writ or decree (together, "orders"), of any federal, state, local or foreign government or any court of competent jurisdiction, administrative agency or commission or other governmental authority or instrumentality, domestic, foreign or supranational (each, a "Governmental Authority") applicable to Progress or any of its subsidiaries or any of the Progress Joint Ventures or any of their respective assets or properties, or (y) any note, bond, mortgage, security agreement, credit agreement, indenture, license, franchise, permit, concession, contract, lease, obligation or other instrument to which Progress or any of its subsidiaries or any of the Progress Joint Ventures is a party or by which Progress or any of its subsidiaries or any of the Progress Joint Ventures or any of their respective assets or properties is bound, excluding from the foregoing clauses (x) and (y) such items that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress.

(ii) Except for (A) compliance with, and filings under, the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations thereunder (the "HSR Act"); (B) the filing with and, to the extent required, the declaration of effectiveness by the Securities and Exchange Commission (the "SEC") of (1) a proxy statement relating to the approval of this Agreement by Progress's shareholders (such proxy statement, together with the proxy statement relating to the approval of this Agreement by Duke's shareholders, in each case as amended or supplemented from time to time, the "Joint Proxy Statement") pursuant to the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "Exchange Act"), (2) the registration statement on Form S-4 prepared in connection with the issuance of Duke Common Stock in the Merger (the "Form S-4") and (3) such reports under the Exchange Act as may be required in connection with this Agreement and the transactions contemplated hereby; (C) the filing of documents with various state securities authorities that may be required in connection with the transactions contemplated hereby; (D) such filings with and approvals of the NYSE to permit the shares of Duke Common Stock that are to be issued pursuant to Article II to be listed on the NYSE; (E) the registration, consents, approvals and notices required under the 2005 Act; (F) notice to, and the consent and approval of, the Federal Energy Regulatory Commission (the "FERC") under Section 203 of the Federal Power Act, as amended (the "Power Act"), or an order under the Power Act disclaiming jurisdiction over the transactions contemplated hereby; (G) the filing of an application to, and consent and approval of, and issuance of any required licenses and license amendments by, the Nuclear Regulatory Commission (the "NRC") under the Atomic Energy Act of 1954, as amended (the "Atomic Energy Act"); (H) the filing of the

Articles of Merger and other appropriate merger documents required by the NCBCA with the Secretary of State of the State of North Carolina and appropriate documents with the relevant authorities of other states in which Progress is qualified to do business; (I) compliance with and such filings as may be required under applicable Environmental Laws; (J) to the extent required, notice to and the approval of the North Carolina Utilities Commission (the "NCUC"), the Public Service Commission of South Carolina (the "PSCSC"), the Florida Public Service Commission (the "FPSC"), the Public Utilities Commission of Ohio (the "PUCO"), the Indiana Utility Regulatory Commission (the "IURC") and the Kentucky Public Service Commission (the "KPSC") (collectively, the "Applicable PSCs"); (K) required pre-approvals (the "FCC Pre-Approvals") of license transfers with the Federal Communications Commission (the "FCC"); (L) such other items as disclosed in Section 3.01(d) of the Progress Disclosure Letter; and (M) compliance with, and filings under, antitrust or competition laws of any foreign jurisdiction, if required (the items set forth above in clauses (A) through (H) and (J), collectively, the "Progress Required Statutory Approvals"), no consent, approval, license, order or authorization ("Consents") or action of, registration, declaration or filing with or notice to any Governmental Authority is necessary or required to be obtained or made in connection with the execution and delivery of this Agreement by Progress, the performance by Progress of its obligations hereunder or the consummation of the Merger and the other transactions contemplated hereby, other than such items that the failure to make or obtain, as the case may be, individually or in the aggregate, could not reasonably be expected to have a material adverse effect on Progress.

(e) SEC Reports, Financial Statements and Utility Reports.

(i) Progress and its subsidiaries have filed or furnished each form, report, schedule, registration statement, registration exemption, if applicable, definitive proxy statement and other document (together with all amendments thereof and supplements thereto) required to be filed or furnished by Progress or any of its subsidiaries pursuant to the Securities Act of 1933, as amended, and the rules and regulations thereunder (the "Securities Act") or the Exchange Act with the SEC since January 1, 2007 (as such documents have since the time of their filing been amended or supplemented, the "Progress SEC Reports"). As of their respective dates, after giving effect to any amendments or supplements thereto, the Progress SEC Reports (A) complied as to form in all material respects with the requirements of the Securities Act and the Exchange Act, if applicable, as the case may be, and, to the extent applicable, the Sarbanes-Oxley Act of 2002 ("SOX"), and (B) did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(ii) Each of the principal executive officer of Progress and the principal financial officer of Progress (or each former principal executive officer of Progress and each former principal financial officer of Progress, as applicable) has made all certifications required by Rule 13a-14 or 15d-14 under the Exchange Act or Sections 302 and 906 of SOX and the rules and regulations of the SEC promulgated thereunder with respect to the Progress SEC Reports. For purposes of the preceding sentence, "principal executive officer" and "principal financial officer" shall have the meanings given to such terms in SOX. Since January 1, 2007, neither Progress nor any of its subsidiaries has arranged any outstanding "extensions of credit" to directors or executive officers within the meaning of Section 402 of SOX.

(iii) The audited consolidated financial statements and unaudited interim consolidated financial statements (including, in each case, the notes, if any, thereto) included in the Progress SEC Reports (the "Progress Financial Statements") complied as to form in all material respects with the published rules and regulations of the SEC with respect thereto in effect at the time of filing or furnishing the applicable Progress SEC Report, were prepared in accordance with United States generally accepted accounting principles ("GAAP") applied on a consistent basis during the periods involved (except as may be indicated therein or in the notes thereto and except with respect to unaudited statements as permitted by Form 10-Q of the SEC) and fairly present (subject, in the case of the unaudited interim financial statements, to normal, recurring year-end audit adjustments that were not or are not expected to be, individually or in the aggregate, materially adverse to Progress) the consolidated financial position of Progress and its consolidated subsidiaries as of the respective dates thereof and the consolidated results of their operations and cash flows for the respective periods then ended.

(iv) All filings (other than immaterial filings) required to be made by Progress or any of its subsidiaries since January 1, 2007, under the 2005 Act, the Power Act, the Atomic Energy Act, the Natural Gas Act, the Natural Gas Policy Act of 1978, the Communications Act of 1934 and applicable state laws and regulations, have been filed with the SEC, the FERC, the Department of Energy (the "DOE"), the FCC or any applicable state public utility commissions (including, to the extent required, NCUC, PSCSC and FPSC), as the case may be, including all forms, statements, reports, agreements (oral or written) and all documents, exhibits, amendments and supplements appertaining thereto, including all rates, tariffs, franchises, service agreements and related documents, and all such filings complied, as of their respective dates, with all applicable requirements of the applicable statute and the rules and regulations thereunder, except for filings the failure of which to make or the failure of which to make in compliance with all applicable requirements of the applicable statute and the rules and regulations thereunder, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress.

(v) Progress has designed and maintains a system of internal control over financial reporting (as defined in Rules 13a–15(f) and 15d–15(f) of the Exchange Act) sufficient to provide reasonable assurances regarding the reliability of financial reporting. Progress (x) has designed and maintains disclosure controls and procedures (as defined in Rules 13a–15 (e) and 15d–15(e) of the Exchange Act) to provide reasonable assurance that all information required to be disclosed by Progress in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to Progress's management as appropriate to allow timely decisions regarding required disclosure, and (y) has disclosed, based on its most recent evaluation of internal control over financial reporting, to Progress's outside auditors and the audit committee of the Board of Directors of Progress (A) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect Progress's ability to record, process, summarize and report financial information and (B) any fraud, whether or not material, that involves management or other employees who have a significant role in Progress's internal control over financial reporting. Since December 31, 2006, any material change in internal control over financial reporting required to be disclosed in any Progress SEC Report has been so disclosed.

(vi) Since December 31, 2006, (x) neither Progress nor any of its subsidiaries nor, to the knowledge of the Executive Officers (for the purposes of this Section 3.01(e)(vi), as such term is defined in Section 3b-7 of the Exchange Act) of Progress, any director, officer, employee, auditor, accountant or representative of Progress or any of its subsidiaries has received or otherwise obtained knowledge of any material complaint, allegation, assertion or claim, whether written or oral, regarding the accounting or auditing practices, procedures, methodologies or methods of Progress or any of its subsidiaries or their respective internal accounting controls relating to periods after December 31, 2006, including any material complaint, allegation, assertion or claim that Progress or any of its subsidiaries has engaged in questionable accounting or auditing practices (except for any of the foregoing after the date hereof which have no reasonable basis), and (y) to the knowledge of the Executive Officers of Progress, no attorney representing Progress or any of its subsidiaries, whether or not employed by Progress or any of its subsidiaries, has reported evidence of a material violation of securities laws, breach of fiduciary duty or similar violation, relating to periods after December 31, 2006, by Progress or any of its officers, directors, employees or agents to the Board of Directors of Progress or any committee thereof or to any director or Executive Officer of Progress.

(f) Absence of Certain Changes or Events. Since December 31, 2009, through the date hereof, Progress and its subsidiaries have conducted their respective businesses in all material respects in the ordinary course of business in a consistent manner since such date and there has not been any change, event or development that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Progress.

(g) Absence of Undisclosed Liabilities. Except for matters reflected or reserved against in the consolidated balance sheet (or notes thereto) as of December 31, 2009, included in the Progress Financial Statements, neither Progress nor any of its subsidiaries has any liabilities or obligations (whether absolute, accrued, contingent, fixed or otherwise, or whether due or to become due) of any nature that would be required by GAAP to be reflected on a consolidated balance sheet of Progress and its consolidated subsidiaries (including the notes thereto), except liabilities or obligations (i) that were incurred in the ordinary course of business consistent with past practice since December 31, 2009, (ii) that were incurred in connection with the transactions contemplated by this Agreement and that are not material in the aggregate or (iii) that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Neither Progress nor any of its subsidiaries is a party to, or has any commitment to become a party to, any joint venture, off-balance sheet partnership or any similar contract or arrangement (including any Contract relating to any transaction or relationship between or among Progress and any of its subsidiaries, on the one hand, and any unconsolidated affiliate, including any structured finance, special purpose or limited purpose entity or person, on the other hand, or any "off-balance sheet arrangements" (as defined in Item 303(a) of Regulation S-K under the Exchange Act), where the result, purpose or effect of such contract or arrangement is to avoid disclosure of any material transaction involving, or material liabilities of, Progress or any of its subsidiaries, in the Progress Financial Statements or the Progress SEC Reports.

(h) Legal Proceedings. Except for Environmental Claims, which are the subject of Section 3.01(n), as of the date of this Agreement, (i) there are no actions, suits, arbitrations or proceedings pending or, to the knowledge of Progress, threatened against, relating to or affecting, nor to the knowledge of Progress are there any Governmental Authority investigations, inquiries

or audits pending or threatened against, relating to or affecting, Progress or any of its subsidiaries or any of the Progress Joint Ventures or any of their respective assets and properties that, in each case, individually or in the aggregate, have had or could reasonably be expected to have a material adverse effect on Progress and (ii) neither Progress nor any of its subsidiaries or material assets is subject to any order of any Governmental Authority that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Progress.

(i) Information Supplied. None of the information supplied or to be supplied by Progress for inclusion or incorporation by reference in (i) the Form S-4 will, at the time the Form S-4 is filed with the SEC, at any time it is amended or supplemented or at the time it becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Joint Proxy Statement will, at the date it is first mailed to Duke's shareholders or Progress's shareholders or at the time of the Progress Shareholders Meeting or the Duke Shareholders Meeting, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not misleading. The Joint Proxy Statement (other than the portions thereof relating solely to the Duke Shareholders Meeting) will comply as to form in all material respects with the requirements of the Exchange Act and the rules and regulations thereunder, except that no representation is made by Progress with respect to statements made or incorporated by reference therein based on information supplied by or on behalf of Duke or Merger Sub for inclusion or incorporation by reference in the Joint Proxy Statement.

(j) Permits; Compliance with Laws and Orders. Progress, its subsidiaries and the Progress Joint Ventures hold all permits, licenses, certificates, notices, authorizations, approvals and similar Consents of all Governmental Authorities ("Permits") necessary for the lawful conduct of their respective businesses, except for failures to hold such Permits that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Progress, its subsidiaries and the Progress Joint Ventures are in compliance with the terms of their Permits, except failures so to comply that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Progress, its subsidiaries and the Progress Joint Ventures are not, and since January 1, 2008 have not been, in violation of or default under any law or order of any Governmental Authority, except for such violations or defaults that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Progress is, and since January 1, 2008 has been, in compliance in all material respects with (i) SOX and (ii) the applicable listing standards and corporate governance rules and regulations of the NYSE. The above provisions of this Section 3.01(j) do not relate to matters with respect to taxes, such matters being the subject of Section 3.01 (k), Environmental Permits and Environmental Laws, such matters being the subject of Section 3.01(n), benefits plans, such matters being the subject of Section 3.01(l) and nuclear power plants, such matters being the subject of Section 3.01(o).

(k) Taxes.

(i) Except as has not had, and could not reasonably be expected to have, a material adverse effect on Progress:

(A) Each of Progress and its subsidiaries has timely filed, or has caused to be timely filed on its behalf, all Tax Returns required to be filed by it, and all such Tax Returns are true, complete and accurate. All Taxes shown to be due and owing on such Tax Returns have been timely paid.

(B) The most recent financial statements contained in the Progress SEC Reports filed prior to the date of this Agreement reflect, in accordance with GAAP, an adequate reserve for all Taxes payable by Progress and its subsidiaries for all taxable periods through the date of such financial statements.

(C) There is no audit, examination, deficiency, refund litigation, proposed adjustment or matter in controversy with respect to any Taxes or Tax Return of Progress or its subsidiaries, and, to the knowledge of Progress, neither Progress nor any of its subsidiaries has received written notice of any claim made by a governmental authority in a jurisdiction where Progress or any of its subsidiaries, as applicable, does not file a Tax Return, that Progress or such subsidiary is or may be subject to income taxation by that jurisdiction. No deficiency with respect to any Taxes has been proposed, asserted or assessed against Progress or any of its subsidiaries, and no requests for waivers of the time to assess any Taxes are pending.

(D) There are no outstanding written agreements, consents or waivers to extend the statutory period of limitations applicable to the assessment of any Taxes or deficiencies against Progress or any of its subsidiaries, and no power of attorney granted by either Progress or any of its subsidiaries with respect to any Taxes is currently in force.

(E) Neither Progress nor any of its subsidiaries is a party to any agreement providing for the allocation or sharing of Taxes imposed on or with respect to any individual or other person (other than (I) such agreements with customers, vendors, lessors or the like entered into in the ordinary course of business and (II) agreements with or among Progress or any of its subsidiaries), and neither Progress nor any of its subsidiaries (A) has been a member of an affiliated group (or similar state, local or foreign filing group) filing a consolidated U.S. federal income Tax Return (other than the group the common parent of which is Progress or a subsidiary of Progress) or (B) has any liability for the Taxes of any person (other than Progress or any of its subsidiaries) (I) under Treasury Regulation Section 1.1502-6 (or any similar provision of state, local or foreign law), or (II) as a transferee or successor.

(F) There are no material Liens for Taxes (other than for current Taxes not yet due and payable) on the assets of Progress and its subsidiaries.

(ii) Neither Progress nor any of its subsidiaries has taken or agreed to take any action or knows of any fact, agreement, plan or other circumstance that is reasonably likely to prevent or impede the Merger from qualifying as a reorganization under Section 368(a) of the Code.

For purposes of this Agreement:

"Taxes" means any and all federal, state, local, foreign or other taxes of any kind (together with any and all interest, penalties, additions to tax and additional amounts imposed with respect thereto) imposed by any governmental authority, including, without limitation, taxes or other charges on or with respect to income, franchises, windfall or other profits, gross receipts, property, sales, use, capital stock, payroll, employment, unemployment, social security, workers' compensation, or net worth, and taxes or other charges in the nature of excise, withholding, ad valorem or value added.

"Tax Return" means any return, report or similar statement (including the schedules attached thereto) required to be filed with respect to Taxes, including, without limitation, any information return, claim for refund, amended return, or declaration of estimated Taxes.

(l) Employee Benefit Plans; ERISA.

(i) Except for such matters that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress, (A) all Progress Employee Benefit Plans are in compliance with all applicable requirements of law, including the Employee Retirement Income Security Act of 1974, as amended, and the rules and regulations thereunder ("ERISA"), and the Code, and (B) there does not now exist, nor do any circumstances exist that could result in, any Controlled Group Liability that would be a liability of Progress or any of its subsidiaries following the Closing. The only material employment agreements, severance agreements or severance policies applicable to Progress or any of its subsidiaries are the agreements and policies disclosed in Section 3.01(l)(i) of the Progress Disclosure Letter.

(ii) As used herein:

(A) "Controlled Group Liability" means any and all liabilities (1) under Title IV of ERISA, (2) under Section 302 of ERISA, (3) under Sections 412 and 4971 of the Code, and (4) as a result of a failure to comply with the continuation coverage requirements of Section 601 et seq. of ERISA and Section 4980B of the Code;

(B) "Progress Employee Benefit Plan" means any Plan entered into, established, maintained, sponsored, contributed to or required to be contributed to by Progress or any of its subsidiaries for the benefit of the current or former employees or directors of Progress or any of its subsidiaries and existing on the date of this Agreement or at any time subsequent thereto and, in the case of a Plan that is subject to Part 3 of Title I of ERISA, Section 412 of the Code or Title IV of ERISA, at any time during the five-year period preceding the date of this Agreement with respect to which Progress or any of its subsidiaries has or could reasonably be expected to have any present or future actual or contingent liabilities; and

(C) "Plan" means any employment, bonus, incentive compensation, deferred compensation, long term incentive, pension, profit sharing, retirement, stock purchase, stock option, stock ownership, stock appreciation rights, phantom

stock, leave of absence, layoff, vacation, day or dependent care, legal services, cafeteria, life, health, medical, accident, disability, workmen's compensation or other insurance, retention, severance, separation, termination, change of control or other benefit plan, agreement, practice, policy, program, scheme or arrangement of any kind, whether written or oral, including any "employee benefit plan" within the meaning of Section 3(3) of ERISA.

(iii) No event has occurred, and there exists no condition or set of circumstances in connection with any Progress Employee Benefit Plan, that has had or could reasonably be expected to have a material adverse effect on Progress.

(iv) Section 3.01(l)(iv) of the Progress Disclosure Letter identifies each Progress Employee Benefit Plan that provides, upon the occurrence of a change in the ownership or effective control of Progress or its subsidiaries or a change in the ownership of all or a substantial portion of the assets of Progress or its subsidiaries, either alone or upon the occurrence of any additional or subsequent events and whether or not applicable to the transactions contemplated by this Agreement, for (A) an acceleration of the time of payment of or vesting in, or an increase in the amount of, compensation or benefits due any current or former employee, director or officer of Progress or its subsidiaries, (B) any forgiveness of indebtedness or obligation to fund compensation or benefits with respect to any such employee, director or officer, or (C) an entitlement of any such employee, director or officer to severance pay, unemployment compensation or any other payment or other benefit.

(v) Each Progress Employee Benefit Plan that is in any part a "nonqualified deferred compensation plan" subject to Section 409A of the Code (A) materially complies and, at all times after December 31, 2008 has materially complied, both in form and operation, with the requirements of Section 409A of the Code and the final regulations thereunder and (B) between January 1, 2005 and December 31, 2008 was operated in material reasonable, good faith compliance with Section 409A of the Code, as determined under applicable guidance of the United States Department of the Treasury (the "Treasury") and the Internal Revenue Service.

(m) Labor Matters. As of the date hereof, neither Progress nor any of its subsidiaries is a party to, bound by or in the process of negotiating any collective bargaining agreement or other labor agreement with any union or labor organization. As of the date of this Agreement, there are no disputes, grievances or arbitrations pending or, to the knowledge of Progress, threatened between Progress or any of its subsidiaries and any trade union or other representatives of its employees and there is no charge or complaint pending or threatened in writing against Progress or any of its subsidiaries before the National Labor Relations Board (the "NLRB") or any similar Governmental Authority, except in each case as, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress, and, to the knowledge of Progress, as of the date of this Agreement, there are no material organizational efforts presently being made involving any of the employees of Progress or any of its subsidiaries. From December 31, 2007, to the date of this Agreement, there has been no work stoppage, strike, slowdown or lockout by or affecting employees of Progress or any of its subsidiaries and, to the knowledge of Progress, no such action has been threatened in writing, except in each case as, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Except as, individually or in the aggregate, has not had and

could not reasonably be expected to have a material adverse effect on Progress: (A) there are no litigations, lawsuits, claims, charges, complaints, arbitrations, actions, investigations or proceedings pending or, to the knowledge of Progress, threatened between or involving Progress or any of its subsidiaries and any of their respective current or former employees, independent contractors, applicants for employment or classes of the foregoing; (B) Progress and its subsidiaries are in compliance with all applicable laws, orders, agreements, contracts and policies respecting employment and employment practices, including, without limitation, all legal requirements respecting terms and conditions of employment, equal opportunity, workplace health and safety, wages and hours, child labor, immigration, discrimination, disability rights or benefits, facility closures and layoffs, workers' compensation, labor relations, employee leaves and unemployment insurance; and (C) since January 1, 2007, neither Progress nor any of its subsidiaries has engaged in any "plant closing" or "mass layoff," as defined in the Worker Adjustment Retraining and Notification Act or any comparable state or local law (the "WARN Act"), without complying with the notice requirements of such laws.

(n) Environmental Matters.

(i) Each of Progress, its subsidiaries and the Progress Joint Ventures since January 1, 2008 has been and is in compliance with all applicable Environmental Laws (as hereinafter defined), except where the failure to be in such compliance, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Progress.

(ii) Each of Progress, its subsidiaries and the Progress Joint Ventures has obtained all Permits under Environmental Laws (collectively, the "Environmental Permits") necessary for the construction of their facilities and the conduct of their operations as of the date of this Agreement, as applicable, and all such Environmental Permits are validly issued, in full force and effect, and final, and Progress, its subsidiaries and the Progress Joint Ventures are in compliance with all terms and conditions of the Environmental Permits, except where the failure to obtain such Environmental Permits, of such Permits to be in good standing or, where applicable, of a renewal application to have been timely filed and be pending or to be in such compliance, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Progress.

(iii) There is no Environmental Claim (as hereinafter defined) pending:

(A) against Progress or any of its subsidiaries or any of the Progress Joint Ventures;

(B) to the knowledge of Progress, against any person or entity whose liability for such Environmental Claim has been retained or assumed either contractually or by operation of law by Progress or any of its subsidiaries or any of the Progress Joint Ventures; or

(C) against any real or personal property or operations that Progress or any of its subsidiaries or any of the Progress Joint Ventures owns, leases or manages, in whole or in part, or, to the knowledge of Progress, formerly owned,

leased or managed, in whole or in part, except in the case of clause (A), (B) or (C) for such Environmental Claims that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress.

(iv) To the knowledge of Progress, there have not been any Releases (as hereinafter defined) of any Hazardous Material (as hereinafter defined) that would be reasonably likely to form the basis of any Environmental Claim against Progress or any of its subsidiaries or any of the Progress Joint Ventures, in each case, except for such Releases that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress.

(v) As used in this Section 3.01(n) and in Section 3.02(n):

(A) "Environmental Claim" means any and all administrative, regulatory or judicial actions, suits, orders, demands, demand letters, directives, claims, liens, investigations, proceedings or notices of noncompliance, liability or violation (written or oral) by any person or entity (including any Governmental Authority) alleging potential liability (including potential responsibility or liability for enforcement, investigatory costs, cleanup costs, governmental response costs, removal costs, remedial costs, natural resources damages, property damages, personal injuries or penalties) arising out of, based on or resulting from circumstances forming the basis of any actual or alleged noncompliance with, violation of, or liability under, any Environmental Law or Environmental Permit;

(B) "Environmental Laws" means all domestic or foreign federal, state and local laws, principles of common law and orders relating to pollution, the environment (including ambient air, surface water, groundwater, land surface or subsurface strata) or protection of human health as it relates to the environment including laws relating to the presence or Release of Hazardous Materials, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of, or exposure to, Hazardous Materials;

(C) "Hazardous Materials" means (a) any petroleum or petroleum products, radioactive materials, asbestos in any form that is or could become friable, urea formaldehyde foam insulation, and polychlorinated biphenyls; and (b) any chemical, material, substance or waste that is prohibited, limited or regulated under any Environmental Law; and

(D) "Release" means any spill, emission, leaking, injection, deposit, disposal, discharge, dispersal, leaching or migration into the atmosphere, soil, surface water, groundwater or property.

(o) Ownership of Nuclear Power Plants. The operations of the nuclear generation stations owned, in whole or part, by Progress or its subsidiaries (collectively, the "Progress Nuclear Facilities") are and have been conducted in compliance with all applicable laws and Permits, except for such failures to comply that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. Each of the

Progress Nuclear Facilities maintains, and is in material compliance with, emergency plans designed to respond to an unplanned Release therefrom of radioactive materials and each such plan conforms with the requirements of applicable law in all material respects. The plans for the decommissioning of each of the Progress Nuclear Facilities and for the storage of spent nuclear fuel conform with the requirements of applicable law in all material respects and, solely with respect to the portion of the Progress Nuclear Facilities owned, directly or indirectly, by Progress, are funded consistent with applicable law. Since December 31, 2008, the operations of the Progress Nuclear Facilities have not been the subject of any notices of violation, any ongoing proceeding, NRC Diagnostic Team Inspections or requests for information from the NRC or any other agency with jurisdiction over such facility, except for such notices or requests for information that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress. No Progress Nuclear Facility is listed by the NRC in the Unacceptable Performance column of the NRC Action Matrix, as a part of NRC's Assessment of Licensee Performance. Liability insurance to the full extent required by law for operating the Progress Nuclear Facilities remains in full force and effect regarding such facilities, except for failures to maintain such insurance in full force and effect that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress.

(p) Vote Required. Assuming the accuracy of the representation and warranty contained in Section 3.02(r), the affirmative vote of the holders of record of at least a majority of the outstanding shares of Progress Common Stock, with respect to the approval of this Agreement (the "Progress Shareholder Approval"), is the only vote of the holders of any class or series of the capital stock of Progress or its subsidiaries required to approve this Agreement, the Merger and the other transactions contemplated hereby.

(q) Opinions of Financial Advisors. The Board of Directors of Progress has received the opinion of each of Lazard Freres & Co. LLC and Barclays Capital Inc., to the effect that, as of the date of such opinion and based on the assumptions, qualifications and limitations contained therein, the Exchange Ratio is fair, from a financial point of view, to the holders of Progress Common Stock.

(r) Ownership of Duke Capital Stock. Neither Progress nor any of its subsidiaries or other affiliates beneficially owns any shares of Duke capital stock.

(s) Articles 9 and 9A of the NCBCA Not Applicable; Other Statutes. Progress has taken all necessary actions, if any, so that the provisions of Articles 9 and 9A of the NCBCA will not, before the termination of this Agreement, apply to this Agreement, the Merger or the other transactions contemplated hereby. No "fair price," "merger moratorium," "control share acquisition," or other anti-takeover or similar statute or regulation applies or purports to apply to this Agreement, the Merger or the other transactions contemplated hereby.

(t) Joint Venture Representations. Each representation or warranty made by Progress in this Section 3.01 relating to a Progress Joint Venture that is neither operated nor managed solely by Progress or a Progress subsidiary shall be deemed made only to the knowledge of Progress.

(u) Insurance. Except for failures to maintain insurance or self-insurance that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Progress, from January 1, 2007, through the date of this Agreement, each of Progress and its subsidiaries has been continuously insured with financially responsible insurers or has self-insured, in each case in such amounts and with respect to such risks and losses as are customary for companies in the United States conducting the business conducted by Progress and its subsidiaries during such time period. Neither Progress nor any of its subsidiaries has received any notice of any pending or threatened cancellation, termination or premium increase with respect to any insurance policy of Progress or any of its subsidiaries, except with respect to any cancellation, termination or premium increase that, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Progress.

(v) Energy Price Risk Management. Progress has established risk parameters, limits and guidelines in compliance with the risk management policy approved by Progress's Board of Directors (the "Progress Risk Management Guidelines") and monitors compliance by Progress and its subsidiaries with such energy price risk parameters. Progress has provided the Progress Risk Management Guidelines to Duke prior to the date of this Agreement. Progress is in compliance in all material respects with the Progress Risk Management Guidelines.

(w) Progress Material Contracts.

(i) For purposes of this Agreement, the term "Progress Material Contract" shall mean any Contract to which Progress or any of its subsidiaries is a party or bound as of the date hereof:

(A) that is a "material contract" (as such term is defined in Item 601(b)(10) of Regulation S-K of the SEC);

(B) that (1) purports to limit in any material respect either the type of business in which Progress or its subsidiaries (or, after the Effective Time, Duke or its subsidiaries) or any of their respective affiliates may engage or the manner or geographic area in which any of them may so engage in any business, (2) would require the disposition of any material assets or line of business of Progress or its subsidiaries (or, after the Effective Time, Duke or its subsidiaries) or any of their respective affiliates as a result of the consummation of the transactions contemplated by this Agreement, (3) is a material Contract that grants "most favored nation" status that, following the Effective Time, would impose obligations upon Duke or its subsidiaries, including Progress and its subsidiaries, or (4) prohibits or limits, in any material respect, the right of Progress or any of its subsidiaries (or, after the Effective Time, Duke or its subsidiaries) to make, sell or distribute any products or services or use, transfer, license or enforce any of their respective intellectual property rights; or

(C) that (1) has an aggregate principal amount, or provides for an aggregate obligation, in excess of $100,000,000 (I) evidencing indebtedness for borrowed money of Progress or any of its subsidiaries to any third party, (II) guaranteeing any such indebtedness of a third party or (III) containing a covenant restricting the payment of dividends, or (2) has the economic effect of any of the items set forth in subclause (1) above.

(ii) Neither Progress nor any subsidiary of Progress is in breach of or default under the terms of any Progress Material Contract and no event has occurred that (with or without notice or lapse of time or both) could result in a breach or default under any Progress Material Contract where such breach or default could reasonably be expected to have, individually or in the aggregate, a material adverse effect on Progress. To the knowledge of Progress, no other party to any Progress Material Contract is in breach of or default under the terms of any Progress Material Contract where such breach or default has had, or could reasonably be expected to have, individually or in the aggregate, a material adverse effect on Progress. Except as could not reasonably be expected to have, individually or in the aggregate, a material adverse effect on Progress, each Progress Material Contract is a valid and binding obligation of Progress or the subsidiary of Progress which is party thereto and, to the knowledge of Progress, of each other party thereto, and is in full force and effect, except that such enforcement may be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws, now or hereafter in effect, relating to creditors' rights generally and to general equitable principles.

(x) Anti-Bribery Laws.

(i) To the knowledge of Progress, Progress and its subsidiaries are, and since January 1, 2008, have been, in compliance in all material respects with all statutory and regulatory requirements under the Foreign Corrupt Practices Act (15 U.S.C. §§ 78dd-1, et seq.), as amended, the Anti-Kickback Act of 1986, as amended, the Organization for Economic Cooperation and Development Convention Against Bribery of Foreign Officials in International Business Transactions and all legislation implementing such convention and all other international anti-bribery conventions, and all other anti-corruption and bribery laws (including any applicable written standards, requirements, directives or policies of any Governmental Authority) (the "Anti-Bribery Laws") in jurisdictions in which Progress and its subsidiaries have operated or currently operate. Since January 1, 2008, neither Progress nor any of its subsidiaries has received any communication from any Governmental Authority or any written communication from any third party that alleges that Progress, any of its subsidiaries or any employee or agent thereof is in material violation of any Anti-Bribery Laws, and no such potential or actual material violation or liability has been discovered.

(ii) Without limiting the other provisions of this Section 3.01(x), since January 1, 2008, none of Progress or its subsidiaries nor, to the knowledge of Progress, any of their respective current or former directors, officers, principals, employees, managers, sales persons, consultants or other agents or representatives, distributors, contractors, joint venturers or any other person acting on any of their behalf, has, directly or indirectly, made or offered or solicited or accepted any contribution, gift, gratuity, entertainment, bribe, rebate, payoff, influence payment, kickback or other payment or anything else of value to or from any person, private or public (including customers, potential customers, political parties, elected officials and candidates), whether in money, property, services or any other form, to influence any act of such person in such person's official capacity, inducing such person to do or omit to do any act in violation of the lawful official duty of such person or securing an improper advantage or to induce such person to use such person's influence to obtain or retain business for Progress or its subsidiaries or otherwise to confer any benefit to Progress or its subsidiaries in violation in any material respect of any Anti-Bribery Laws.

(iii) Since January 1, 2006, neither Progress nor any of its subsidiaries has made any disclosure (voluntary or otherwise) to any Governmental Authority with respect to any alleged material irregularity, material misstatement or material omission or other potential material violation or liability arising under or relating to any Anti-Bribery Law.

Section 3.02 Representations and Warranties of Duke and Merger Sub. Except as set forth in the letter dated the date of this Agreement and delivered to Progress by Duke concurrently with the execution and delivery of this Agreement (the "Duke Disclosure Letter") or, to the extent the qualifying nature of such disclosure is readily apparent therefrom and excluding any forward-looking statements, risk factors and other similar statements that are cautionary and non-specific in nature, as set forth in the Duke SEC Reports filed on or after January 1, 2009 and prior to the date hereof, Duke and Merger Sub represent and warrant to Progress as follows:

(a) Organization and Qualification.

(i) Each of Duke and its subsidiaries is duly organized, validly existing and in good standing (with respect to jurisdictions that recognize the concept of good standing) under the laws of its jurisdiction of organization and has full power and authority to conduct its business as and to the extent now conducted and to own, use and lease its assets and properties, except for such failures to be so organized, existing and in good standing (with respect to jurisdictions that recognize the concept of good standing) or to have such power and authority that, individually or in the aggregate, have not had and could not be reasonably expected to have a material adverse effect on Duke. Each of Duke and its subsidiaries is duly qualified, licensed or admitted to do business and is in good standing (with respect to jurisdictions that recognize the concept of good standing) in each jurisdiction in which the ownership, use or leasing of its assets and properties, or the conduct or nature of its business, makes such qualification, licensing or admission necessary, except for such failures to be so qualified, licensed or admitted and in good standing (with respect to jurisdictions that recognize the concept of good standing) that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Section 3.02 (a) of the Duke Disclosure Letter sets forth as of the date of this Agreement the name and jurisdiction of organization of each subsidiary of Duke. Merger Sub is a newly formed corporation and has engaged in no activities except as contemplated by this Agreement. All of the outstanding capital stock of Merger Sub is owned directly by Duke. No subsidiary of Duke owns any stock in Duke. Duke has made available to Progress prior to the date of this Agreement a true and complete copy of Duke's certificate of incorporation and by-laws, each as amended through the date hereof.

(ii) Section 3.02(a) of the Duke Disclosure Letter sets forth a description as of the date of this Agreement, of all Duke Joint Ventures, including (x) the name of each such entity and (y) a brief description of the principal line or lines of business conducted by each such entity.

(iii) Except for interests in the subsidiaries of Duke, the Duke Joint Ventures and interests acquired after the date of this Agreement without violating any covenant or agreement set forth herein, neither Duke nor any of its subsidiaries directly or indirectly owns any

equity or similar interest in, or any interest convertible into or exchangeable or exercisable for, any equity or similar interest in, any person, in which the invested capital associated with such interest of Duke or any of its subsidiaries exceeds, individually as of the date of this Agreement, $100,000,000.

(b) Capital Stock.

(i) The authorized capital stock of Duke consists of:

(A) 2,000,000,000 shares of common stock, par value $0.001 per share (the "Duke Common Stock"), of which 1,324,548,714 shares were outstanding as of October 29, 2010; and

(B) 44,000,000 shares of preferred stock, par value $0.001 per share, none of which were outstanding as of the date of this Agreement.

As of the date of this Agreement, no shares of Duke Common Stock are held in the treasury of Duke. As of the date of this Agreement, 13,869,567 shares of Duke Common Stock were subject to outstanding stock options granted under the Duke Employee Stock Option Plans ("Duke Employee Stock Options"), 1,756,064 shares of Duke Common Stock were subject to outstanding awards of phantom stock units of Duke Common Stock ("Duke Phantom Stock Units"), 7,549,720 shares of Duke Common Stock were subject to outstanding awards of performance shares of Duke Common Stock, determined at maximum performance levels ("Duke Performance Shares") and 75,901,515 additional shares of Duke Common Stock were reserved for issuance pursuant to the Duke Power Company Stock Incentive Plan, the Duke Energy Corporation 1998 Long-Term Incentive Plan, the Duke Energy Corporation 2006 Long-Term Incentive Plan, the Duke Energy Corporation 2010 Long-Term Incentive Plan, the Duke Energy Corporation Directors' Savings Plan, the Duke Energy Corporation Executive Savings Plan and any other compensatory plan, program or arrangement under which shares of Duke Common Stock are reserved for issuance (collectively, the "Duke Employee Stock Option Plans"). Since October 29, 2010, no shares of Duke Common Stock have been issued except pursuant to the Duke Employee Stock Option Plans and Duke Employee Stock Options issued thereunder, and from October 29, 2010 to the date of this Agreement, no shares of Duke Common Stock have been issued other than 268,498 shares of Duke Common Stock issued pursuant to the Duke Employee Stock Option Plans or Duke Employee Stock Options issued thereunder. All of the issued and outstanding shares of Duke Common Stock are, and all shares reserved for issuance will be, upon issuance in accordance with the terms specified in the instruments or agreements pursuant to which they are issuable, duly authorized, validly issued, fully paid and nonassessable. Except as disclosed in this Section 3.02(b), as of date of this Agreement there are no outstanding Options obligating Duke or any of its subsidiaries (A) to issue or sell any shares of capital stock of Duke, (B) to grant, extend or enter into any Option with respect thereto, (C) redeem or otherwise acquire any such shares of capital stock or other equity interests or (D) provide a material amount of funds to, or make any material investment (in the form of a loan, capital contribution or otherwise) in, any of their respective subsidiaries.

(ii) Except as permitted by this Agreement, all of the outstanding shares of capital stock of each subsidiary of Duke are duly authorized, validly issued, fully paid and

nonassessable and are owned, beneficially and of record, by Duke or a subsidiary of Duke, free and clear of any Liens, except for any of the foregoing that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. All of the outstanding shares of capital stock of Merger Sub are duly authorized, validly issued, fully paid and nonassessable and are owned, beneficially and of record, directly by Duke. The shares of Merger Sub owned by Duke are owned free and clear of any Liens. There are no (A) outstanding Options obligating Duke or any of its subsidiaries to issue or sell any shares of capital stock of any subsidiary of Duke or to grant, extend or enter into any such Option or (B) voting trusts, proxies or other commitments, understandings, restrictions or arrangements in favor of any person other than Duke or a subsidiary wholly-owned, directly or indirectly, by Duke with respect to the voting of or the right to participate in dividends or other earnings on any capital stock of Duke or any subsidiary of Duke.

(iii) As of the date of this Agreement, none of the subsidiaries of Duke or the Duke Joint Ventures is a "public utility company," a "holding company," a "subsidiary company" or an "affiliate" of any holding company within the meaning of Section 2(a)(5), 2(a)(7), 2(a)(8) or 2(a)(11) of the 2005 Act, respectively. None of Duke, its subsidiaries and the Duke Joint Ventures is registered under the 2005 Act.

(iv) As of the date of this Agreement, no bonds, debentures, notes or other indebtedness of Duke or any of its subsidiaries having the right to vote (or which are convertible into or exercisable for securities having the right to vote) (collectively, "Duke Voting Debt") on any matters on which Duke shareholders may vote are issued or outstanding nor are there any outstanding Options obligating Duke or any of its subsidiaries to issue or sell any Duke Voting Debt or to grant, extend or enter into any Option with respect thereto.

(v) Each share of Duke Common Stock to be issued in the Merger shall be duly authorized, validly issued, fully paid and nonassessable and free and clear of any Liens.

(vi) There have been no repricings of any Duke Employee Stock Options through amendments, cancellation and reissuance or other means during the current or prior two (2) calendar years. None of the Duke Employee Stock Options, Duke Phantom Stock Units or Duke Performance Shares (A) have been granted since August 6, 2010, except as permitted by this Agreement, or (B) have been granted in contemplation of the Merger or the transactions contemplated in this Agreement. None of the Duke Employee Stock Options was granted with an exercise price below the per share closing price on the NYSE on the date of grant. All grants of Duke Employee Stock Options, Duke Phantom Stock Units and Duke Performance Shares were validly made and properly approved by the Board of Directors of Duke (or a duly authorized committee or subcommittee thereof) in compliance with all applicable laws and recorded on the consolidated financial statements of Duke in accordance with GAAP, and no such grants of Duke Employee Stock Options involved any "back dating," "forward dating" or similar practices.

(c) Authority. Duke has full corporate power and authority to enter into this Agreement, to perform its obligations hereunder and, subject to obtaining Duke Shareholder Approval, to consummate the transactions contemplated hereby. The execution, delivery and performance of this Agreement by Duke and the consummation by Duke of the transactions contemplated hereby have been duly and validly adopted and unanimously approved by the Board

of Directors of Duke, the Board of Directors of Duke has recommended approval by the shareholders of Duke of the Duke Charter Amendment and the Duke Share Issuance, and directed that the Duke Charter Amendment and Duke Share Issuance be submitted to the shareholders of Duke for their approval, and no other corporate proceedings on the part of Duke or its shareholders are necessary to authorize the execution, delivery and performance of this Agreement by Duke and the consummation by Duke of the Merger and the other transactions contemplated hereby, other than obtaining Duke Shareholder Approval. This Agreement has been duly and validly executed and delivered by Duke and, assuming this Agreement constitutes the legal, valid and binding obligation of Progress, constitutes a legal, valid and binding obligation of Duke enforceable against Duke in accordance with its terms, except that such enforcement may be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws, now or hereafter in effect, relating to creditors' rights generally and to general equitable principles.

(d) No Conflicts; Approvals and Consents.

(i) The execution and delivery of this Agreement by Duke does not, and the performance by Duke of its obligations hereunder and the consummation of the Merger and the other transactions contemplated hereby will not, conflict with, result in a violation or breach of, constitute (with or without notice or lapse of time or both) a default under, result in or give to any person any right of payment or reimbursement, termination, cancellation, modification or acceleration of, or result in the creation or imposition of any Lien upon any of the assets or properties of Duke or any of its subsidiaries or any of the Duke Joint Ventures under, any of the terms, conditions or provisions of (A) subject to the effectiveness of the Duke Charter Amendment, the certificates or articles of incorporation or by-laws (or other comparable organizational documents) of Duke or any of its subsidiaries or any of the Duke Joint Ventures, or (B) subject to the obtaining of Duke Shareholder Approval and the taking of the actions described in paragraph (ii) of this Section 3.02(d), including the Duke Required Statutory Approvals, (x) any laws or orders of any Governmental Authority applicable to Duke or any of its subsidiaries or any of the Duke Joint Ventures or any of their respective assets or properties, or (y) any note, bond, mortgage, security agreement, credit agreement, indenture, license, franchise, permit, concession, contract, lease, obligation or other instrument to which Duke or any of its subsidiaries or any of the Duke Joint Ventures is a party or by which Duke or any of its subsidiaries or any of the Duke Joint Ventures or any of their respective assets or properties is bound, excluding from the foregoing clauses (x) and (y) such items that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke.

(ii) Except for (A) compliance with, and filings under, the HSR Act; (B) the filing with and, to the extent required, the declaration of effectiveness by, the SEC of (1) the Joint Proxy Statement pursuant to the Exchange Act, (2) the Form S-4 and (3) such reports under the Exchange Act as may be required in connection with this Agreement and the transactions contemplated hereby; (C) the filing of documents with various state securities authorities that may be required in connection with the transactions contemplated hereby; (D) such filings with and approvals of the NYSE with respect to the Duke Charter Amendment, if necessary, and to permit the shares of Duke Common Stock that are to be issued pursuant to Article II to be listed on the NYSE; (E) the registration, consents, approvals and notices required under the 2005 Act; (F) notice to, and the consent and approval of, FERC under Section 203 of the Power Act, or an order under the Power Act disclaiming jurisdiction over the transactions contemplated hereby; (G) the

filing of an application to, and consent and approval of, and issuance of any required licenses and license amendments by, the NRC under the Atomic Energy Act; (H) the filing of the Certificate of Amendment with respect to the Duke Charter Amendment with the Secretary of State of the State of Delaware and the Articles of Merger and other appropriate merger documents required by the NCBCA with the Secretary of State of the State of North Carolina and appropriate documents with the relevant authorities of other states in which Duke is qualified to do business; (I) compliance with and such filings as may be required under applicable Environmental Laws; (J) to the extent required, notice to and the approval of, the Applicable PSCs; (K) the FCC Pre-Approvals; (L) such other items as disclosed in Section 3.02(d) of the Duke Disclosure Letter; and (M) compliance with, and filings under, antitrust or competition laws of any foreign jurisdiction, if required (the items set forth above in clauses (A) through (H) and (J) collectively, the "Duke Required Statutory Approvals"), no Consents or action of, registration, declaration or filing with or notice to any Governmental Authority is necessary or required to be obtained or made in connection with the execution and delivery of this Agreement by Duke, the performance by Duke of its obligations hereunder or the consummation of the Merger and the other transactions contemplated hereby, other than such items that the failure to make or obtain, as the case may be, individually or in the aggregate, could not reasonably be expected to have a material adverse effect on Duke.

(e) SEC Reports, Financial Statements and Utility Reports.

(i) Duke and its subsidiaries have filed or furnished each form, report, schedule, registration statement, registration exemption, if applicable, definitive proxy statement and other document (together with all amendments thereof and supplements thereto) required to be filed or furnished by Duke or any of its subsidiaries pursuant to the Securities Act or the Exchange Act with the SEC since January 1, 2007 (as such documents have since the time of their filing been amended or supplemented, the "Duke SEC Reports"). As of their respective dates, after giving effect to any amendments or supplements thereto, the Duke SEC Reports (A) complied as to form in all material respects with the requirements of the Securities Act and the Exchange Act, if applicable, as the case may be, and, to the extent applicable, SOX and (B) did not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(ii) Each of the principal executive officer of Duke and the principal financial officer of Duke (or each former principal executive officer of Duke and each former principal financial officer of Duke, as applicable) has made all certifications required by Rule 13a-14 or 15d-14 under the Exchange Act or Sections 302 and 906 of SOX and the rules and regulations of the SEC promulgated thereunder with respect to the Duke SEC Reports. For purposes of the preceding sentence, "principal executive officer" and "principal financial officer" shall have the meanings given to such terms in SOX. Since January 1, 2007, neither Duke nor any of its subsidiaries has arranged any outstanding "extensions of credit" to directors or executive officers within the meaning of Section 402 of SOX.

(iii) The audited consolidated financial statements and unaudited interim consolidated financial statements (including, in each case, the notes, if any, thereto) included in the Duke SEC Reports (the "Duke Financial Statements") complied as to form in all material respects with the published rules and regulations of the SEC with respect thereto in effect at the time of

filing or furnishing the applicable Duke SEC Report, were prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated therein or in the notes thereto and except with respect to unaudited statements as permitted by Form 10-Q of the SEC) and fairly present (subject, in the case of the unaudited interim financial statements, to normal, recurring year-end audit adjustments that were not or are not expected to be, individually or in the aggregate, materially adverse to Duke) the consolidated financial position of Duke and its consolidated subsidiaries as of the respective dates thereof and the consolidated results of their operations and cash flows for the respective periods then ended.

(iv) All filings (other than immaterial filings) required to be made by Duke or any of its subsidiaries since January 1, 2007, under the 2005 Act, the Power Act, the Atomic Energy Act, the Natural Gas Act, the Natural Gas Policy Act of 1978, the Communications Act of 1934 and applicable state laws and regulations, have been filed with the SEC, the FERC, the DOE, the NRC, the FCC or any applicable state public utility commissions (including, to the extent required, NCUC, PSCSC, PUCO, IURC and KPSC), as the case may be, including all forms, statements, reports, agreements (oral or written) and all documents, exhibits, amendments and supplements appertaining thereto, including all rates, tariffs, franchises, service agreements and related documents, and all such filings complied, as of their respective dates, with all applicable requirements of the applicable statute and the rules and regulations thereunder, except for filings the failure of which to make or the failure of which to make in compliance with all applicable requirements of the applicable statute and the rules and regulations thereunder, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke.

(v) Duke has designed and maintains a system of internal control over financial reporting (as defined in Rules 13a–15(f) and 15d–15(f) of the Exchange Act) sufficient to provide reasonable assurances regarding the reliability of financial reporting. Duke (x) has designed and maintains disclosure controls and procedures (as defined in Rules 13a–15(e) and 15d–15(e) of the Exchange Act) to provide reasonable assurance that all information required to be disclosed by Duke in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to Duke's management as appropriate to allow timely decisions regarding required disclosure, and (y) has disclosed, based on its most recent evaluation of internal control over financial reporting, to Duke's outside auditors and the audit committee of the Board of Directors of Duke (A) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect Duke's ability to record, process, summarize and report financial information and (B) any fraud, whether or not material, that involves management or other employees who have a significant role in Duke's internal control over financial reporting. Since December 31, 2006, any material change in internal control over financial reporting required to be disclosed in any Duke SEC Report has been so disclosed.

(vi) Since December 31, 2006, (x) neither Duke nor any of its subsidiaries nor, to the knowledge of the Executive Officers (for the purposes of this Section 3.02(e)(vi), as such term is defined in Section 3b-7 of the Exchange Act) of Duke, any director, officer, employee, auditor, accountant or representative of Duke or any of its subsidiaries has received or otherwise obtained knowledge of any material complaint, allegation, assertion or claim, whether written or

oral, regarding the accounting or auditing practices, procedures, methodologies or methods of Duke or any of its subsidiaries or their respective internal accounting controls relating to periods after December 31, 2006, including any material complaint, allegation, assertion or claim that Duke or any of its subsidiaries has engaged in questionable accounting or auditing practices (except for any of the foregoing after the date hereof which have no reasonable basis), and (y) to the knowledge of the Executive Officers of Duke, no attorney representing Duke or any of its subsidiaries, whether or not employed by Duke or any of its subsidiaries, has reported evidence of a material violation of securities laws, breach of fiduciary duty or similar violation, relating to periods after December 31, 2006, by Duke or any of its officers, directors, employees or agents to the Board of Directors of Duke or any committee thereof or, to any director or Executive Officer of Duke.

(f) Absence of Certain Changes or Events. Since December 31, 2009 through the date hereof, Duke and its subsidiaries have conducted their respective businesses in all material respects in the ordinary course of business in a consistent manner since such date and there has not been any change, event or development that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Duke.

(g) Absence of Undisclosed Liabilities. Except for matters reflected or reserved against in the consolidated balance sheet (or notes thereto) as of December 31, 2009, included in the Duke Financial Statements, neither Duke nor any of its subsidiaries has any liabilities or obligations (whether absolute, accrued, contingent, fixed or otherwise, or whether due or to become due) of any nature that would be required by GAAP to be reflected on a consolidated balance sheet of Duke and its consolidated subsidiaries (including the notes thereto), except liabilities or obligations (i) that were incurred in the ordinary course of business consistent with past practice since December 31, 2009, (ii) that were incurred in connection with the transactions contemplated by this Agreement and that are not material in the aggregate or (iii) that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Neither Duke nor any of its subsidiaries is a party to, or has any commitment to become a party to, any joint venture, off-balance sheet partnership or any similar contract or arrangement (including any Contract relating to any transaction or relationship between or among Duke and any of its subsidiaries, on the one hand, and any unconsolidated affiliate, including any structured finance, special purpose or limited purpose entity or person, on the other hand, or any "off-balance sheet arrangements" (as defined in Item 303(a) of Regulation S-K under the Exchange Act), where the result, purpose or effect of such contract or arrangement is to avoid disclosure of any material transaction involving, or material liabilities of, Duke or any of its subsidiaries, in the Duke Financial Statements or the Duke SEC Reports.

(h) Legal Proceedings. Except for Environmental Claims, which are the subject of Section 3.02(n), as of the date of this Agreement, (i) there are no actions, suits, arbitrations or proceedings pending or, to the knowledge of Duke, threatened against, relating to or affecting, nor to the knowledge of Duke are there any Governmental Authority investigations, inquiries or audits pending or threatened against, relating to or affecting, Duke or any of its subsidiaries or any of the Duke Joint Ventures or any of their respective assets and properties that, in each case, individually or in the aggregate, have had or could reasonably be expected to have a material adverse effect on Duke and (ii) neither Duke nor any of its subsidiaries or material assets is subject to any order of any Governmental Authority that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Duke.

(i) Information Supplied. None of the information supplied or to be supplied by Duke for inclusion or incorporation by reference in (i) the Form S-4 will, at the time the Form S-4 is filed with the SEC, at any time it is amended or supplemented or at the time it becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Joint Proxy Statement will, at the date it is first mailed to Progress's shareholders or Duke's shareholders or at the time of the Progress Shareholders Meeting or the Duke Shareholders Meeting, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not misleading. The Joint Proxy Statement (other than the portions thereof relating solely to the Progress Shareholders Meeting) and the Form S-4 will comply as to form in all material respects with the requirements of the Exchange Act and Securities Act, respectively, and the rules and regulations thereunder, except that no representation is made by Duke with respect to statements made or incorporated by reference therein based on information supplied by or on behalf of Progress for inclusion or incorporation by reference in the Joint Proxy Statement or the Form S-4.

(j) Permits; Compliance with Laws and Orders. Duke, its subsidiaries and the Duke Joint Ventures hold all Permits necessary for the lawful conduct of their respective businesses, except for failures to hold such Permits that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Duke, its subsidiaries and the Duke Joint Ventures are in compliance with the terms of their Permits, except failures so to comply that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Duke, its subsidiaries and the Duke Joint Ventures are not, and since January 1, 2008 have not been, in violation of or default under any law or order of any Governmental Authority, except for such violations or defaults that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Duke is, and since January 1, 2008 has been, in compliance in all material respects with (i) SOX and (ii) the applicable listing standards and corporate governance rules and regulations of the NYSE. The above provisions of this Section 3.02(j) do not relate to matters with respect to taxes, such matters being the subject of Section 3.02(k), Environmental Permits and Environmental Laws, such matters being the subject of Section 3.02(n), benefits plans, such matters being the subject of Section 3.02(l), and nuclear power plants, such matters being the subject of Section 3.02(o).

(k) Taxes.

(i) Except as has not had, and could not reasonably be expected to have, a material adverse effect on Duke:

(A) Each of Duke and its subsidiaries has timely filed, or has caused to be timely filed on its behalf, all Tax Returns required to be filed by it, and all such Tax Returns are true, complete and accurate. All Taxes shown to be due and owing on such Tax Returns have been timely paid.

(B) The most recent financial statements contained in the Duke SEC Reports filed prior to the date of this Agreement reflect, in accordance with GAAP, an adequate reserve for all Taxes payable by Duke and its subsidiaries for all taxable periods through the date of such financial statements.

(C) There is no audit, examination, deficiency, refund litigation, proposed adjustment or matter in controversy with respect to any Taxes or Tax Return of Duke or its subsidiaries, and, to the knowledge of Duke, neither Duke nor any of its subsidiaries has received written notice of any claim made by a governmental authority in a jurisdiction where Duke or any of its subsidiaries, as applicable, does not file a Tax Return, that Duke or such subsidiary is or may be subject to income taxation by that jurisdiction. No deficiency with respect to any Taxes has been proposed, asserted or assessed against Duke or any of its subsidiaries, and no requests for waivers of the time to assess any Taxes are pending.

(D) There are no outstanding written agreements, consents or waivers to extend the statutory period of limitations applicable to the assessment of any Taxes or deficiencies against Duke or any of its subsidiaries, and no power of attorney granted by either Duke or any of its subsidiaries with respect to any Taxes is currently in force.

(E) Neither Duke nor any of its subsidiaries is a party to any agreement providing for the allocation or sharing of Taxes imposed on or with respect to any individual or other person (other than (I) such agreements with customers, vendors, lessors or the like entered into in the ordinary course of business, and (II) agreements with or among Duke or any of its subsidiaries), and neither Duke nor any of its subsidiaries (A) has been a member of an affiliated group (or similar state, local or foreign filing group) filing a consolidated U.S. federal income Tax Return (other than the group the common parent of which is Duke or a subsidiary of Duke) or (B) has any liability for the Taxes of any person (other than Duke or any of its subsidiaries) (I) under Treasury Regulation Section 1.1502-6 (or any similar provision of state, local or foreign law), or (II) as a transferee or successor.

(F) There are no material Liens for Taxes (other than for current Taxes not yet due and payable) on the assets of Duke and its subsidiaries.

(ii) Neither Duke nor any of its subsidiaries has taken or agreed to take any action or knows of any fact, agreement, plan or other circumstance that is reasonably likely to prevent or impede the Merger from qualifying as a reorganization under Section 368(a) of the Code.

(l) Employee Benefit Plans; ERISA.

(i) Except for such matters that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke, (A) all Duke Employee Benefit Plans are in compliance with all applicable requirements of law, including

ERISA and the Code, and (B) there does not now exist, nor do any circumstances exist that could result in, any Controlled Group Liability that would be a liability of Duke or any of its subsidiaries following the Closing. The only material employment agreements, severance agreements or severance policies applicable to Duke or any of its subsidiaries are the agreements and policies disclosed in Section 3.02(l)(i) of the Duke Disclosure Letter.

(ii) As used herein, "Duke Employee Benefit Plan" means any Plan entered into, established, maintained, sponsored, contributed to or required to be contributed to by Duke or any of its subsidiaries for the benefit of the current or former employees or directors of Duke or any of its subsidiaries and existing on the date of this Agreement or at any time subsequent thereto and, in the case of a Plan that is subject to Part 3 of Title I of ERISA, Section 412 of the Code or Title IV of ERISA, at any time during the five-year period preceding the date of this Agreement with respect to which Duke or any of its subsidiaries has or could reasonably be expected to have any present or future actual or contingent liabilities.

(iii) No event has occurred, and there exists no condition or set of circumstances in connection with any Duke Employee Benefit Plan, that has had or could reasonably be expected to have a material adverse effect on Duke.

(iv) Section 3.02(l)(iv) of the Duke Disclosure Letter identifies each Duke Employee Benefit Plan that provides, upon the occurrence of a change in the ownership or effective control of Duke or its subsidiaries or a change in the ownership of all or a substantial portion of the assets of Duke or its subsidiaries, either alone or upon the occurrence of any additional or subsequent events and whether or not applicable to the transactions contemplated by this Agreement, for (A) an acceleration of the time of payment of or vesting in, or an increase in the amount of, compensation or benefits due any current or former employee, director or officer of Duke or its subsidiaries, (B) any forgiveness of indebtedness or obligation to fund compensation or benefits with respect to any such employee, director or officer, or (C) an entitlement of any such employee, director or officer to severance pay, unemployment compensation or any other payment or other benefit.

(v) Each Duke Employee Benefit Plan that is in any part a "nonqualified deferred compensation plan" subject to Section 409A of the Code (A) materially complies and, at all times after December 31, 2008 has materially complied, both in form and operation, with the requirements of Section 409A of the Code and the final regulations thereunder and (B) between January 1, 2005 and December 31, 2008 was operated in material reasonable, good faith compliance with Section 409A of the Code, as determined under applicable guidance of the Treasury and the Internal Revenue Service.

(m) Labor Matters. As of the date hereof, neither Duke nor any of its subsidiaries is a party to, bound by or in the process of negotiating any collective bargaining agreement or other labor agreement with any union or labor organization. As of the date of this Agreement, there are no disputes, grievances or arbitrations pending or, to the knowledge of Duke, threatened between Duke or any of its subsidiaries and any trade union or other representatives of its employees and there is no charge or complaint pending or threatened in writing against Duke or any of its subsidiaries before the NLRB or any similar Governmental Authority, except in each case as, individually or in the aggregate, have not had and could not reasonably be expected to have a

material adverse effect on Duke, and, to the knowledge of Duke, as of the date of this Agreement, there are no material organizational efforts presently being made involving any of the employees of Duke or any of its subsidiaries. From December 31, 2007, to the date of this Agreement, there has been no work stoppage, strike, slowdown or lockout by or affecting employees of Duke or any of its subsidiaries and, to the knowledge of Duke, no such action has been threatened in writing, except in each case as, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Except as, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Duke: (A) there are no litigations, lawsuits, claims, charges, complaints, arbitrations, actions, investigations or proceedings pending or, to the knowledge of Duke, threatened between or involving Duke or any of its subsidiaries and any of their respective current or former employees, independent contractors, applicants for employment or classes of the foregoing; (B) Duke and its subsidiaries are in compliance with all applicable laws, orders, agreements, contracts and policies respecting employment and employment practices, including, without limitation, all legal requirements respecting terms and conditions of employment, equal opportunity, workplace health and safety, wages and hours, child labor, immigration, discrimination, disability rights or benefits, facility closures and layoffs, workers' compensation, labor relations, employee leaves and unemployment insurance; and (C) since January 1, 2007, neither Duke nor any of its subsidiaries has engaged in any "plant closing" or "mass layoff," as defined in the WARN Act, without complying with the notice requirements of such laws.

(n) Environmental Matters.

(i) Each of Duke, its subsidiaries and the Duke Joint Ventures since January 1, 2008 has been and is in compliance with all applicable Environmental Laws, except where the failure to be in such compliance, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Duke.

(ii) Each of Duke, its subsidiaries and the Duke Joint Ventures has obtained all Environmental Permits necessary for the construction of their facilities and the conduct of their operations as of the date of this Agreement, as applicable, and all such Environmental Permits are validly issued, in full force and effect and final, and Duke, its subsidiaries and the Duke Joint Ventures are in compliance with all terms and conditions of the Environmental Permits, except where the failure to obtain such Environmental Permits, of such Permits to be in good standing or, where applicable, of a renewal application to have been timely filed and be pending or to be in such compliance, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Duke.

(iii) There is no Environmental Claim pending

(A) against Duke or any of its subsidiaries or any of the Duke Joint Ventures;

(B) to the knowledge of Duke, against any person or entity whose liability for such Environmental Claim has been retained or assumed either contractually or by operation of law by Duke or any of its subsidiaries or any of the Duke Joint Ventures; or

(C) against any real or personal property or operations that Duke or any of its subsidiaries or any of the Duke Joint Ventures owns, leases or manages, in whole or in part, or, to the knowledge of Duke, formerly owned, leased or arranged, in whole or in part, except in the case of clause (A), (B) or (C) for such Environmental Claims that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke.

(iv) To the knowledge of Duke, there have not been any Releases of any Hazardous Material that would be reasonably likely to form the basis of any Environmental Claim against Duke or any of its subsidiaries or any of the Duke Joint Ventures, in each case, except for such Releases that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke.

(o) Operations of Nuclear Power Plants. The operations of the nuclear generation stations owned, in whole or part, by Duke or its subsidiaries (collectively, the "Duke Nuclear Facilities") are and have been conducted in compliance with all applicable laws and Permits, except for such failures to comply that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. Each of the Duke Nuclear Facilities maintains, and is in material compliance with, emergency plans designed to respond to an unplanned Release therefrom of radioactive materials and each such plan conforms with the requirements of applicable law in all material respects. The plans for the decommissioning of each of the Duke Nuclear Facilities and for the storage of spent nuclear fuel conform with the requirements of applicable law in all material respects and, solely with respect to the portion of the Duke Nuclear Facilities owned, directly or indirectly, by Duke, are funded consistent with applicable law. Since December 31, 2008, the operations of the Duke Nuclear Facilities have not been the subject of any notices of violation, any ongoing proceeding, NRC Diagnostic Team Inspections or requests for information from the NRC or any other agency with jurisdiction over such facility, except for such notices or requests for information that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke. No Duke Nuclear Facility is listed by the NRC in the Unacceptable Performance column of the NRC Action Matrix, as a part of NRC's Assessment of Licensee Performance. Liability insurance to the full extent required by law for operating the Duke Nuclear Facilities remains in full force and effect regarding such facilities, except for failures to maintain such insurance in full force and effect that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke.

(p) Vote Required. Assuming the accuracy of the representation and warranty contained in Section 3.01(r), the affirmative vote of the holders of record of at least a majority of the shares of Duke Common Stock (i) outstanding, with respect to an amendment to the Amended and Restated Certificate of Incorporation of Duke providing for the Duke Charter Amendment and (ii) voting thereon, provided that the total vote cast represents over fifty percent in interest of all securities entitled to vote on the proposal, with respect to the issuance of shares of Duke Common Stock in connection with the Merger as contemplated by this Agreement (the "Duke Share Issuance") ((i) and (ii) collectively, the "Duke Shareholder Approval"), are the only votes of the holders of any class or series of the capital stock of Duke or its subsidiaries required to approve this Agreement, the Merger and the other transactions contemplated hereby.

(q) Opinions of Financial Advisors. The Board of Directors of Duke has received the opinion of each of J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner and Smith Incorporated, to the effect that, as of the date of such opinion and based on the assumptions, qualifications and limitations contained therein, the Exchange Ratio is fair, from a financial point of view, to Duke.

(r) Ownership of Progress Capital Stock. Neither Duke nor any of its subsidiaries or other affiliates beneficially owns any shares of Progress capital stock.

(s) Certain Statutes. No "fair price," "merger moratorium," "control share acquisition," or other anti-takeover or similar statute or regulation applies or purports to apply to this Agreement, the Merger or the other transactions contemplated hereby.

(t) Joint Venture Representations. Each representation or warranty made by Duke in this Section 3.02 relating to a Duke Joint Venture that is neither operated nor managed solely by Duke or a Duke subsidiary shall be deemed made only to the knowledge of Duke.

(u) Insurance. Except for failures to maintain insurance or self-insurance that, individually or in the aggregate, have not had and could not reasonably be expected to have a material adverse effect on Duke, from January 1, 2007, through the date of this Agreement, each of Duke and its subsidiaries has been continuously insured with financially responsible insurers or has self-insured, in each case in such amounts and with respect to such risks and losses as are customary for companies in the United States conducting the business conducted by Duke and its subsidiaries during such time period. Neither Duke nor any of its subsidiaries has received any notice of any pending or threatened cancellation, termination or premium increase with respect to any insurance policy of Duke or any of its subsidiaries, except with respect to any cancellation, termination or premium increase that, individually or in the aggregate, has not had and could not reasonably be expected to have a material adverse effect on Duke.

(v) Energy Price Risk Management. Duke has established risk parameters, limits and guidelines in compliance with the risk management policy approved by Duke's Board of Directors (the "Duke Risk Management Guidelines") and monitors compliance by Duke and its subsidiaries with such energy price risk parameters. Duke has provided the Duke Risk Management Guidelines to Progress prior to the date of this Agreement. Duke is in compliance in all material respects with the Duke Risk Management Guidelines.

(w) Duke Material Contracts.

(i) For purposes of this Agreement, the term "Duke Material Contract" shall mean any Contract to which Duke or any of its subsidiaries is a party or bound as of the date hereof:

(A) that is a "material contract" (as such term is defined in Item 601(b)(10) of Regulation S-K of the SEC);

(B) that (1) purports to limit in any material respect either the type of business in which Duke or its subsidiaries (including, after the Effective Time, Progress or its subsidiaries) or any of their respective affiliates may engage or the

manner or geographic area in which any of them may so engage in any business, (2) would require the disposition of any material assets or line of business of Duke or its subsidiaries (including, after the Effective Time, Progress or its subsidiaries) or any of their respective affiliates as a result of the consummation of the transactions contemplated by this Agreement, (3) is a material Contract that grants "most favored nation" status that, following the Effective Time, would impose obligations upon Duke or its subsidiaries, including Progress and its subsidiaries, or (4) prohibits or limits, in any material respect, the right of Duke or any of its subsidiaries (including, after the Effective Time, Progress or its subsidiaries) to make, sell or distribute any products or services or use, transfer, license or enforce any of their respective intellectual property rights; or

(C) that (1) has an aggregate principal amount, or provides for an aggregate obligation, in excess of $200,000,000 (I) evidencing indebtedness for borrowed money of Duke or any of its subsidiaries to any third party, (II) guaranteeing any such indebtedness of a third party or (III) containing a covenant restricting the payment of dividends, or (2) has the economic effect of any of the items set forth in subclause (1) above.

(ii) Neither Duke nor any subsidiary of Duke is in breach of or default under the terms of any Duke Material Contract and no event has occurred that (with or without notice or lapse of time or both) could result in a breach or default under any Duke Material Contract where such breach or default could reasonably be expected to have, individually or in the aggregate, a material adverse effect on Duke. To the knowledge of Duke, no other party to any Duke Material Contract is in breach of or default under the terms of any Duke Material Contract where such breach or default has had, or could reasonably be expected to have, individually or in the aggregate, a material adverse effect on Duke. Except as could not reasonably be expected to have, individually or in the aggregate, a material adverse effect on Duke, each Duke Material Contract is a valid and binding obligation of Duke or the subsidiary of Duke which is party thereto and, to the knowledge of Duke, of each other party thereto, and is in full force and effect, except that such enforcement may be subject to applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws, now or hereafter in effect, relating to creditors' rights generally and to general equitable principles.

(x) Anti-Bribery Laws.

(i) To the knowledge of Duke, Duke and its subsidiaries are, and since January 1, 2008 have been, in compliance in all material respects with the Anti-Bribery Laws in jurisdictions in which Duke and its subsidiaries have operated or currently operate. Since January 1, 2008, neither Duke nor any of its subsidiaries has received any communication from any Governmental Authority or any written communication from any third party that alleges that Duke, any of its subsidiaries or any employee or agent thereof is in material violation of any Anti-Bribery Laws, and no such potential or actual material violation or liability has been discovered.

(ii) Without limiting the other provisions of this Section 3.02(x), since January 1, 2008, none of Duke or its subsidiaries nor, to the knowledge of Duke, any of their respective current or former directors, officers, principals, employees, managers, sales persons, consultants

or other agents or representatives, distributors, contractors, joint venturers or any other person acting on any of their behalf, has, directly or indirectly, made or offered or solicited or accepted any contribution, gift, gratuity, entertainment, bribe, rebate, payoff, influence payment, kickback or other payment or anything else of value to or from any person, private or public (including customers, potential customers, political parties, elected officials and candidates), whether in money, property, services or any other form, to influence any act of such person in such person's official capacity, inducing such person to do or omit to do any act in violation of the lawful official duty of such person or securing an improper advantage or to induce such person to use such person's influence to obtain or retain business for Duke or its subsidiaries or otherwise to confer any benefit to Duke or its subsidiaries in violation in any material respect of any Anti-Bribery Laws.

(iii) Since January 1, 2006, neither Duke nor any of its subsidiaries has made any disclosure (voluntary or otherwise) to any Governmental Authority with respect to any alleged material irregularity, material misstatement or material omission or other potential material violation or liability arising under or relating to any Anti-Bribery Law.

ARTICLE IV

COVENANTS

Section 4.01 Covenants of Progress. From and after the date of this Agreement until the Effective Time, Progress covenants and agrees as to itself and its subsidiaries that (except as expressly contemplated or permitted by this Agreement, as set forth in Section 4.01 of the Progress Disclosure Letter, for transactions (other than those set forth in Section 4.01(d) to the extent relating to the capital stock of Progress) solely involving Progress and one or more of its direct or indirect wholly-owned subsidiaries or between two or more direct or indirect wholly-owned subsidiaries of Progress, as required by law, or to the extent that Duke shall otherwise previously consent in writing, such consent not to be unreasonably withheld or delayed):

(a) Ordinary Course. Progress and each of its subsidiaries shall conduct their businesses in all material respects in the ordinary course of business consistent with past practice. Without limiting the generality of the foregoing, Progress and its subsidiaries shall use commercially reasonable efforts to preserve intact in all material respects their present business organizations, to maintain in effect all existing Permits and to timely submit renewal applications (as applicable), subject to prudent management of workforce and business needs, to keep available the services of their key officers and employees, to maintain their assets and properties in good working order and condition, ordinary wear and tear excepted, to preserve their relationships with Governmental Authorities, customers and suppliers and others having significant business dealings with them and to comply in all material respects with all laws, orders and Permits of all Governmental Authorities applicable to them.

(b) Charter Documents. Progress shall not amend or propose to amend its articles of incorporation or, other than in a manner that would not materially restrict the operation of its or their businesses, its by-laws or its subsidiaries' articles of incorporation or by-laws (or other comparable organizational documents).

(c) Dividends. Progress shall not, nor shall it permit any of its subsidiaries to,

(i) declare, set aside or pay any dividends on or make other distributions in respect of any of its capital stock or share capital, except:

(A) that, subject to Section 4.06 of this Agreement, Progress may continue the declaration and payment of regular quarterly cash dividends on Progress Common Stock, not to exceed $0.62 per share for each quarterly dividend, with usual record and payment dates for such dividends in accordance with past dividend practice, and

(B) for the declaration and payment of dividends by a direct or indirect wholly-owned subsidiary of Progress solely to its parent, or by a direct or indirect partially owned subsidiary of Progress (provided, that Progress or a Progress subsidiary receives or is to receive its proportionate share of such dividend or distribution), and

(C) for the declaration and payment of regular cash dividends with respect to preferred stock of Progress's subsidiaries outstanding as of the date of this Agreement or permitted to be issued under the terms of this Agreement, and

(D) for the declaration and payment of dividends necessary to comply with Section 4.06,

(ii) split, combine, reclassify or take similar action with respect to any of its capital stock or share capital or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or comprised in its share capital,

(iii) adopt a plan of complete or partial liquidation or resolutions providing for or authorizing such liquidation or a dissolution, merger, consolidation, restructuring, recapitalization or other reorganization, or

(iv) except as disclosed in Section 4.01(c)(iv) of the Progress Disclosure Letter, directly or indirectly redeem, repurchase or otherwise acquire any shares of its capital stock or any Option with respect thereto except:

(A) in connection with intercompany purchases of capital stock or share capital, or

(B) for the purpose of funding the Progress Employee Stock Option Plans or employee stock ownership or dividend reinvestment and stock purchase plans, or

(C) mandatory repurchases or redemptions of preferred stock of Progress or its subsidiaries in accordance with the terms thereof.

(d) Share Issuances. Progress shall not, nor shall it permit any of its subsidiaries to, issue, deliver or sell, or authorize or propose the issuance, delivery or sale of, any shares of its capital stock or any Option with respect thereto (other than (i) the issuance of Progress Common Stock upon the exercise of Progress Employee Stock Options outstanding as of the date hereof or issued after the date hereof in accordance with the terms of this Agreement in accordance with their terms, (ii) the issuance of Progress Common Stock in respect of Progress Restricted Stock, Progress Restricted Stock Units, Progress Performance Shares and other equity compensation awards, excluding Progress Employee Stock Options, granted under the Progress Employee Stock Option Plans ("Other Progress Equity Awards") outstanding as of the date hereof or issued after the date hereof in accordance with the terms of this Agreement in accordance with their terms, (iii) the issuance of Progress Restricted Stock, Progress Performance Shares and the grant of Progress Restricted Stock Units and Other Progress Equity Awards in accordance with their terms providing, in aggregate, up to an additional 2,000,000 shares of Progress Common Stock in any 12-month period following the date hereof, in amounts, at times and on terms and conditions in the ordinary course of business consistent with past practice, with Progress Performance Shares counted assuming the achievement of maximum performance level for the purposes of determining how many shares were granted during any such 12-month period; provided, however, that any Progress Restricted Stock, Progress Restricted Stock Units, Progress Performance Shares and Other Progress Equity Awards granted after the date of this Agreement shall be granted on terms pursuant to which such Progress Restricted Stock, Progress Restricted Stock Units, Progress Performance Shares and Other Progress Equity Awards shall not vest on the Effective Time or otherwise in connection with the occurrence of the transactions contemplated hereby and that, notwithstanding any plan, program or arrangement to the contrary, and except as provided in Section 4.01(d)(iii) of the Progress Disclosure Letter, any definition of "good reason" or any similar concept of constructive termination relating to such awards shall be as defined in Section 4.01(d)(iii) of the Progress Disclosure Letter and the terms and conditions of each grant of Progress Performance Shares shall be consistent with the treatment set forth in Section 5.06(a)(iii), (iv) the *pro rata* issuance by a subsidiary of its capital stock to its shareholders, and (v) the issuance of shares of Progress Common Stock in connection with any employee benefit plan intended to satisfy the requirements of Section 401(a) of the Code in the ordinary course of business consistent with past practice), or modify or amend any right of any holder of outstanding shares of its capital stock or any Option with respect thereto other than to give effect to Section 5.06.

(e) Acquisitions; Capital Expenditures. Except for (x) acquisitions of, or capital expenditures relating to, the entities, assets and facilities identified in Section 4.01(e) of the Progress Disclosure Letter, (y) expenditures of amounts set forth in Progress's capital expenditure plan included in Section 4.01(e) of the Progress Disclosure Letter, and (z) capital expenditures (1) required by law or Governmental Authorities or (2) incurred in connection with the repair or replacement of facilities destroyed or damaged due to casualty or accident (whether or not covered by insurance), Progress shall not, nor shall it permit any of its subsidiaries to, make any capital expenditures, or acquire or agree to acquire (whether by merger, consolidation, purchase or otherwise) any person or assets, if (A) in the case of any acquisition or acquisitions or series of related acquisitions of any person, asset or property located within the United States, the expected gross expenditures and commitments pursuant to all such acquisitions (including the amount of any indebtedness and amounts received for negative trading positions assumed) exceeds or may exceed, in the aggregate, $150,000,000, (B) any such acquisition is of persons, properties or assets located outside of the United States, (C) any such acquisition or capital expenditure constitutes any

line of business that is not conducted by Progress, its subsidiaries or the Progress Joint Ventures as of the date of this Agreement, or (D) any such acquisition or capital expenditure is reasonably likely, individually or in the aggregate, to materially delay the satisfaction of the conditions set forth in Section 6.02(d) or Section 6.03(d) or prevent the satisfaction of such conditions.

(f) Dispositions. Except for (x) dispositions set forth in Section 4.01(f) of the Progress Disclosure Letter, (y) dispositions of obsolete equipment or assets or dispositions of assets being replaced, in each case in the ordinary course of business consistent with past practice, and (z) dispositions by Progress or its subsidiaries of its assets in accordance with the terms of restructuring and divestiture plans mandated or approved by applicable local or state regulatory agencies, Progress shall not, nor shall it permit any of its subsidiaries to, sell, lease, grant any security interest in or otherwise dispose of or encumber any of its assets or properties if the aggregate value of all such dispositions exceeds or may exceed, in the aggregate, $150,000,000. For the purposes of this Section 4.01(f), the value of any disposition or series of related dispositions shall mean the greater of (i) the book value or (ii) the sales price, in each case of the person, asset or property which is the subject of such disposition and, in each case, together with the indebtedness and amounts paid for negative energy price risk management positions transferred by Progress or its subsidiaries in connection with such disposition.

(g) Indebtedness. Except as disclosed in Section 4.01(g) of the Progress Disclosure Letter, Progress shall not, nor shall it permit any of its subsidiaries to, (A) incur or guarantee any indebtedness or enter into any "keep well" or other agreement to maintain any financial condition of another person or enter into any arrangement having the economic effect of any of the foregoing (including any capital leases, "synthetic" leases or conditional sale or other title retention agreements) other than (i) short-term indebtedness incurred in the ordinary course of business, (ii) letters of credit obtained in the ordinary course of business, (iii) borrowings under Progress's or its subsidiaries' existing credit facilities (or replacement facilities permitted by this Section 4.01(g)) but only to the extent the commercial paper market is unavailable to Progress upon reasonable terms and conditions, as to which borrowings Progress agrees to notify Duke promptly following the consummation thereof, (iv) indebtedness incurred in connection with the refunding or refinancing of existing indebtedness (x) at maturity or upon final mandatory redemption (without the need for the occurrence of any special event) or (y) at a lower cost of funds, (v) indebtedness incurred to finance acquisitions permitted pursuant to Section 4.01(e) or indebtedness assumed pursuant thereto, (vi) other indebtedness in an aggregate principal amount not to exceed $250,000,000 outstanding at any time, (vii) guarantees or other credit support issued pursuant to energy price risk management or marketing positions established prior to the date of this Agreement, (viii) in addition to the guarantees or other credit support contemplated by subsection (A) (vii) of this Section 4.01(g), additional guarantees or other credit support issued in connection with energy price risk management or marketing activities in the ordinary course of business and (ix) indebtedness owed to any direct or indirect wholly-owned subsidiary of Progress, or, in the case of a subsidiary of Progress, to Progress or (B) make any loans or advances to any other person, other than (i) in the ordinary course of business consistent with past practice, (ii) to any direct or indirect wholly-owned subsidiary of Progress, or, in the case of a subsidiary of Progress, to Progress or (iii) as required pursuant to any obligation in effect as of the date of this Agreement.

(h) Marketing of Energy; Energy Price Risk Management. Progress shall not, nor shall it permit any of its subsidiaries to, (i) permit any material change in policies governing or

otherwise relating to energy price risk management or marketing of energy other than as a result of acquisitions or capital expenditures permitted pursuant to Section 4.01(e) or (ii) enter into any physical commodity transactions, exchange-traded futures and options transactions, over-the-counter transactions and derivatives thereof or similar transactions other than as permitted by the Progress Risk Management Guidelines.

(i) Employee Benefits. Except as required by law, or the terms of any collective bargaining agreement or any Progress Employee Benefit Plan, or as disclosed in Section 4.01(i) of the Progress Disclosure Letter or as otherwise expressly permitted by this Agreement, Progress shall not, nor shall it permit any of its subsidiaries to, enter into, adopt, amend or terminate any Progress Employee Benefit Plan, or other agreement, arrangement, plan or policy between Progress or one of its subsidiaries and one or more of its directors, officers or employees (other than any amendment that is immaterial or administrative in nature), or, except for normal increases in the ordinary course of business consistent with past practice, increase in any manner the compensation or fringe benefits of any director, executive officer or other employee, or, except for normal payments in the ordinary course of business consistent with past practice, and the award of annual bonuses on terms and conditions that are consistent with Section 5.07(g), pay any benefit not required by any plan or arrangement in effect as of the date of this Agreement; provided, however, that the foregoing shall not restrict Progress or its subsidiaries from (i) entering into or making available to newly hired officers and employees or to officers and employees in the context of promotions based on job performance or workplace requirements in the ordinary course of business consistent with past practice, plans, agreements, benefits and compensation arrangements (including incentive grants) that have, consistent with past practice, been made available to newly hired or promoted officers and employees, (ii) entering into severance agreements with, or adopting severance plans in the ordinary course of business consistent with past practice for, employees who are not executive officers in connection with terminations of employment of such employees, or (iii) entering into or amending collective bargaining agreements with existing collective bargaining representatives or newly certified bargaining units regarding mandatory subjects of bargaining under applicable law, in each case in a manner consistent with past practice to the extent permitted by law.

(j) [Intentionally Reserved.]

(k) Accounting. Progress shall not, nor shall it permit any of its subsidiaries to, make any changes in its accounting methods materially affecting the reported consolidated assets, liabilities or results of operations of Progress, except as required by law or GAAP.

(l) Insurance. Progress shall, and shall cause its subsidiaries to, maintain with financially responsible insurance companies (or through self-insurance, consistent with past practice) insurance in such amounts and against such risks and losses as are customary for companies engaged in their respective businesses, to the extent available on commercially reasonable terms.

(m) Taxes. Except as could not reasonably be expected to have a material adverse effect on Progress, Progress shall not, nor shall it permit any of its subsidiaries to, (i) settle any claim, action or proceeding relating to Taxes or (ii) make any Tax election (this clause (m) being the sole provision of this Section 4.01 governing Tax matters).

(n) Release of Claims. Except as disclosed in Section 4.01(n) of the Progress Disclosure Letter and except with respect to any settlements or agreements with or before any Governmental Authorities in the ordinary course of business, Progress shall not, and shall not permit any of its subsidiaries to, waive, release, assign, settle or compromise any claim, action or proceeding against Progress or any of its subsidiaries, other than waivers, releases, assignments, settlements or compromises that (x) with respect to the payment of monetary damages, involve only the payment of monetary damages (A) equal to or less than the amounts specifically reserved with respect thereto on the balance sheet as of December 31, 2009 included in the Progress SEC Documents or (B) that do not exceed $15,000,000 individually or $50,000,000 in the aggregate during any consecutive twelve-month period, and (y) with respect to any non-monetary terms and conditions therein, impose or require actions that would not reasonably be expected individually or in the aggregate to have a material adverse effect on Progress.

(o) Contracts. Except as permitted by Section 4.01(i), Progress shall not, nor shall it permit any of its subsidiaries to, (i) enter into any Contract that would materially restrict, after the Effective Time, Duke and its subsidiaries (including the Surviving Corporation and its subsidiaries) with respect to engaging or competing in any line of business or in any geographic area or (ii) other than in the ordinary course of business, waive, release, or assign any material rights or claims under, or materially modify or terminate any Contract that is material to Progress and its subsidiaries, taken as a whole, (A) in any manner that is materially adverse to Progress or (B) which would prevent or materially delay the consummation of the Merger and the other transactions contemplated by this Agreement, it being understood and agreed that the restriction on material modifications and terminations in clause (ii)(A) shall not apply with respect to any Contract permitted to be entered into under clause (e), (f), (g), (h) or (n) of this Section 4.01.

Section 4.02 Covenants of Duke. From and after the date of this Agreement until the Effective Time, Duke covenants and agrees as to itself and its subsidiaries that (except as expressly contemplated or permitted by this Agreement, as set forth in Section 4.02 of the Duke Disclosure Letter, for transactions (other than those set forth in Section 4.02(d) to the extent relating to the capital stock of Duke) solely involving Duke and one or more of its direct or indirect wholly-owned subsidiaries or between two or more direct or indirect wholly-owned subsidiaries of Duke, as required by law, or to the extent that Progress shall otherwise previously consent in writing, such consent not to be unreasonably withheld or delayed):

(a) Ordinary Course. Duke and each of its subsidiaries shall conduct their businesses in all material respects in the ordinary course of business consistent with past practice. Without limiting the generality of the foregoing, Duke and its subsidiaries shall use commercially reasonable efforts to preserve intact in all material respects their present business organizations, to maintain in effect all existing Permits and to timely submit renewal applications (as applicable), subject to prudent management of workforce and business needs, to keep available the services of their key officers and employees, to maintain their assets and properties in good working order and condition, ordinary wear and tear excepted, to preserve their relationships with Governmental Authorities, customers and suppliers and others having significant business dealings with them and to comply in all material respects with all laws, orders and Permits of all Governmental Authorities applicable to them.

(b) Charter Documents. Duke shall not amend or propose to amend its certificate of incorporation other than in connection with the Duke Charter Amendment or, other than in a manner that would not materially restrict the operation of its or their businesses, its by-laws or its subsidiaries' certificates of incorporation or by-laws (or other comparable organizational documents).

(c) Dividends. Duke shall not, nor shall it permit any of its subsidiaries to,

(i) declare, set aside or pay any dividends on or make other distributions in respect of any of its capital stock or share capital, except:

(A) that, subject to Section 4.06 of this Agreement, Duke may continue the declaration and payment of regular quarterly cash dividends on Duke Common Stock not to exceed $0.245 per share for each quarterly dividend, with usual record and payment dates for such dividends in accordance with past dividend practice; provided, that Duke may increase its regular quarterly cash dividend to an amount not to exceed $0.25 commencing with the regular quarterly dividend that would be payable in 2011 with respect to the second quarter of 2011 (corresponding to the dividend paid on September 16, 2010) and to an amount not to exceed $0.255 commencing with the regular quarterly dividend that would be payable in 2012 with respect to the second quarter of 2012 (it being Duke's intention prior to the Effective Time to declare and pay those dividends permitted by this Section 4.02(c)(i)(A) if and to the extent there are funds legally available therefor and such dividends may otherwise lawfully be declared and paid), and

(B) for the declaration and payment of dividends by a direct or indirect wholly-owned subsidiary of Duke solely to its parent, or by a direct or indirect partially owned subsidiary of Duke (provided, that Duke or a Duke subsidiary receives or is to receive its proportionate share of such dividend or distribution), and

(C) for the declaration and payment of dividends necessary to comply with Section 4.06,

(ii) split, combine, reclassify or take similar action with respect to any of its capital stock or share capital or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or comprised in its share capital,

(iii) adopt a plan of complete or partial liquidation or resolutions providing for or authorizing such liquidation or a dissolution, merger, consolidation, restructuring, recapitalization or other reorganization,

(iv) except as disclosed in Section 4.02(c)(iv) of the Duke Disclosure Letter directly or indirectly redeem, repurchase or otherwise acquire any shares of its capital stock or any Option with respect thereto except:

(A) in connection with intercompany purchases of capital stock or share capital, or

(B) for the purpose of funding the Duke Employee Stock Option Plan or employee stock ownership or dividend reinvestment and stock purchase plans, or

(v) bind Duke to any restriction not in existence on the date hereof on the payment by Duke of dividends and distributions on Duke Common Stock.

(d) Share Issuances. Duke shall not, nor shall it permit any of its subsidiaries to, issue, deliver or sell, or authorize or propose the issuance, delivery or sale of, any shares of its capital stock or any Option with respect thereto (other than (i) the issuance of Duke Common Stock upon the exercise of Duke Employee Stock Options outstanding as of the date hereof or issued after the date hereof in accordance with the terms of this Agreement in accordance with their terms, (ii) the issuance of Duke Common Stock in respect of Duke Phantom Stock Units, Duke Performance Shares and other equity compensation awards, excluding Duke Employee Stock Options, granted under the Duke Employee Stock Option Plans ("Other Duke Equity Awards") outstanding as of the date hereof or issued after the date hereof in accordance with the terms of this Agreement in accordance with their terms, (iii) the issuance of Duke Employee Stock Options, Duke Performance Shares and the grant of Duke Phantom Stock Units and Other Duke Equity Awards in accordance with their terms providing, in aggregate, up to an additional 6,000,000 shares of Duke Common Stock in any 12-month period following the date hereof, in amounts, at times and on terms and conditions in the ordinary course of business consistent with past practice, with each Duke Employee Stock Option counting as 1/4 of a share of Duke Common Stock and Duke Performance Shares counted assuming the achievement of maximum performance level, in each case for the purposes of determining how many shares were granted during any such 12-month period; provided, however, that any Duke Employee Stock Options, Duke Phantom Stock Units, Duke Performance Shares and Other Duke Equity Awards granted after the date of this Agreement shall be granted on terms pursuant to which such Duke Employee Stock Options, Duke Phantom Stock Units, Duke Performance Shares and Other Duke Equity Awards shall not vest on the Effective Time or otherwise in connection with the occurrence of the transactions contemplated hereby and that, notwithstanding any plan, program or arrangement to the contrary, any definition of "good reason" or any similar concept of constructive termination relating to such awards shall be as defined in Section 4.02(d)(iii) of the Duke Disclosure Letter, (iv) the *pro rata* issuance by a subsidiary of its capital stock to its shareholders and (v) the issuance of shares of Duke Common Stock in connection with any employee benefit plan intended to satisfy the requirements of Section 401(a) of the Code in the ordinary course of business consistent with past practice), or modify or amend any right of any holder of outstanding shares of its capital stock or any Option with respect thereto other than to give effect to Section 5.06.

(e) Acquisitions; Capital Expenditures. Except for (x) acquisitions of, or capital expenditures relating to, the entities, assets and facilities identified in Section 4.02(e) of the Duke Disclosure Letter, (y) expenditures of amounts set forth in Duke's capital expenditure plan included in Section 4.02(e) of the Duke Disclosure Letter, and (z) capital expenditures (1) required by law or Governmental Authorities or (2) incurred in connection with the repair or replacement of facilities destroyed or damaged due to casualty or accident (whether or not covered by insurance), Duke shall not, nor shall it permit any of its subsidiaries to, make any capital expenditures, or acquire or agree to acquire (whether by merger, consolidation, purchase or otherwise) any person or assets, if (A) the expected gross expenditures and commitments pursuant thereto (including the amount of any indebtedness and amounts received for negative energy price risk management

positions assumed) exceeds or may exceed $300,000,000 (no more than $150,000,000 of which may be for any acquisition or series of related acquisitions of any person, asset or property located outside of the United States), (B) any such acquisition or capital expenditure constitutes any line of business that is not conducted by Duke, its subsidiaries or the Duke Joint Ventures as of the date of this Agreement or extends any line of business of Duke, its subsidiaries or the Duke Joint Ventures into any geographic region outside of the continental United States or Canada in which Duke, its subsidiaries or the Duke Joint Ventures do not conduct business as of the date of this Agreement, or (C) any such acquisition or capital expenditure is reasonably likely, individually or in the aggregate, to materially delay the satisfaction of the conditions set forth in Section 6.02(d) or Section 6.03(d) or prevent the satisfaction of such conditions.

(f) Dispositions. Except for (x) dispositions set forth in Section 4.02(f) of the Duke Disclosure Letter, (y) dispositions of obsolete equipment or assets or dispositions of assets being replaced, in each case in the ordinary course of business consistent with past practice, and (z) dispositions by Duke or its subsidiaries of its assets in accordance with the terms of restructuring and divestiture plans mandated or approved by applicable local or state regulatory agencies, Duke shall not, nor shall it permit any of its subsidiaries to, sell, lease, grant any security interest in or otherwise dispose of or encumber any of its assets or properties if (A) the aggregate value of all such dispositions exceeds or may exceed $300,000,000 (no more than $150,000,000 of which may be for any disposition or series of related dispositions of any person, asset or property located outside the United States). For the purposes of this Section 4.02(f), the value of any disposition or series of related dispositions shall mean the greater of (i) the book value or (ii) the sales price, in each case of the person, asset or property which is the subject of such disposition and, in each case, together with the indebtedness and amounts paid for negative energy price risk management positions transferred by Duke or its subsidiaries in connection with such disposition.

(g) Indebtedness. Except as disclosed in Section 4.02(g) of the Duke Disclosure Letter, Duke shall not, nor shall it permit any of its subsidiaries to, (A) incur or guarantee any indebtedness or enter into any "keep well" or other agreement to maintain any financial condition of another person or enter into any arrangement having the economic effect of any of the foregoing (including any capital leases, "synthetic" leases or conditional sale or other title retention agreements) other than (i) short-term indebtedness incurred in the ordinary course of business, (ii) letters of credit obtained in the ordinary course of business, (iii) borrowings under Duke's or its subsidiaries' existing credit facilities (or replacement facilities permitted by this Section 4.02(g)) but only to the extent the commercial paper market is unavailable to Duke upon reasonable terms and conditions, and as to which borrowings Duke agrees to notify Progress promptly following the consummation thereof, (iv) indebtedness incurred in connection with the refunding or refinancing of existing indebtedness (x) at maturity or upon final mandatory redemption (without the need for the occurrence of any special event) or (y) at a lower cost of funds, (v) indebtedness incurred to finance acquisitions permitted pursuant to Section 4.02(e) or indebtedness assumed pursuant thereto, (vi) other indebtedness in an aggregate principal amount not to exceed $500,000,000 outstanding at any time, (vii) guarantees or other credit support issued pursuant to energy price risk management or marketing positions established prior to the date of this Agreement, (viii) in addition to the guarantees or other credit support contemplated by subsection (A) (vii) of this Section 4.02(g), additional guarantees or other credit support issued in connection with energy price risk management or marketing activities in the ordinary course of business and (ix) indebtedness owed to any direct or indirect wholly-owned subsidiary of Duke, or, in the case of a

subsidiary of Duke, to Duke or (B) make any loans or advances to any other person, other than (i) in the ordinary course of business consistent with past practice, (ii) to any direct or indirect wholly-owned subsidiary of Duke, or, in the case of a subsidiary of Duke, to Duke or (iii) as required pursuant to any obligation in effect as of the date of this Agreement.

(h) Marketing of Energy; Energy Price Risk Management. Except as disclosed in Section 4.02(h) of the Duke Disclosure Letter, Duke shall not, nor shall it permit any of its subsidiaries to, (i) permit any material change in policies governing or otherwise relating to energy price risk management or marketing of energy other than as a result of acquisitions or capital expenditures permitted pursuant to Section 4.02(e) or (ii) enter into any physical commodity transactions, exchange-traded futures and options transactions, over-the-counter transactions and derivatives thereof or similar transactions other than as permitted by the Duke Risk Management Guidelines.

(i) Employee Benefits. Except as required by law, or the terms of any collective bargaining agreement or any Duke Employee Benefit Plan, or as disclosed in Section 4.02(i) of the Duke Disclosure Letter or as otherwise expressly permitted by this Agreement, Duke shall not, nor shall it permit any of its subsidiaries to, enter into, adopt, amend or terminate any Duke Employee Benefit Plan, or other agreement, arrangement, plan or policy between Duke or one of its subsidiaries and one or more of its directors, officers or employees (other than any amendment that is immaterial or administrative in nature), or, except for normal increases in the ordinary course of business consistent with past practice, increase in any manner the compensation or fringe benefits of any director, executive officer or other employee, or, except for normal payments in the ordinary course of business consistent with past practice, and the award of annual bonuses on the terms and conditions set forth in Section 4.02(i) of the Duke Disclosure Letter, pay any benefit not required by any plan or arrangement in effect as of the date of this Agreement; provided, however, that the foregoing shall not restrict Duke or its subsidiaries from (i) entering into or making available to newly hired officers and employees or to officers and employees in the context of promotions based on job performance or workplace requirements in the ordinary course of business consistent with past practice, plans, agreements, benefits and compensation arrangements (including incentive grants) that have, consistent with past practice, been made available to newly hired or promoted officers and employees, (ii) entering into severance agreements with, or adopting severance plans in the ordinary course of business consistent with past practice for, employees who are not executive officers in connection with terminations of employment of such employees, or (iii) entering into or amending collective bargaining agreements with existing collective bargaining representatives or newly certified bargaining units regarding mandatory subjects of bargaining under applicable law, in each case in a manner consistent with past practice to the extent permitted by law.

(j) [Intentionally Reserved.]

(k) Accounting. Duke shall not, nor shall it permit any of its subsidiaries to, make any changes in its accounting methods materially affecting the reported consolidated assets, liabilities or results of operations of Duke, except as required by law or GAAP.

(l) Insurance. Duke shall, and shall cause its subsidiaries to, maintain with financially responsible insurance companies (or through self-insurance, consistent with past practice) insurance in such amounts and against such risks and losses as are customary for companies engaged in their respective businesses to the extent available on commercially reasonable terms.

(m) Taxes. Except as could not reasonably be expected to have a material adverse effect on Duke, Duke shall not, nor shall it permit any of its subsidiaries to, (i) settle any claim, action or proceeding relating to Taxes or (ii) make any Tax election (this clause (m) being the sole provision of this Section 4.02 governing Tax matters).

(n) Release of Claims. Except as disclosed in Section 4.02(n) of the Duke Disclosure Letter and except with respect to any settlements or agreements with or before any Governmental Authorities in the ordinary course of business, Duke shall not, and shall not permit any of its subsidiaries to, waive, release, assign, settle or compromise any claim, action or proceeding against Duke or any of its subsidiaries, other than waivers, releases, assignments, settlements or compromises that (x) with respect to the payment of monetary damages, involve only the payment of monetary damages (A) equal to or less than the amounts specifically reserved with respect thereto on the balance sheet as of December 31, 2009 included in the Duke SEC Documents or (B) that do not exceed $30,000,000 individually or $100,000,000 in the aggregate during any consecutive twelve-month period, and (y) with respect to any non-monetary terms and conditions therein, impose or require actions that would not reasonably be expected individually or in the aggregate to have a material adverse effect on Duke.

(o) Contracts. Except as permitted by Section 4.02(i), Duke shall not, nor shall it permit any of its subsidiaries to, (i) enter into any Contract that would materially restrict, after the Effective Time, Duke and its subsidiaries (including the Surviving Corporation and its subsidiaries) with respect to engaging or competing in any line of business or in any geographic area or (ii) waive, release, or assign any material rights or claims under, or materially modify or terminate any Contract that is material to Duke and its subsidiaries, taken as a whole, (A) in any manner that is materially adverse to Duke or (B) which would prevent or materially delay the consummation of the Merger and the other transactions contemplated by this Agreement, it being understood and agreed that the restriction on material modifications and terminations in clause (ii) (A) shall not apply with respect to any Contract permitted to be entered into under clause (e), (f), (g), (h) or (n) of this Section 4.02.

Section 4.03 No Solicitation by Progress. (a) Except as expressly permitted by this Section 4.03, Progress shall not, nor shall it permit any of its subsidiaries to, nor shall it authorize or permit any of its directors, officers or employees to, and shall use its reasonable best efforts to cause any investment banker, financial advisor, attorney, accountant or other representative retained by it or any of its subsidiaries not to, directly or indirectly, (i) solicit, initiate or knowingly encourage (including by way of furnishing information), or take any other action designed to facilitate, any inquiries or the making of any proposal that constitutes a Progress Takeover Proposal or (ii) participate in any negotiations or substantive discussions regarding any Progress Takeover Proposal; provided, however, that if, at any time prior to receipt of the Progress Shareholder Approval (the "Progress Applicable Period"), the Board of Directors of Progress determines in good faith, after consultation with its legal and financial advisors, that a Progress Takeover Proposal that did not result from a breach (other than in immaterial respects) of this Section 4.03(a) is, or is reasonably likely to result in, a Progress Superior Proposal (as defined in Section 4.03(b)), and subject to providing prior written notice of its decision to take such action to

Duke and compliance with Section 4.03(c), Progress may (x) furnish information with respect to and provide access to the properties, books and records of Progress and its subsidiaries to the person making such proposal (and its representatives) pursuant to a customary confidentiality agreement containing terms no less favorable to Progress with respect to confidentiality than those set forth in the Confidentiality Agreement (the "Confidentiality Agreement") dated July 29, 2010, between Duke and Progress (provided, that such confidentiality agreement shall not in any way restrict Progress from complying with its disclosure obligations under this Agreement, including with respect to such proposal) and (y) participate in discussions or negotiations regarding such proposal. Progress, its subsidiaries and their representatives immediately shall cease and cause to be terminated any existing activities, discussions or negotiations with any parties with respect to any Progress Takeover Proposal. For purposes of this Agreement, "Progress Takeover Proposal" means any bona fide inquiry, proposal or offer from any person relating to (i) any direct or indirect acquisition or purchase of a business that constitutes 20% or more of the net revenues, net income or the assets (including equity securities) of Progress and its subsidiaries, taken as a whole (a "Progress Material Business"), (ii) any direct or indirect acquisition or purchase of 20% or more of any class of voting securities of Progress or any subsidiary of Progress owning, operating or controlling a Progress Material Business, (iii) any tender offer or exchange offer that if consummated would result in any person beneficially owning 20% or more of any class of voting securities of Progress, or (iv) any merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving Progress or any subsidiary of Progress owning, operating or controlling a Progress Material Business, in each case other than the transactions contemplated by this Agreement. Notwithstanding the foregoing and provided that Progress has otherwise complied with this Section 4.03(a), nothing in this Section 4.03(a) shall prohibit Progress or its directors, officers, employees, representatives or agents from contacting in writing any person who has made a Progress Takeover Proposal after the date of this Agreement solely to request the clarification of the terms and conditions thereof to the extent necessary to permit it to determine whether the Progress Takeover Proposal is, or is reasonably likely to result in, a Progress Superior Proposal.

(b) Except as contemplated by this Section 4.03, neither the Board of Directors of Progress nor any committee thereof shall (A) withdraw or modify, or propose publicly to withdraw or modify, in a manner adverse to Duke, the approval or recommendation to Progress's shareholders by such Board of Directors or such committee of this Agreement or the Merger, (B) approve or recommend, or propose publicly to approve or recommend, any Progress Takeover Proposal, or (C) cause Progress to enter into any letter of intent, agreement in principle, acquisition agreement or other similar agreement (each, a "Progress Acquisition Agreement") related to any Progress Takeover Proposal. Notwithstanding the foregoing:

(i) in response to a Progress Takeover Proposal that did not result from a breach (other than in immaterial respects) of Section 4.03(a), during the Progress Applicable Period, the Board of Directors of Progress may, if it determines in good faith, after consulting with outside counsel, that the failure to take such action would be reasonably likely to result in a breach of the Board of Directors' fiduciary obligations under applicable law, (A) withdraw or modify, or propose publicly to withdraw or modify, the approval or recommendation by such Board of Directors or any committee thereof of this Agreement or the Merger, (B) approve or recommend, or propose to approve or recommend, any Progress Superior Proposal, or (C) terminate this Agreement pursuant to Section 7.01(d), but only after (1) in the case of each of clauses (B) or (C),

such Board of Directors has determined in good faith that such Progress Takeover Proposal constitutes a Progress Superior Proposal, and (2) in the case of clause (C), (I) Progress has notified Duke in writing of the determination that such Progress Takeover Proposal constitutes a Progress Superior Proposal and (II) at least five business days following receipt by Duke of such notice, the Board of Directors of Progress has determined that such Progress Superior Proposal remains a Progress Superior Proposal; provided, however, that in the event that any such Progress Takeover Proposal is thereafter modified by the person making such Progress Takeover Proposal and the Board of Directors determines pursuant to clause (C) to terminate this Agreement pursuant to Section 7.01(d), Progress shall again comply with clauses (I) and (II) of this paragraph (b)(i) except that the five business-day period shall be reduced to two business days; and

(ii) in circumstances other than in response to a Progress Takeover Proposal as provided in Section 4.03(b)(i), during the Progress Applicable Period, the Board of Directors of Progress may, if it determines in good faith, after consulting with outside counsel, that the failure to take such action would be reasonably likely to result in a breach of the Board of Directors' fiduciary obligations under applicable law, withdraw or modify, or propose publicly to withdraw or modify, the approval or recommendation by such Board of Directors or any committee thereof of this Agreement or the Merger, but only after (1) Progress has notified Duke in writing that the Board of Directors of Progress is prepared to make the determination set forth in this clause (ii) setting forth the reasons therefor in reasonable detail, (2) for a period of five business days following Duke's receipt of the notice set forth in clause (1) of this sentence (or, if the period from the time of receipt by Duke of such notice to the Progress Shareholders Meeting shall be less than five business days, for such lesser period), Progress negotiates with Duke in good faith to make such adjustments to the terms and conditions of this Agreement, the Merger and the other transactions contemplated hereby as would enable the Progress Board of Directors to proceed with its recommendation of this Agreement and the Merger and (3) at the end of such five-business day period (or such lesser period, as the case may be, in accordance with this clause (ii)) the Board of Directors of Progress maintains its determination described in this clause (ii) (after taking into account Duke's proposed adjustments, if any, to the terms and conditions of this Agreement, the Merger and the other transactions contemplated hereby).

For purposes of this Agreement, "Progress Superior Proposal" means any written Progress Takeover Proposal that the Board of Directors of Progress determines in good faith (after consultation with a financial advisor of nationally recognized reputation) to be more favorable (taking into account (i) all financial and strategic considerations, including relevant legal, financial, regulatory and other aspects of such Progress Takeover Proposal and the Merger and the other transactions contemplated by this Agreement deemed relevant by the Board of Directors, (ii) the identity of the third party making such Progress Takeover Proposal, and (iii) the conditions and prospects for completion of such Progress Takeover Proposal) to Progress's shareholders than the Merger and the other transactions contemplated by this Agreement (taking into account all of the terms of any proposal by Duke to amend or modify the terms of the Merger and the other transactions contemplated by this Agreement), except that (x) the references to "20%" in clauses (i), (ii) and (iii) of the definition of "Progress Takeover Proposal" in Section 4.03(a) shall each be deemed to be a reference to "50%", (y) a "Progress Takeover Proposal" shall only be deemed to refer to a transaction involving Progress, and not any of its subsidiaries or Progress Material Businesses alone, and (z) the references to "or any subsidiary of Progress owning, operating or controlling a Progress Material Business" in clauses (ii) and (iv) shall be deemed to be deleted.

(c) In addition to the obligations of Progress set forth in paragraphs (a) and (b) of this Section 4.03, Progress shall as promptly as practicable advise Duke, orally and in writing, of any Progress Takeover Proposal or of any request for information relating to any Progress Takeover Proposal (and in any case within 48 hours of such request or the receipt of such Progress Takeover Proposal), the principal terms and conditions of such request or Progress Takeover Proposal and the identity of the person making such request or Progress Takeover Proposal. Progress shall keep Duke informed in all material respects of the status and details (including amendments or proposed amendments) of any such request or Progress Takeover Proposal. Contemporaneously with any termination by Progress of this Agreement pursuant to Section 7.01(b)(i), Progress shall provide Duke with a written verification that it has complied with its obligations pursuant to this Section 4.03(c) (other than noncompliance which is immaterial).

(d) Nothing contained in this Agreement shall prohibit Progress or its Board of Directors or any committee thereof from (i) taking and disclosing to its shareholders a position contemplated by Rule 14e-2(a) promulgated under the Exchange Act or from making any disclosure to Progress's shareholders if, in the good faith judgment of the Board of Directors of Progress, after consultation with outside counsel, failure so to disclose would be inconsistent with its or Progress's obligations under applicable law or (ii) taking actions permitted by Section 4.01(f).

Section 4.04 No Solicitation by Duke. (a) Except as expressly permitted by this Section 4.04, Duke shall not, nor shall it permit any of its subsidiaries to, nor shall it authorize or permit any of its directors, officers or employees to, and shall use its reasonable best efforts to cause any investment banker, financial advisor, attorney, accountant or other representative retained by it or any of its subsidiaries not to, directly or indirectly, (i) solicit, initiate or knowingly encourage (including by way of furnishing information), or take any other action designed to facilitate, any inquiries or the making of any proposal that constitutes a Duke Takeover Proposal or (ii) participate in any negotiations or substantive discussions regarding any Duke Takeover Proposal; provided, however, that if, at any time prior to receipt of the Duke Shareholder Approval (the "Duke Applicable Period"), the Board of Directors of Duke determines in good faith, after consultation with its legal and financial advisors, that a Duke Takeover Proposal that did not result from a breach (other than in immaterial respects) of this Section 4.04(a) is, or is reasonably likely to result in, a Duke Superior Proposal (as defined in Section 4.04(b)), and subject to providing prior written notice of its decision to take such action to Progress and compliance with Section 4.04(c), Duke may (x) furnish information with respect to and provide access to the properties, books and records of Duke and its subsidiaries to the person making such proposal (and its representatives) pursuant to a customary confidentiality agreement containing terms no less favorable to Duke with respect to confidentiality than those set forth in the Confidentiality Agreement (provided, that such confidentiality agreement shall not in any way restrict Duke from complying with its disclosure obligations under this Agreement, including with respect to such proposal) and (y) participate in discussions or negotiations regarding such proposal. Duke, its subsidiaries and their representatives immediately shall cease and cause to be terminated any existing activities, discussions or negotiations with any parties with respect to any Duke Takeover Proposal. For purposes of this Agreement, "Duke Takeover Proposal" means any bona fide inquiry, proposal or offer from any person relating to (i) any direct or indirect acquisition or purchase of a business that constitutes 20% or more of the net revenues, net income or the assets (including equity securities) of Duke and its subsidiaries, taken as a whole (a "Duke Material

Business"), (ii) any direct or indirect acquisition or purchase of 20% or more of any class of voting securities of Duke or any subsidiary of Duke owning, operating or controlling a Duke Material Business, (iii) any tender offer or exchange offer that if consummated would result in any person beneficially owning 20% or more of any class of voting securities of Duke, or (iv) any merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving Duke or any subsidiary of Duke owning, operating or controlling a Duke Material Business, in each case other than the transactions contemplated by this Agreement. Notwithstanding the foregoing and provided that Duke has otherwise complied with this Section 4.04(a), nothing in this Section 4.04(a) shall prohibit Duke or its directors, officers, employees, representatives or agents from contacting in writing any person who has made a Duke Takeover Proposal after the date of this Agreement solely to request the clarification of the terms and conditions thereof to the extent necessary to permit it to determine whether the Duke Takeover Proposal is, or is reasonably likely to result in, a Duke Superior Proposal.

(b) Except as contemplated by this Section 4.04, neither the Board of Directors of Duke nor any committee thereof shall (A) withdraw or modify, or propose publicly to withdraw or modify, in a manner adverse to Progress, the approval or recommendation to Duke's shareholders by such Board of Directors or such committee of the Duke Share Issuance or Duke Charter Amendment, (B) approve or recommend, or propose publicly to approve or recommend, any Duke Takeover Proposal, or (C) cause Duke to enter into any letter of intent, agreement in principle, acquisition agreement or other similar agreement (each, a "Duke Acquisition Agreement") related to any Duke Takeover Proposal. Notwithstanding the foregoing:

(i) in response to a Duke Takeover Proposal that did not result from a breach (other than in immaterial respects) of Section 4.04(a), during the Duke Applicable Period, the Board of Directors of Duke may, if it determines in good faith, after consulting with outside counsel, that the failure to take such action would be reasonably likely to result in a breach of the Board of Directors' fiduciary obligations under applicable law, (A) withdraw or modify, or propose publicly to withdraw or modify, the approval or recommendation by such Board of Directors or any committee thereof of the Duke Share Issuance or Duke Charter Amendment, (B) approve or recommend, or propose to approve or recommend, any Duke Superior Proposal, or (C) terminate this Agreement pursuant to Section 7.01(f), but only after (1) in the case of each of clauses (B) or (C), such Board of Directors has determined in good faith that such Duke Takeover Proposal constitutes a Duke Superior Proposal, and (2) in the case of clause (C), (I) Duke has notified Progress in writing of the determination that such Duke Takeover Proposal constitutes a Duke Superior Proposal and (II) at least five business days following receipt by Progress of such notice, the Board of Directors of Duke has determined that such Duke Superior Proposal remains a Duke Superior Proposal; provided, however, that in the event that any such Duke Takeover Proposal is thereafter modified by the person making such Duke Takeover Proposal and the Board of Directors determines pursuant to clause (C) to terminate this Agreement pursuant to Section 7.01(f), Duke shall again comply with clauses (I) and (II) of this paragraph (b)(i) except that the five business-day period shall be reduced to two business days; and

(ii) in circumstances other than in response to a Duke Takeover Proposal as provided in Section 4.04(b)(i), during the Duke Applicable Period, the Board of Directors of Duke may, if it determines in good faith, after consulting with outside counsel, that the failure to take such action would be reasonably likely to result in a breach of the Board of Directors' fiduciary

obligations under applicable law, withdraw or modify, or propose publicly to withdraw or modify, the approval or recommendation by such Board of Directors or any committee thereof of the Duke Share Issuance or Duke Charter Amendment, but only after (1) Duke has notified Progress in writing that the Board of Directors of Duke is prepared to make the determination set forth in this clause (ii) setting forth the reasons therefor in reasonable detail, (2) for a period of five business days following Progress's receipt of the notice set forth in clause (1) of this sentence (or, if the period from the time of receipt by Progress of such notice to the Duke Shareholders Meeting shall be less than five business days, for such lesser period), Duke negotiates with Progress in good faith to make such adjustments to the terms and conditions of this Agreement, the Merger and the other transactions contemplated hereby as would enable the Duke Board of Directors to proceed with its recommendation of the Duke Share Issuance and the Duke Charter Amendment and (3) at the end of such five-business day period (or such lesser period, as the case may be, in accordance with this clause (ii)) the Board of Directors of Duke maintains its determination described in this clause (ii) (after taking into account Progress's proposed adjustments, if any, to the terms and conditions of this Agreement, the Merger and the other transactions contemplated hereby).

For purposes of this Agreement, a "Duke Superior Proposal" means any written Duke Takeover Proposal that the Board of Directors of Duke determines in good faith (after consultation with a financial advisor of nationally recognized reputation) to be more favorable (taking into account (i) all financial and strategic considerations, including relevant legal, financial, regulatory and other aspects of such Duke Takeover Proposal and the Merger and the other transactions contemplated by this Agreement deemed relevant by the Board of Directors, (ii) the identity of the third party making such Duke Takeover Proposal, and (iii) the conditions and prospects for completion of such Duke Takeover Proposal) to Duke's shareholders than the Merger and the other transactions contemplated by this Agreement (taking into account all of the terms of any proposal by Progress to amend or modify the terms of the Merger and the other transactions contemplated by this Agreement), except that (x) the references to "20%" in clauses (i), (ii) and (iii) of the definition of "Duke Takeover Proposal" in Section 4.04(a) shall each be deemed to be a reference to "50%", (y) a "Duke Takeover Proposal" shall only be deemed to refer to a transaction involving Duke, and not any of its subsidiaries or Duke Material Businesses alone, and (z) the references to "or any subsidiary of Duke owning, operating or controlling a Duke Material Business" in clauses (ii) and (iv) shall be deemed to be deleted.

(c) In addition to the obligations of Duke set forth in paragraphs (a) and (b) of this Section 4.04, Duke shall as promptly as practicable advise Progress, orally and in writing, of any Duke Takeover Proposal or of any request for information relating to any Duke Takeover Proposal (and in any case within 48 hours of such request or the receipt of such Duke Takeover Proposal), the principal terms and conditions of such request or Duke Takeover Proposal and the identity of the person making such request or Duke Takeover Proposal. Duke shall keep Progress informed in all material respects of the status and details (including amendments or proposed amendments) of any such request or Duke Takeover Proposal. Contemporaneously with any termination by Duke of this Agreement pursuant to Section 7.01(b)(i), Duke shall provide Progress with a written verification that it has complied with its obligations pursuant to this Section 4.04(c) (other than noncompliance which is immaterial).

(d) Nothing contained in this Agreement shall prohibit Duke or its Board of Directors or any committee thereof from (i) taking and disclosing to its shareholders a position contemplated

by Rule 14e-2(a) promulgated under the Exchange Act or from making any disclosure to Duke's shareholders if, in the good faith judgment of the Board of Directors of Duke, after consultation with outside counsel, failure so to disclose would be inconsistent with its or Duke's obligations under applicable law or (ii) taking actions permitted by Section 4.02(f).

Section 4.05 Other Actions. Each of Progress and Duke shall use its reasonable best efforts not to, and shall use its reasonable best efforts not to permit any of its respective subsidiaries to, take any action that would, or that could reasonably be expected to, result in (i) any of the representations and warranties of such party set forth in this Agreement that is qualified as to materiality or material adverse effect becoming untrue, (ii) any of such representations and warranties that is not so qualified becoming untrue in any material respect, or (iii) any condition to the Merger set forth in Article VI not being satisfied.

Section 4.06 Coordination of Dividends. From the date of this Agreement until the Effective Time, Duke and Progress shall coordinate with each other regarding the declaration and payment of dividends in respect of the shares of Progress Common Stock and Duke Common Stock and the record dates and payment dates relating thereto, it being the intention of Progress and Duke that no holder of Progress Common Stock or Duke Common Stock shall receive two dividends, or fail to receive one dividend, for any single calendar quarter with respect to its shares of Progress Common Stock or Duke Common Stock (including Duke Common Stock issued in connection with the Merger), as the case may be. In furtherance of and without limiting the generality of the foregoing, if at the time that Progress would otherwise declare a regular quarterly cash dividend pursuant to Section 4.01(c)(i)(A) the parties expect the Closing Date to occur during the period of time from and after the record date for such Progress dividend and prior to the record date for the next subsequent regular quarterly cash dividend of Duke, the parties shall coordinate to reduce the amount of such Progress dividend to an amount reasonably calculated to effectuate the intent of the parties described in the first sentence of this Section 4.06. In the event (a) the Closing Date would, in the absence of this Section 4.06, occur after the record date for the last regular quarterly cash dividend of Progress prior to the Closing Date and prior to the record date for the next subsequent regular quarterly cash dividend of Duke and (b) such last recent Progress regular quarterly cash dividend occurring prior to the Closing shall not have been reduced as contemplated by the preceding sentence, Duke shall be permitted to (i) declare and pay a special dividend to Duke stockholders immediately prior to the Closing in an amount reasonably calculated to effectuate the intent of the parties described in the first sentence of this Section 4.06 or (ii) subject to the prior written consent of Progress (which consent shall not be unreasonably withheld), postpone the Closing to a date no later than one business day after the record date for the next succeeding regular quarterly cash dividend of Duke (in which event Progress shall be permitted to declare and pay a special dividend immediately prior to the Closing in an amount reasonably calculated to effectuate the intent of the parties described in the first sentence of this Section 4.06, and neither party shall be entitled to terminate this Agreement pursuant to Section 7.01(b)(i) during the period of such postponement).

ARTICLE V

ADDITIONAL AGREEMENTS

Section 5.01 Preparation of the Form S-4 and the Joint Proxy Statement; Shareholders Meetings. (a) As soon as practicable following the date of this Agreement, Progress and Duke shall prepare and file with the SEC the Joint Proxy Statement and Duke shall prepare and file with the SEC the Form S-4, in which the Joint Proxy Statement will be included. The Joint Proxy Statement and Form S-4 shall comply as to form in all material respects with the applicable provisions of the Securities Act and the Exchange Act and the rules and regulations thereunder. Duke shall use its reasonable best efforts, and Progress will reasonably cooperate with Duke in such efforts, to have the Form S-4 declared effective under the Securities Act as promptly as practicable after such filing and to keep the Form S-4 effective as long as necessary to consummate the Merger and other transactions contemplated hereby. Progress will use its reasonable best efforts to cause the Joint Proxy Statement to be mailed to Progress's shareholders, and Duke will use its reasonable best efforts to cause the Joint Proxy Statement to be mailed to Duke's shareholders, in each case as promptly as practicable after the Form S-4 is declared effective under the Securities Act. Duke shall also take any action required to be taken by it under any applicable state or provincial securities laws in connection with the issuance of Duke Common Stock in the Merger and each party shall furnish all information concerning itself and its shareholders as may be reasonably requested in connection with any such action. Each party will advise the others, promptly after it receives notice thereof, of the time when the Form S-4 has become effective or any supplement or amendment has been filed, the issuance of any stop order, the suspension of the qualification of the Duke Common Stock issuable in connection with the Merger for offering or sale in any jurisdiction, or any request by the SEC for amendment of the Joint Proxy Statement or the Form S-4 or comments thereon and responses thereto or requests by the SEC for additional information. If prior to the Effective Time any event occurs with respect to Progress, Duke or any subsidiary of Progress or Duke, respectively, or any change occurs with respect to information supplied by or on behalf of Progress or Duke, respectively, for inclusion in the Joint Proxy Statement or the Form S-4 that, in each case, is required to be described in an amendment of, or a supplement to, the Joint Proxy Statement or the Form S-4, Progress or Duke, as applicable, shall promptly notify the other of such event, and Progress or Duke, as applicable, shall cooperate with the other in the prompt filing with the SEC of any necessary amendment or supplement to the Joint Proxy Statement and the Form S-4 and, as required by law, in disseminating the information contained in such amendment or supplement to Progress's shareholders and to Duke's shareholders; provided that no amendment or supplement to the Joint Proxy Statement or the Form S-4 shall be filed by either party, and no material correspondence with the SEC shall be made by either party, without providing the other party a reasonable opportunity to review and comment thereon.

(b) Progress shall, as soon as reasonably practicable following the date of this Agreement, duly call, give notice of, convene and hold a meeting of its shareholders (the "Progress Shareholders Meeting") for the purpose of obtaining the Progress Shareholder Approval and any other matters required under applicable law to be considered at the Progress Shareholders Meeting. Without limiting the generality of the foregoing, Progress agrees that unless this Agreement is terminated pursuant to Section 7.01, its obligations pursuant to the first sentence of this Section 5.01(b) shall not be affected by (i) the commencement, public proposal, public disclosure or

communication to Progress of any Progress Takeover Proposal, (ii) the withdrawal or modification by the Board of Directors of Progress of its approval or recommendation to Progress's shareholders of this Agreement, the Merger or the other transactions contemplated hereby, or (iii) the approval or recommendation of any Progress Superior Proposal. Notwithstanding any of the events set forth in clauses (i), (ii) and (iii) of the immediately preceding sentence, in the event Progress fulfills its obligations pursuant to this Section 5.01(b) and the Progress Shareholder Approval is not obtained at the Progress Shareholders Meeting, Duke shall not thereafter have the right to terminate this Agreement pursuant to Sections 7.01(h)(i) as a result of the Board of Directors of Progress (or any committee thereof) having, pursuant to Section 4.03(b)(ii), withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Merger; provided Duke shall retain all other rights to terminate this Agreement set forth in Section 7.01.

(c) Duke shall, as soon as reasonably practicable following the date of this Agreement, duly call, give notice of, convene and hold a meeting of its shareholders (the "Duke Shareholders Meeting") for the purpose of obtaining the Duke Shareholder Approval and any other matters required under applicable law to be considered at the Duke Shareholders Meeting. Without limiting the generality of the foregoing, Duke agrees that unless this Agreement is terminated pursuant to Section 7.01, its obligations pursuant to the first sentence of this Section 5.01(c) shall not be affected by (i) the commencement, public proposal, public disclosure or communication to Duke of any Duke Takeover Proposal, (ii) the withdrawal or modification by the Board of Directors of Duke of its approval or recommendation to Duke's shareholders of the Duke Share Issuance and the Duke Charter Amendment, or (iii) the approval or recommendation of any Duke Superior Proposal. Notwithstanding any of the events set forth in clauses (i), (ii) and (iii) of the immediately preceding sentence, in the event Duke fulfills its obligations pursuant to this Section 5.01(c) and the Duke Shareholder Approval is not obtained at the Duke Shareholders Meeting, Progress shall not thereafter have the right to terminate this Agreement pursuant to Section 7.01(g)(i) as a result of the Board of Directors of Duke (or any committee thereof) having, pursuant to Section 4.04(b)(ii), withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Duke Merger; provided Progress shall retain all other rights to terminate this Agreement set forth in Section 7.01.

Subject to receipt of the Duke Shareholder Approval, on or before the Closing Date and prior to the Effective Time, Duke shall file with the Secretary of State of the State of Delaware a Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Duke providing for, after prior consultation with Progress, a 1-for-2 or 1-for-3 reverse stock split with respect to the Duke Common Stock (the "Duke Charter Amendment"), such Certificate of Amendment to become effective on the Closing Date prior to the filing of the Articles of Merger with the Secretary of State of the State of North Carolina.

(d) Progress and Duke will use their reasonable best efforts to hold the Duke Shareholders Meeting and the Progress Shareholders Meeting on the same date and as soon as practicable after the date of this Agreement.

Section 5.02 Letters of Duke's Accountants. Duke shall use its reasonable best efforts to cause to be delivered to Progress two letters from Duke's independent accountants, one dated a

date within two business days before the date on which the Form S-4 shall become effective and one dated a date within two business days before the Closing Date, each addressed to Progress, in form and substance reasonably satisfactory to Progress and customary in scope and substance for comfort letters delivered by independent public accountants in connection with registration statements similar to the Form S-4.

Section 5.03 Letters of Progress's Accountants. Progress shall use its reasonable best efforts to cause to be delivered to Duke two letters from Progress's independent accountants, one dated a date within two business days before the date on which the Form S-4 shall become effective and one dated a date within two business days before the Closing Date, each addressed to Duke, in form and substance reasonably satisfactory to Duke and customary in scope and substance for comfort letters delivered by independent public accountants in connection with registration statements similar to the Form S-4.

Section 5.04 Access to Information; Effect of Review.

(a) Access. Subject to the Confidentiality Agreement, to the extent permitted by applicable law, each of Progress and Duke shall, and shall cause each of its respective subsidiaries to, and, so long as consistent with its confidentiality obligations under its applicable agreements, shall use its respective reasonable best efforts to cause the Progress Joint Ventures and Duke Joint Ventures, respectively, to, afford to the other party and to the officers, employees, accountants, counsel, financial advisors and other representatives of such other party reasonable access during normal business hours during the period prior to the Effective Time to all their respective properties, books, contracts, commitments, personnel and records and, during such period, to the extent permitted by applicable law, each of Progress and Duke shall, and shall cause each of its respective subsidiaries to, and, so long as consistent with its confidentiality and other contractual obligations under its applicable agreements, shall use its respective reasonable best efforts to cause the Progress Joint Ventures and Duke Joint Ventures, respectively, to, (i) confer on a regular and frequent basis with one or more representatives of the other party to discuss material operational and regulatory matters and the general status of its ongoing operations, (ii) advise the other party of any change or event that has had or could reasonably be expected to have a material adverse effect on such party, and (iii) furnish promptly all other information concerning its business, properties and personnel, in each case as such other party may reasonably request; provided, however, that no actions shall be taken pursuant to this Section 5.04(a) that would create a risk of loss or waiver of the attorney/client privilege, provided, further, that the parties shall use their respective commercially reasonable efforts to allow for access and disclosure of information in a manner reasonably acceptable to the parties that does not result in the loss or waiver of the attorney-client privilege (which efforts shall include entering into mutually acceptable joint defense agreements between the parties if doing so would reasonably permit the disclosure of information without violating applicable law or jeopardizing such attorney-client privilege). Notwithstanding the foregoing, if a party requests access to proprietary information of the other party, the disclosure of which would have a material adverse effect on the other party if the Closing were not to occur (giving effect to the requesting party's obligations under the Confidentiality Agreement), such information shall only be disclosed to the extent reasonably agreed upon by the chief financial officers (or their designees) of Progress and Duke. All information exchanged pursuant to this Section 5.04(a) shall be subject to the Confidentiality Agreement.

(b) Effect of Review. No review pursuant to this Section 5.04 shall have any effect for the purpose of determining the accuracy of any representation or warranty given by any of the parties hereto to any of the other parties hereto.

Section 5.05 Regulatory Matters; Reasonable Best Efforts.

(a) Regulatory Approvals. Each party hereto shall cooperate and promptly prepare and file all necessary documentation, to effect all necessary applications, notices, petitions and filings, and shall use reasonable best efforts to take or cause to be taken all actions, and do or cause to be done all things in order to obtain all approvals and authorizations of all Governmental Authorities, necessary or advisable to consummate and make effective, in the most expeditious manner reasonably practicable, the Merger and the other transactions contemplated by this Agreement, including the Progress Required Statutory Approvals and the Duke Required Statutory Approvals; provided, however, that Progress shall have primary responsibility for the preparation and filing of any related applications, filings or other materials with the FPSC and the NCUC and PSCSC, provided, further, that Duke shall have primary responsibility for the preparation and filing of any related applications, filings or other materials with the PUCO, the IURC and the KPSC. Progress shall have the right to review and approve in advance all characterizations of the information relating to Progress, on the one hand, and Duke shall have the right to review and approve in advance all characterizations of the information relating to Duke, on the other hand, in either case, that appear in any application, notice, petition or filing made in connection with the Merger or the other transactions contemplated by this Agreement. Progress and Duke agree that they will consult and cooperate with each other with respect to the obtaining of all such necessary approvals and authorizations of Governmental Authorities.

(b) Reasonable Best Efforts. Subject to the terms and conditions set forth in this Agreement, each of the parties hereto shall use its reasonable best efforts (subject to, and in accordance with, applicable law) to take, or cause to be taken, promptly all actions, and to do, or cause to be done, promptly and to assist and cooperate with the other parties in doing, all things necessary, proper or advisable to consummate and make effective the Merger and the other transactions contemplated by this Agreement, including (i) the obtaining of all necessary Consents or waivers from third parties and Governmental Authorities, (ii) the defending of any lawsuits or other legal proceedings, whether judicial or administrative, challenging this Agreement or the consummation of the transactions contemplated by this Agreement, and (iii) the execution and delivery of any additional instruments necessary to consummate the transactions contemplated by this Agreement. For purposes of this Agreement, "reasonable best efforts" shall not include nor require either party or its subsidiaries to (A) sell, or agree to sell, hold or agree to hold separate, or otherwise dispose or agree to dispose of any asset, in each case if such sale, separation or disposition or agreement with respect thereto would, individually or in the aggregate, reasonably be expected to have a material adverse effect on the expected benefits of the transactions contemplated by this Agreement to such party, or (B) conduct or agree to conduct its business in any particular manner if such conduct or agreement with respect thereto would, individually or in the aggregate, reasonably be expected to have a material adverse effect on the expected benefits of the transactions contemplated by this Agreement to such party, or (C) agree to any order, action or regulatory condition of any regulatory body, whether in an approval proceeding or another regulatory proceeding, that, if effected, would cause a material reduction in the expected benefits for such party's shareholders (for example, the parties expect their customers to participate in the

benefits of the transactions contemplated by this Agreement in amounts up to but not exceeding (x) the benefits of joint system dispatch and fuel savings as they materialize in future fuel clause proceedings and (y) rates that are lower than they otherwise would have been as net merger savings materialize in future rate proceedings initiated in the ordinary course of business) (any of the foregoing effects, a "Burdensome Effect").

(c) State Anti-Takeover Statutes. Without limiting the generality of Section 5.05(b), Progress and Duke shall (i) take all action necessary to ensure that no state anti-takeover statute or similar statute or regulation is or becomes applicable to the Merger, this Agreement or any of the other transactions contemplated by this Agreement and (ii) if any state anti-takeover statute or similar statute or regulation becomes applicable to the Merger, this Agreement or any other transaction contemplated by this Agreement, take all action necessary to ensure that the Merger and the other transactions contemplated by this Agreement may be consummated as promptly as reasonably practicable on the terms contemplated by this Agreement and otherwise to minimize the effect of such statute or regulation on the Merger and the other transactions contemplated by this Agreement.

Section 5.06 Stock Options; Restricted Stock and Equity Awards; Stock Plans. (a) At the Effective Time, each Progress Employee Stock Option, whether vested or unvested, shall be converted into an option to acquire, on the same terms and conditions as were applicable under such Progress Employee Stock Option, including vesting, a number of shares of Duke Common Stock equal to the number of shares of Progress Common Stock subject to such Progress Employee Stock Option immediately before the Effective Time multiplied by the Exchange Ratio (rounded down to the nearest whole share) at a price per share of Duke Common Stock equal to the price per share under such Progress Employee Stock Option divided by the Exchange Ratio (rounded up to the nearest cent) (each, as so adjusted, a "Progress Adjusted Option");

(i) at the Effective Time, each award of restricted shares of Progress Common Stock ("Progress Restricted Stock") shall be converted into an award of a number of restricted shares of Duke Common Stock equal to the number of restricted shares of Progress Common Stock multiplied by the Exchange Ratio, on the same terms and conditions as were applicable to such award of restricted shares of Progress Common Stock, including vesting ("Progress Adjusted Restricted Stock");

(ii) at the Effective Time, each Progress Restricted Stock Unit shall be converted into an award of a number of restricted stock units of Duke Common Stock equal to the number of restricted stock units of Progress Common Stock multiplied by the Exchange Ratio, on the same terms and conditions as were applicable to such award of restricted stock units of Progress Common Stock, including vesting ("Progress Adjusted Restricted Stock Units");

(iii) at the Effective Time, each Progress Performance Share shall be assumed and converted into an award of a number of performance shares of Duke Common Stock equal to the number of performance shares of Progress Common Stock multiplied by the Exchange Ratio, on the same terms and conditions as were applicable to such award of performance shares of Progress Common Stock, including vesting, and the performance measurement period for such performance shares shall remain open (such that no payments shall be made under the terms of such performance shares solely as a result of or in connection with the Merger) and the

Compensation Committee of the Board of Directors of Duke shall adjust the performance measures of such performance shares as soon as practicable after the Effective Time as it determines is appropriate and equitable to reflect the performance of Progress during the performance measurement period prior to the Effective Time, the transactions contemplated by this Agreement and the performance measures under awards made to similarly situated Duke employees for the same or comparable performance cycle (the "Progress Adjusted Performance Shares");

(iv) all outstanding Other Progress Equity Awards, whether vested or unvested, as of immediately prior to the Effective Time shall be converted into an equity or equity-based award in respect of a number of shares of Duke Common Stock equal to the number of shares of Progress Common Stock represented by such award multiplied by the Exchange Ratio, on the same terms and conditions as were applicable to such Progress equity or equity-based award, including vesting ("Other Progress Adjusted Equity Awards"); and

(v) prior to the Effective Time, the Board of Directors of Progress (or, if appropriate, any committee administering the Progress Employee Stock Option Plans) shall adopt such resolutions or take such other actions as may be required to effect the foregoing and to ensure that the conversion pursuant to Section 2.01(b) of the Progress Common Stock held by any director or officer of Progress and the conversion pursuant to this Section 5.06(a) into Progress Adjusted Options of Progress Employee Stock Options, Progress Adjusted Restricted Stock of Progress Restricted Stock, Progress Adjusted Restricted Stock Units of Progress Restricted Stock Units, Progress Adjusted Performance Shares of Progress Performance Shares and Other Progress Adjusted Equity Awards of Other Progress Equity Awards held by any director or officer of Progress will be eligible for exemption under Rule 16b-3(e) under the Exchange Act.

(b) Prior to the Effective Time, the Board of Directors of Duke shall adopt such resolutions or take such other actions as may be required to ensure to the maximum extent permitted by law that the conversion pursuant to Section 2.01(a) of the Progress Common Stock held by any director or officer of Progress and the conversion pursuant to Section 5.06(a) will be eligible for exemption under Rule 16b-3(e) under the Exchange Act. Prior to the Effective Time, Progress shall deliver to the holders of Progress Adjusted Options, Progress Adjusted Restricted Stock, Progress Adjusted Restricted Stock Units, Progress Adjusted Performance Shares and Other Progress Adjusted Equity Awards appropriate notices setting forth such holders' rights pursuant to the respective plans and this Agreement (collectively, the "Stock Plans").

(c) At the Effective Time, by virtue of the Merger, the Stock Plans shall be assumed by Duke, with the result that all obligations of Progress under the Stock Plans, including with respect to awards outstanding at the Effective Time under each Stock Plan, shall be obligations of Duke following the Effective Time. Prior to the Effective Time, Duke shall take all necessary actions for the assumption of the Stock Plans, including the reservation, issuance and listing of Duke Common Stock in a number at least equal to the number of shares of Duke Common Stock that will be subject to Progress Adjusted Options, Progress Adjusted Restricted Stock Units, Progress Adjusted Performance Shares and Other Progress Adjusted Equity Awards. As promptly as practicable following the Effective Time, Duke or its subsidiaries shall prepare and file with the SEC a registration statement on Form S-8 (or another appropriate form) registering a number of shares of Duke Common Stock determined in accordance with the preceding sentence. Such

registration statement shall be kept effective (and the current status of the prospectus or prospectuses required thereby shall be maintained) at least for so long as Progress Adjusted Options, Progress Adjusted Restricted Stock Units, Progress Adjusted Performance Shares and Other Progress Adjusted Equity Awards remain outstanding.

Section 5.07 Employee Matters. (a) From and after the Effective Time, the Duke Employee Benefit Plans and the Progress Employee Benefit Plans in effect as of the date of this Agreement and at the Effective Time shall remain in effect with respect to employees and former employees of Duke or Progress and their subsidiaries (the "Newco Employees"), respectively, covered by such Plans at the Effective Time, until such time as Duke and Progress together shall otherwise determine, subject to applicable laws and the terms of such plans. Prior to the Effective Time, Duke and Progress shall cooperate in reviewing, evaluating and analyzing Duke Employee Benefit Plans and Progress Employee Benefit Plans with a view towards maintaining appropriate Plans for Newco Employees.

(b) With respect to any Plans in which any Newco Employees who are employees of Duke or Progress (or their subsidiaries) prior to the Effective Time first become eligible to participate on or after the Effective Time, and in which such Newco Employees did not participate prior to the Effective Time (the "New Plans"), Duke shall, or shall cause its subsidiaries to, use reasonable best efforts, subject to applicable law, to: (i) waive all pre-existing conditions, exclusions and waiting periods with respect to participation and coverage requirements applicable to the Newco Employees and their eligible dependents under any New Plans in which such employees may be eligible to participate after the Effective Time, except to the extent such pre-existing conditions, exclusions or waiting periods would apply under the analogous Duke Employee Benefit Plan or Progress Employee Benefit Plan, as the case may be; (ii) provide each Newco Employee and their eligible dependents with credit for any co-payments and deductibles paid prior to the Effective Time under a Duke Employee Benefit Plan or Progress Employee Benefit Plan (to the same extent that such credit was given under the analogous Duke Employee Benefit Plan or Progress Employee Benefit Plan, as applicable, prior to the Effective Time) in satisfying any applicable deductible or out-of-pocket requirements under any New Plans in which such employees may be eligible to participate after the Effective Time; and (iii) recognize all service of the Newco Employees with Progress and Duke, and their respective affiliates, for all purposes (including, for purposes of eligibility to participate, vesting credit, entitlement to benefits, and, except with respect to defined benefit pension plans, benefit accrual) in any New Plan in which such employees may be eligible to participate after the Effective Time, including any severance plan, to the extent such service is taken into account under the applicable New Plan; provided that the foregoing shall not apply to the extent it would result in duplication of benefits.

(c) Prior to the Effective Time, Duke and Progress shall cooperate to establish common retention, relocation and severance policies or plans that apply to Newco Employees on and after the Effective Time; provided, however, that for the period beginning on the Closing Date and ending on the second anniversary of the Closing Date (the "Continuation Period"), each Newco Employee who was an employee of Progress immediately prior to the Effective Time whose employment is terminated during the Continuation Period shall be eligible to receive severance benefits in amounts and on terms and conditions no less favorable than those provided to employees of Progress pursuant to plans or policies in effect immediately prior to the Effective Time, including, without limitation, the Progress CIC Plan (as defined in Section 5.07(d)).

(d) Duke acknowledges and agrees that (i) it will assume, as of the Effective Time, all obligations under the Progress Energy, Inc. Management Change-in-Control Plan, as amended and restated effective January 1, 2008 but after giving effect to the amendment of the definition of "Good Reason" set forth in Section 4.01(d)(iii) of the Progress Disclosure Letter (the "Progress CIC Plan") and (ii) a termination of employment from Duke and its affiliates shall be the same as a termination of employment from Progress and its affiliates for all purposes under the Progress CIC Plan.

(e) Prior to the Effective Time, Progress shall (i) amend the definition of Committee set forth in Section 2.9 of the Progress CIC Plan by deleting the last sentence of such definition in its entirety and (ii) either amend the Progress CIC Plan or prescribe terms in the applicable award agreement to provide that, except as set forth in Section 4.01(d)(iii) of the Progress Disclosure Letter, for all equity awards granted under the Progress Employee Stock Option Plans to participants in the Progress CIC Plan after the date hereof, the definition of "good reason" or similar concept of constructive termination relating to such awards shall be as defined in Section 4.01(d)(iii) of the Progress Disclosure Letter. Progress also acknowledges and agrees that (A) neither Progress nor any of its subsidiaries will take any actions to fund any grantor trust or similar vehicle that it currently maintains, or may maintain at any time following the date hereof, in connection with the transactions contemplated by this Agreement and (B) prior to the Effective Time, Progress will take all actions necessary to amend (x) any grantor trust maintained by Progress to eliminate any requirement to fund any such grantor trust in connection with the transactions contemplated by this Agreement and (y) any Progress Employee Benefit Plan requiring the establishment or funding of a grantor trust to eliminate such requirement.

(f) Duke acknowledges and agrees that it shall assume, as of the Effective Time, all obligations under the Amended and Restated Supplemental Senior Executive Retirement Plan of Progress Energy, Inc. (the "SERP"); provided that nothing herein shall prohibit Progress or its affiliates or their respective successors and assigns from modifying, amending or terminating the provisions of the SERP in any manner in accordance with its terms and applicable law; provided, further that no modification, amendment or termination shall adversely affect a participant's accrued benefit or the right to payment thereof under the provisions of the SERP as in effect immediately prior to such amendment, modification or termination. Without limiting the generality of the foregoing, following the Effective Time, in the event that the SERP is amended in a manner that would otherwise reduce a participant's right to accrue future benefits under the SERP, Duke shall provide such participant with the opportunity to earn additional benefits under the SERP (or another compensation or benefit arrangement) equal to no less than the incremental amount that the participant would have earned under the SERP (i.e., due to the accrual of additional years of Service (as defined in the SERP)) in the absence of such amendment, except that such incremental amount shall be calculated after treating the participant's Final Average Salary (as defined in the SERP) as if it was solely based on compensation earned by the participant prior to the Effective Time, as increased after the Effective Time by cost of living adjustments. Progress shall amend the SERP as soon as practicable after the date hereof to provide that no individual may become a participant in the SERP following the date of this Agreement.

(g) At the Effective Time, outstanding awards under the Progress Management Incentive Compensation Plan shall be assumed and the performance period for each such award shall remain open (such that no payments shall be made under the terms of the Progress

Management Incentive Compensation Plan solely as a result of or in connection with the Merger) at a level and providing an annual incentive compensation opportunity that is not less than the level and annual incentive compensation opportunity under the existing Progress Management Incentive Compensation Plan and the applicable performance criteria and vesting requirements for each such award shall be adjusted by the Compensation Committee of the Board of Directors of Duke as it determines is appropriate and equitable to reflect the performance of Progress during the performance period prior to the Effective Time, the transactions contemplated by this Agreement and the performance measures under awards made to similarly situated Duke employees as soon as practicable following the Effective Time.

(h) Without limiting the generality of Section 8.06, the provisions of this Section 5.07 are solely for the benefit of the parties to this Agreement, and no current or former director, officer, employee or independent contractor or any other person shall be a third-party beneficiary of this Agreement, and nothing herein shall be construed as an amendment to any Progress Employee Benefit Plan, Duke Employee Benefit Plan or other compensation or benefit plan or arrangement for any purpose.

Section 5.08 Indemnification, Exculpation and Insurance. (a) Each of Duke, Merger Sub and Progress agrees that, to the fullest extent permitted under applicable law, all rights to indemnification, advancement and exculpation from liabilities for acts or omissions occurring at or prior to the Effective Time now existing in favor of the current or former directors, officers and employees and the fiduciaries currently indemnified under benefit plans of Progress and its subsidiaries, as provided in their respective certificate or articles of incorporation, by-laws (or comparable organizational documents) or other agreements providing indemnification, advancement or exculpation shall survive the Merger and shall continue in full force and effect in accordance with their terms, and no such provision in any certificate or articles of incorporation, by-laws (or comparable organizational document) or other agreement shall be amended, modified or repealed in any manner that would adversely affect the rights or protections thereunder to any such individual with respect to acts or omissions occurring at or prior to the Effective Time. In addition, from and after the Effective Time, all directors, officers and employees and all fiduciaries currently indemnified under benefit plans of Progress or its subsidiaries who become directors, officers, employees or fiduciaries under benefit plans of Duke will be entitled to the indemnity, advancement and exculpation rights and protections afforded to directors, officers and employees or fiduciaries under benefit plans of Duke. From and after the Effective Time, Duke shall cause the Surviving Corporation and its subsidiaries to honor and perform, in accordance with their respective terms, each of the covenants contained in this Section 5.08 without limit as to time.

(b) For six years after the Effective Time, Duke shall maintain in effect the directors' and officers' liability (and fiduciary) insurance policies currently maintained by Progress covering acts or omissions occurring on or prior to the Effective Time with respect to those persons who are currently covered by Progress's respective directors' and officers' liability (and fiduciary) insurance policies on terms with respect to such coverage and in amounts no less favorable than those set forth in the relevant policy in effect on the date of this Agreement; provided that the annual cost thereof shall not exceed 300% of the annual cost of such policies as of the date hereof. If such no less favorable insurance coverage cannot be maintained for such cost, Duke shall maintain the most advantageous policies of directors' and officers' insurance otherwise obtainable for such cost. Prior to the Effective Time, Progress may purchase a six-year "tail" prepaid policy

on terms and conditions no less advantageous to the Progress Indemnified Parties, or any other person entitled to the benefit of Sections 5.08(a) and (b), as applicable, than the existing directors' and officers' liability (and fiduciary) insurance maintained by Progress, covering without limitation the transactions contemplated hereby; provided that the aggregate cost thereof shall not exceed 600% of the annual cost of the directors' and officers' liability (and fiduciary) insurance maintained by Progress as of the date hereof. If such "tail" prepaid policy has been obtained by Progress prior to the Effective Time, it shall satisfy the obligations set forth in the first two sentences of this paragraph (b) and Duke shall, after the Effective Time, maintain such policy in full force and effect, for its full term, and continue to honor its obligations thereunder.

(c) From and after the Effective Time, Duke will cause the Surviving Corporation to indemnify and hold harmless each present director and officer of Progress or any of its subsidiaries (in each case, for acts or failures to act in such capacity), determined as of the date hereof, and any person who becomes such a director or officer between the date hereof and the Effective Time (collectively, the "Progress Indemnified Parties"), against any costs or expenses (including reasonable attorneys' fees, costs and expenses), judgments, fines, losses, claims, damages or liabilities incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of matters existing or occurring at or prior to the Effective Time, whether asserted or claimed prior to, at or after the Effective Time (including any matters arising in connection with the transactions contemplated by this Agreement), to the fullest extent permitted by applicable law (and Duke will cause the Surviving Corporation to also advance expenses (including reasonable attorneys' fees, costs and expenses) as incurred to the fullest extent permitted under applicable law; provided that if required by applicable law the person to whom expenses are advanced provides an undertaking to repay such advances if it is ultimately determined that such person is not entitled to indemnification); and provided, further, that any determination as to whether a Progress Indemnified Party is entitled to indemnification or advancement of expenses hereunder pursuant to applicable law shall be made by independent counsel jointly selected by the Surviving Corporation and such Progress Indemnified Party.

(d) The obligations of Duke and the Surviving Corporation under this Section 5.08 shall not be terminated or modified by such parties in a manner so as to adversely affect any Progress Indemnified Party, or any other person entitled to the benefit of Sections 5.08(a) and (b), as the case may be, to whom this Section 5.08 applies without the consent of the affected Progress Indemnified Party, or such other person, as the case may be. If Duke, the Surviving Corporation or any of their respective successors or assigns (i) shall consolidate with or merge into any other corporation or entity and shall not be the continuing or surviving corporation or entity of such consolidation or merger or (ii) shall transfer all or substantially all of its properties and assets to any individual, corporation or other entity, then, and in each such case, proper provisions shall be made so that the successors and assigns of Duke or the Surviving Corporation, as the case may be, shall assume all of the obligations of Duke, or the Surviving Corporation, as the case may be, set forth in this Section 5.08.

(e) The provisions of Section 5.08 are (i) intended to be for the benefit of, and will be enforceable by, each indemnified party, his or her heirs and his or her representatives and (ii) in addition to, and not in substitution for, any other rights to indemnification, advancement, exculpation or contribution that any such person may have by contract or otherwise.

Section 5.09 Fees and Expenses. (a) Except as provided in this Section 5.09, all fees and expenses incurred in connection with the Merger, this Agreement and the transactions contemplated by this Agreement shall be paid by the party incurring such fees or expenses, whether or not the Merger is consummated, except that each of Progress and Duke shall each bear and pay one-half of the costs and expenses incurred in connection with (1) the filing, printing and mailing of the Form S-4 and the Joint Proxy Statement (including SEC filing fees), (2) the filings of the premerger notification and report forms under the HSR Act (including filing fees) and (3) the preparation and filing of all applications, filings or other materials with the FPSC, PUCO, the NCUC, the IURC, the KPSC and the PSCSC. The Surviving Corporation shall file any return with respect to, and shall pay, any state or local taxes (including penalties or interest with respect thereto), if any, that are attributable to (i) the transfer of the beneficial ownership of Progress's real property and (ii) the transfer of Progress Common Stock pursuant to this Agreement as a result of the Merger. Progress and Duke shall cooperate with respect to the filing of such returns, including supplying any information that is reasonably necessary to complete such returns.

(b) Progress shall immediately pay Duke a fee equal to $400 million (the "Progress Termination Fee") minus any amounts as may have been previously paid by Progress pursuant to Section 5.09(d), payable by wire transfer of same day funds, in the event that:

(i) following the Progress Shareholder Approval, (x) a Progress Takeover Proposal shall have been made known to Progress or any person shall have publicly announced an intention (whether or not conditional) to make a Progress Takeover Proposal, (y) thereafter this Agreement is terminated by Progress pursuant to Section 7.01(b)(i) and (z) within six months of such termination Progress or any of its subsidiaries enters into any Progress Acquisition Agreement or consummates any Progress Takeover Proposal, in either case with the person (or an affiliate of such person) that made the Progress Takeover Proposal referred to in clause (x), or

(ii) prior to or during the Progress Shareholders Meeting (or any subsequent meeting of Progress shareholders at which it is proposed that the Merger be approved), (x) a Progress Takeover Proposal shall have been publicly disclosed or any person shall have publicly announced an intention (whether or not conditional) to make a Progress Takeover Proposal, (y) thereafter this Agreement is terminated by either Progress or Duke pursuant to Section 7.01(b)(iii), and (z) within 12 months of such termination Progress or any of its subsidiaries enters into any Progress Acquisition Agreement or consummates any Progress Takeover Proposal, in either case with the person (or an affiliate of such person) that made the Progress Takeover Proposal referred to in clause (x), or

(iii) this Agreement is terminated by Progress pursuant to Section 7.01(d), or

(iv) this Agreement is terminated by Duke pursuant to Section 7.01(h)(i), provided, however, that if this Agreement is terminated by Duke pursuant to Section 7.01(h)(i) as a result of the Board of Directors of Progress (or any committee thereof) having withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Merger primarily due to adverse conditions, events or actions of or relating to Duke, the Progress Termination Fee shall not be payable to Duke, or

(v) this Agreement is terminated by Duke pursuant to 7.01(h)(iii).

For the purposes of Section 5.09(b)(i) and (ii), the terms "Progress Acquisition Agreement" and "Progress Takeover Proposal" shall have the meanings assigned to such terms in Section 4.03 (except that the references to "20%" in the definition of "Progress Takeover Proposal" in Section 4.03(a) shall be deemed to be references to "50%") and the Termination Fee shall be immediately payable upon the first to occur of Progress entering into such Progress Acquisition Agreement or consummating such Progress Takeover Proposal.

(c) Duke shall immediately pay Progress a fee equal to $675 million (the "Duke Termination Fee") minus any amounts as may have been previously paid by Duke pursuant to Section 5.09(e), payable by wire transfer of same day funds, in the event that:

(i) following the Duke Shareholder Approval, (x) a Duke Takeover Proposal shall have been made known to Duke or any person shall have publicly announced an intention (whether or not conditional) to make a Duke Takeover Proposal, (y) thereafter this Agreement is terminated by Duke pursuant to Section 7.01(b)(i), and (z) within six months of such termination Duke or any of its subsidiaries enters into any Duke Acquisition Agreement or consummates any Duke Takeover Proposal, in either case with the person (or an affiliate of such person) that made the Duke Takeover Proposal referred to in clause (x), or

(ii) prior to or during the Duke Shareholders Meeting (or any subsequent meeting of Duke shareholders at which it is proposed that the Duke Share Issuance or Duke Charter Amendment be approved), (x) a Duke Takeover Proposal shall have been publicly disclosed or any person shall have publicly announced an intention (whether or not conditional) to make a Duke Takeover Proposal, (y) thereafter this Agreement is terminated by either Progress or Duke pursuant to Section 7.01(b)(ii), and (z) within 12 months of such termination Duke or any of its subsidiaries enters into any Duke Acquisition Agreement or consummates any Duke Takeover Proposal, in either case with the person (or an affiliate of such person) that made the Duke Takeover Proposal referred to in clause (x), or

(iii) this Agreement is terminated by Duke pursuant to Section 7.01(f), or

(iv) this Agreement is terminated by Progress pursuant to Section 7.01(g)(i), provided, however, that if this Agreement is terminated by Progress pursuant to Section 7.01(g)(i) as a result of the Board of Directors of Duke (or any committee thereof) having withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of the Duke Share Issuance or Duke Charter Amendment primarily due to adverse conditions, events or actions of or relating to Progress, the Duke Termination Fee shall not be payable to Progress, or

(v) this Agreement is terminated by Progress pursuant to 7.01(g)(iii).

For the purposes of Section 5.09(c)(i) and (ii), the terms "Duke Acquisition Agreement" and "Duke Takeover Proposal" shall have the meanings assigned to such terms in Section 4.04 (except that the references to "20%" in the definition of "Duke Takeover Proposal" in Section 4.04(a) shall be deemed to be references to "50%") and the Duke Termination Fee shall be immediately payable upon the first to occur of Duke entering into such Duke Acquisition Agreement or consummating such Duke Takeover Proposal.

(d) If this Agreement is terminated (i) by Progress or Duke pursuant to Section 7.01(b)(iii) (after the public disclosure of a Progress Takeover Proposal or the announcement by any person of the intention (whether or not conditional) to make a Progress Takeover Proposal and in each case there shall not have been a bona fide withdrawal thereof prior to the Progress Shareholders Meeting) or (ii) by Duke pursuant to Section 7.01(e), Progress shall reimburse Duke promptly upon demand, but in no event later than three business days after the date of such demand, by wire transfer of same day funds, for all reasonable, out-of-pocket fees and expenses incurred or paid by or on behalf of, Duke in connection with the Merger or the transactions contemplated by this Agreement, including all reasonable fees and expenses of counsel, investment banking firms, accountants, experts and consultants to Duke; provided, however, that Progress shall not be obligated to make payments pursuant to this Section 5.09(d) in excess of $30,000,000 in the aggregate.

(e) If this Agreement is terminated (i) by Progress or Duke pursuant to Section 7.01(b)(ii) (after the public disclosure of a Duke Takeover Proposal or the announcement by any person of the intention (whether or not conditional) to make a Duke Takeover Proposal and in each case there shall not have been a bona fide withdrawal thereof prior to the Duke Shareholders Meeting), or (ii) by Progress pursuant to Section 7.01(c), Duke shall reimburse Progress promptly upon demand, but in no event later than three business days after the date of such demand, by wire transfer of same day funds, for all reasonable, out-of-pocket fees and expenses incurred or paid by or on behalf of, Progress in connection with the Merger or the transactions contemplated by this Agreement, including all reasonable fees and expenses of counsel, investment banking firms, accountants, experts and consultants to Progress; provided, however, that Duke shall not be obligated to make payments pursuant to this Section 5.09(e) in excess of $30,000,000 in the aggregate.

(f) Progress acknowledges that the agreements contained in Sections 5.09(b) and 5.09(d) are an integral part of the transactions contemplated by this Agreement, and that, without these agreements, Duke would not enter into this Agreement; accordingly, if Progress fails promptly to pay the amount due pursuant to Section 5.09(b) or 5.09(d), and, in order to obtain such payment, Duke commences a suit that results in a judgment against Progress for the fees set forth in Section 5.09(b) or 5.09(d), Progress shall pay to Duke its costs and expenses (including attorneys' fees and expenses) in connection with such suit, together with interest on the amount of the fee at the prime rate of Citibank N.A. in effect on the date such payment was required to be made.

(g) Duke acknowledges that the agreements contained in Sections 5.09(c) and 5.09(e) are an integral part of the transactions contemplated by this Agreement, and that, without these agreements, Progress would not enter into this Agreement; accordingly, if Duke fails promptly to pay the amount due pursuant to Section 5.09(c) or 5.09(e), and, in order to obtain such payment, Progress commences a suit that results in a judgment against Duke for the fees set forth in Section 5.09 (c) or 5.09(e), Duke shall pay to Progress its costs and expenses (including attorneys' fees and expenses) in connection with such suit, together with interest on the amount of the fee at the prime rate of Citibank N.A. in effect on the date such payment was required to be made.

Section 5.10 Public Announcements. Progress and Duke will consult with each other before issuing, and provide each other the reasonable opportunity to review, comment upon and

concur with, any press release or other public statements with respect to the transactions contemplated by this Agreement, including the Merger, and shall not issue any such press release or make any such public statement prior to such consultation, except as any party, after consultation with counsel, determines is required by applicable law or applicable rule or regulation of the NYSE.

Section 5.11 Affiliates. As soon as practicable after the date of this Agreement, Progress shall deliver to Duke, and Duke shall deliver to Progress, a letter identifying all persons who are, at the time this Agreement is submitted for adoption by the respective shareholders of Duke and Progress, "affiliates" of Progress or Duke, as the case may be, for purposes of Rule 145 under the Securities Act.

Section 5.12 NYSE Listing. Duke shall use its reasonable best efforts to cause the shares of Duke Common Stock issuable to Progress's shareholders as contemplated by this Agreement to be approved for listing on the NYSE, subject to official notice of issuance, as promptly as practicable after the date of this Agreement, and in any event prior to the Closing Date.

Section 5.13 Shareholder Litigation. Each of Progress and Duke shall give the other the reasonable opportunity to consult concerning the defense of any shareholder litigation against Progress or Duke, as applicable, or any of their respective directors or officers relating to the transactions contemplated by this Agreement.

Section 5.14 Tax-Free Reorganization Treatment. The parties to this Agreement intend that the Merger will qualify as a reorganization under Section 368(a) of the Code, and each shall not, and shall not permit any of their respective subsidiaries to, take any action, or fail to take any action, that would reasonably be expected to jeopardize the qualification of the Merger as a reorganization under Section 368(a) of the Code.

Section 5.15 Standstill Agreements; Confidentiality Agreements. During the period from the date of this Agreement through the Effective Time, neither Progress nor Duke shall terminate, amend, modify or waive any provision of any confidentiality or standstill agreement to which it or any of its respective subsidiaries is a party except (i) as required by applicable law, (ii) during the Progress Applicable Period in the case of Progress or during the Duke Applicable Period in the case of Duke, neither party shall enforce any standstill agreements or similar obligations in effect on the date of this Agreement in any manner that might prevent a third party from requesting permission to submit a Progress Takeover Proposal in accordance with Section 4.03 or a Duke Takeover Proposal in accordance with Section 4.04, as applicable or (iii) if the Board of Directors of the applicable party determines in good faith that failure to do so could reasonably be expected to result in a breach of its fiduciary obligations under applicable law. Except as provided in the first sentence of this Section 5.15, Progress or Duke, as the case may be, shall enforce any confidentiality or standstill agreement to which it or any of its respective subsidiaries is a party, including by seeking injunctions to prevent any breaches of such agreements and to enforce specifically the terms and provisions thereof, to the fullest extent permitted under applicable law.

ARTICLE VI

CONDITIONS PRECEDENT

Section 6.01 Conditions to Each Party's Obligation to Effect the Merger. The respective obligation of each party to effect the Merger is subject to the satisfaction or waiver by Progress and Duke on or prior to the Closing Date of the following conditions:

(a) Shareholder Approvals. Each of the Duke Shareholder Approval and the Progress Shareholder Approval shall have been obtained.

(b) No Injunctions or Restraints. No (i) temporary restraining order or preliminary or permanent injunction or other order by any federal or state court of competent jurisdiction preventing consummation of the Merger or (ii) applicable federal or state law prohibiting consummation of the Merger (collectively, "Restraints") shall be in effect.

(c) Form S-4. The Form S-4 shall have become effective under the Securities Act and shall not be the subject of any stop order or proceedings seeking a stop order and no proceedings for that purpose shall have been initiated or overtly threatened by the SEC.

(d) NYSE Listing. The shares of Duke Common Stock issuable to Progress's shareholders as contemplated by this Agreement shall have been approved for listing on the NYSE, subject to official notice of issuance.

(e) Charter Amendment. The Duke Charter Amendment shall have become effective.

Section 6.02 Conditions to Obligations of Progress. The obligation of Progress to effect the Merger is further subject to satisfaction or waiver of the following conditions:

(a) Representations and Warranties. The representations and warranties of Duke set forth herein shall be true and correct both when made and at and as of the Closing Date, as if made at and as of such time (except to the extent expressly made as of an earlier date, in which case as of such date), except where the failure of such representations and warranties to be so true and correct (without giving effect to any limitation as to "materiality" or "material adverse effect" set forth therein) does not have, and could not reasonably be expected to have, individually or in the aggregate, a material adverse effect on Duke.

(b) Performance of Obligations of Duke. Duke shall have performed in all material respects all obligations required to be performed by it under this Agreement at or prior to the Closing Date.

(c) Tax Opinion. Progress shall have received a written opinion from Hunton & Williams LLP, counsel to Progress, dated as of the Closing Date, to the effect that the Merger will qualify as a reorganization under Section 368(a) of the Code. Such counsel shall be entitled to rely upon representation letters from each of Duke, Progress, Merger Sub and others, in each case, in form and substance reasonably satisfactory to such counsel. Each such representation letter shall be dated as of the date of such opinion. The opinion condition referred to in this Section 6.02(c) shall not be waivable after receipt of the Progress Shareholder Approval, unless further approval of the shareholders of Progress is obtained with appropriate disclosure.

(d) Statutory Approvals. The Progress Required Statutory Approvals and the Duke Required Statutory Approvals shall have been obtained (including, in each case, the expiration or termination of the waiting periods (and any extensions thereof) under the HSR Act applicable to the Merger and the transactions contemplated by this Agreement) at or prior to the Effective Time, such approvals shall have become Final Orders (as defined below) and neither (i) such Final Orders nor (ii) any other order, action or regulatory condition of a regulatory body shall impose terms or conditions that, individually or in the aggregate, could reasonably be expected to have a Burdensome Effect on Progress or Duke. A "Final Order" means action by the relevant Governmental Authority that has not been reversed, stayed, enjoined, set aside, annulled or suspended, with respect to which any waiting period prescribed by law before the transactions contemplated hereby may be consummated has expired (a "Final Order Waiting Period"), and as to which all conditions to the consummation of such transactions prescribed by law, regulation or order have been satisfied.

(e) No Material Adverse Effect. Except as disclosed in the Duke SEC Reports filed on or after January 1, 2010 and prior to the date hereof or in any specific section of the Duke Disclosure Letter corresponding to Section 3.02, since December 31, 2009, there shall not have been any change, event, occurrence or development that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Duke.

(f) Closing Certificates. Progress shall have received a certificate signed by an executive officer of Duke, dated the Effective Time, to the effect that, to such officer's knowledge, the conditions set forth in Sections 6.02(a), 6.02(b) and 6.02(e) have been satisfied.

Section 6.03 Conditions to Obligations of Duke. The obligation of Duke to effect the Merger is further subject to satisfaction or waiver of the following conditions:

(a) Representations and Warranties. The representations and warranties of Progress set forth herein shall be true and correct both when made and at and as of the Closing Date, as if made at and as of such time (except to the extent expressly made as of an earlier date, in which case as of such date), except where the failure of such representations and warranties to be so true and correct (without giving effect to any limitation as to "materiality" or "material adverse effect" set forth therein) does not have, and could not reasonably be expected to have, individually or in the aggregate, a material adverse effect on Progress.

(b) Performance of Obligations of Progress. Progress shall have performed in all material respects all obligations required to be performed by it under this Agreement at or prior to the Closing Date.

(c) Tax Opinion. Duke shall have received a written opinion from Wachtell, Lipton, Rosen & Katz, counsel to Duke, dated as of the Closing Date, to the effect that the Merger will qualify as a reorganization under Section 368(a) of the Code. Such counsel shall be entitled to rely upon representation letters from each of Duke, Progress, Merger Sub and others, in each case, in form and substance reasonably satisfactory to such counsel. Each such representation letter shall

be dated as of the date of such opinion. The opinion condition referred to in this Section 6.03(c) shall not be waivable after receipt of the Duke Shareholder Approval, unless further approval of the shareholders of Duke is obtained with appropriate disclosure.

(d) Statutory Approvals. The Progress Required Statutory Approvals and the Duke Required Statutory Approvals shall have been obtained (including, in each case, the expiration or termination of the waiting periods (and any extensions thereof) under the HSR Act applicable to the Merger and the transactions contemplated by this Agreement) at or prior to the Effective Time, such approvals shall have become Final Orders and neither (i) such Final Orders nor (ii) any other order, action or regulatory condition of a regulatory body shall impose terms or conditions that, individually or in the aggregate, could reasonably be expected to have a Burdensome Effect on Duke or Progress.

(e) No Material Adverse Effect. Except as disclosed in the Progress SEC Reports filed on or after January 1, 2010 and prior to the date hereof or in any specific section of the Progress Disclosure Letter corresponding to Section 3.01, since December 31, 2009, there shall not have been any change, event, occurrence or development that, individually or in the aggregate, has had or could reasonably be expected to have a material adverse effect on Progress.

(f) Closing Certificates. Duke shall have received a certificate signed by an executive officer of Progress, dated the Effective Time, to the effect that, to such officer's knowledge, the conditions set forth in Sections 6.03(a), 6.03(b) and 6.03(e) have been satisfied.

Section 6.04 Frustration of Closing Conditions. Neither Progress nor Duke may rely on the failure of any condition set forth in Section 6.01, 6.02 or 6.03, as the case may be, to be satisfied if such failure was caused by such party's failure to use reasonable best efforts to consummate the Merger and the other transactions contemplated by this Agreement, to the extent required by and subject to Section 5.05.

ARTICLE VII

TERMINATION, AMENDMENT AND WAIVER

Section 7.01 Termination. This Agreement may be terminated at any time prior to the Effective Time, whether before or (other than pursuant to clauses (d), (f), (g) or (h) below) after the Progress Shareholder Approval or the Duke Shareholder Approval:

(a) by mutual written consent of Progress and Duke;

(b) by either Progress or Duke:

(i) if the Merger shall not have been consummated by the 12-month anniversary of the date of this Agreement (the "Initial Termination Date"); provided, however, that the right to terminate this Agreement pursuant to this Section 7.01(b)(i) shall not be available to any party whose failure to perform any of its obligations under this Agreement results in the failure of the Merger to be consummated by such time; and provided, further, that, (A) if on the Initial Termination Date the conditions to the Closing set forth in Sections 6.01(b), 6.02(d) and/or 6.03(d) shall not have been fulfilled but all other conditions to the Closing shall have been fulfilled or shall

be capable of being fulfilled, then either party may (on one or more occasions) extend the Initial Termination Date up to the 18-month anniversary of the date of this Agreement and (B) if the Initial Termination Date (as it may be extended pursuant to clause (A) of this Section 7.01(b)(i)) shall occur during any Final Order Waiting Period, the Initial Termination Date shall be extended until the third business day after the expiration of such Final Order Waiting Period;

(ii) if the Duke Shareholder Approval shall not have been obtained at a Duke Shareholders Meeting duly convened therefor or at any adjournment or postponement thereof;

(iii) if the Progress Shareholder Approval shall not have been obtained at a Progress Shareholders Meeting duly convened therefor or at any adjournment or postponement thereof;

(iv) if any Restraint having any of the effects set forth in Section 6.01(b) shall be in effect and shall have become final and nonappealable; provided that the party seeking to terminate this Agreement pursuant to this Section 7.01(b)(iv) shall have used its reasonable best efforts to prevent the entry of and to remove such Restraint; or

(v) if any condition to the obligation of such party to consummate the Merger set forth in Section 6.02 (in the case of Progress) or in Section 6.03 (in the case of Duke) becomes incapable of satisfaction prior to the Initial Termination Date (or, if the Initial Termination Date is extended in accordance with the second proviso to Section 7.01(b)(i), such date as extended); provided, however, in the case of Section 6.02(d) and 6.03(d), the Initial Termination Date shall refer to such date as it may be extended pursuant to the second proviso to Section 7.01(b)(i); and provided further, that the failure of any such condition to be capable of satisfaction is not the result of a material breach of this Agreement by the party seeking to terminate this Agreement;

(c) by Progress, if Duke shall have breached or failed to perform in any material respect any of its representations, warranties, covenants or other agreements contained in this Agreement, which breach or failure to perform (A) would give rise to the failure of a condition set forth in Section 6.02(a) or (b), and (B) is incapable of being cured by Duke or is not cured by Duke within 60 days following receipt of written notice from Progress of such breach or failure to perform;

(d) by Progress in accordance with Section 4.03(b); provided, that, in order for the termination of this Agreement pursuant to this paragraph (d) to be deemed effective, Progress shall have complied with Section 4.03 and with applicable requirements, including the payment of the Progress Termination Fee, of Section 5.09;

(e) by Duke, if Progress shall have breached or failed to perform in any material respect any of its representations, warranties, covenants or other agreements contained in this Agreement, which breach or failure to perform (A) would give rise to the failure of a condition set forth in Section 6.03(a) or (b), and (B) is incapable of being cured by Progress or is not cured by Progress within 60 days following receipt of written notice from Duke of such breach or failure to perform;

(f) by Duke in accordance with Section 4.04(b); provided, that, in order for the termination of this Agreement pursuant to this paragraph (f) to be deemed effective, Duke shall have complied with Section 4.04 and with applicable requirements, including the payment of the Duke Termination Fee, of Section 5.09;

(g) by Progress, if the Board of Directors of Duke (or any committee thereof) (i) shall have withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of the Duke Charter Amendment or the Duke Share Issuance, (ii) shall fail to reaffirm such approval or recommendation within 15 business days of receipt of Progress's written request at any time when a Duke Takeover Proposal shall have been made and not rejected by the Board of Directors of Duke; provided, that, such 15-business day period shall be extended for ten business days following any material modification to such Duke Takeover Proposal occurring after the receipt of Progress's written request and provided, further, that such 15-business day period shall recommence each time a Duke Takeover Proposal has been made following the receipt of Progress's written request by a person that had not made a Duke Takeover Proposal prior to the receipt of Progress's written request, or (iii) shall have approved or recommended, or proposed to approve or recommend, a Duke Takeover Proposal; or

(h) by Duke, if the Board of Directors of Progress (or any committee thereof) (i) shall have withdrawn or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Merger, (ii) shall fail to reaffirm such approval or recommendation within 15 business days of receipt of Duke's written request at any time when a Progress Takeover Proposal shall have been made and not rejected by the Board of Directors of Progress; provided, that, such 15-business day period shall be extended for ten business days following any material modification to such Progress Takeover Proposal occurring after the receipt of Duke's written request and provided, further, that such 15-business day period shall recommence each time a Progress Takeover Proposal has been made following the receipt of Duke's written request by a person that had not made a Progress Takeover Proposal prior to the receipt of Duke's written request, or (iii) shall have approved or recommended, or proposed to approve or recommend, a Progress Takeover Proposal.

Section 7.02 Effect of Termination. (a) In the event of termination of this Agreement by either Duke or Progress as provided in Section 7.01, this Agreement shall forthwith become null and void and have no effect, without any liability or obligation on the part of Progress or Duke, other than the provisions of Section 5.09, this Section 7.02 and Article VIII, which provisions shall survive such termination, and except to the extent that such termination results from the willful and material breach by a party of any of its representations, warranties, covenants or agreements set forth in this Agreement, in which case such termination shall not relieve any party of any liability or damages resulting from its willful and material breach of this Agreement (including any such case in which a Progress Termination Fee or a Duke Termination Fee, as the case may be, is, or any expenses of Progress or Duke in connection with the transactions contemplated by this Agreement are, payable pursuant to Section 5.09 to Progress or Duke, as the case may be (the "Injured Party"), to the extent any such liability or damage suffered by the Injured Party exceeds the amount of the Progress Termination Fee, in the circumstance in which Duke is the Injured Party, or the Duke Termination Fee, in the circumstance in which Progress is the Injured Party and any expenses payable pursuant to Section 5.09 to the Injured Party, it being the intent that any Progress Termination Fee, Duke Termination Fee and any expenses paid to the Injured Party shall serve as a credit against and off-set any liability or damage suffered by the Injured Party to the extent of such payment).

(b) In the event Duke terminates this Agreement pursuant to Section 7.01(h)(i) as a result of the Board of Directors of Progress having withdrawn or modified, or proposed to publicly withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Merger that was made primarily due to adverse conditions, events or actions of or relating to Duke, in any judicial, court or tribunal proceeding in which the payment of the Progress Termination Fee is at issue under the proviso in Section 5.09(b)(iv), whether brought or initiated by Duke or Progress, Progress shall have the burden of proving that the Board of Directors of Progress withdrew or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of this Agreement or the Merger primarily due to adverse conditions, events or actions of or relating to Duke.

(c) In the event Progress terminates this Agreement pursuant to Section 7.01(g)(i) as a result of the Board of Directors of Duke having withdrawn or modified, or proposed to publicly withdraw or modify, the approval or recommendation by such Board of Directors of the Duke Share Issuance and the Duke Charter Amendment that was made primarily due to adverse conditions, events or actions of or relating to Progress, in any judicial, court or tribunal proceeding in which the payment of the Duke Termination Fee is at issue under the proviso in Section 5.09(c)(iv), whether brought or initiated by Progress or Duke, Duke shall have the burden of proving that the Board of Directors of Duke withdrew or modified, or proposed publicly to withdraw or modify, the approval or recommendation by such Board of Directors of the Duke Share Issuance and the Duke Charter Amendment primarily due to adverse conditions, events or actions of or relating to Progress.

Section 7.03 Amendment. This Agreement may be amended by the parties at any time before or after the Duke Shareholder Approval or the Progress Shareholder Approval; provided, however, that after any such approval, there shall not be made any amendment that by law requires further approval by the shareholders of Duke or Progress without the further approval of such shareholders. This Agreement may not be amended except by an instrument in writing signed on behalf of each of the parties.

Section 7.04 Extension; Waiver. At any time prior to the Effective Time, a party may (a) extend the time for the performance of any of the obligations or other acts of the other parties, (b) waive any inaccuracies in the representations and warranties of the other parties contained in this Agreement or in any document delivered pursuant to this Agreement or (c) subject to the proviso of Section 7.03, waive compliance by the other parties with any of the agreements or conditions contained in this Agreement. Any agreement on the part of a party to any such extension or waiver shall be valid only if set forth in an instrument in writing signed on behalf of such party. The failure of any party to this Agreement to assert any of its rights under this Agreement or otherwise shall not constitute a waiver of such rights.

ARTICLE VIII

GENERAL PROVISIONS

Section 8.01 Nonsurvival of Representations and Warranties. None of the representations and warranties in this Agreement or in any instrument delivered pursuant to this Agreement shall survive the Effective Time. This Section 8.01 shall not limit any covenant or agreement of the parties that by its terms contemplates performance after the Effective Time and such provisions shall survive the Effective Time.

Section 8.02 Notices. All notices, requests, claims, demands and other communications under this Agreement shall be in writing and shall be deemed given (as of the time of delivery or, in the case of a telecopied communication, of confirmation) if delivered personally, telecopied (which is confirmed) or sent by overnight courier (providing proof of delivery) to the parties at the following addresses (or at such other address for a party as shall be specified by like notice):

if to Duke, to:

Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28202
Telecopy No.: (704) 382-7705
Attention: Marc E. Manly

with a copy to:

Wachtell, Lipton, Rosen & Katz
51 West 52nd Street
New York, New York 10019
Telecopy No.: (212) 403-2000
Attention: Steven A. Rosenblum

if to Progress, to:

Progress Energy, Inc.
410 S. Wilmington Street
Raleigh, North Carolina 27602
Telecopy No.: (919) 546-5245
Attention: John R. McArthur

with a copy to:

Hunton & Williams LLP
200 Park Avenue
New York, New York 10166
Telecopy No.: (212) 309-1100
Attention: James A. Jones, III

and

Hunton & Williams LLP
One Bank of America Plaza, Suite 1400
421 Fayetteville Street
Raleigh, North Carolina 27601
Telecopy No.: (919) 833-6352
Attention: Timothy S. Goettel

Section 8.03 Definitions. For purposes of this Agreement:

(a) an "affiliate" of any person means another person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such first person, where "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management policies of a person, whether through the ownership of voting securities, by contract, as trustee or executor, or otherwise;

(b) "capital stock" or "shares of capital stock" means (i) with respect to a corporation, as determined under the laws of the jurisdiction of organization of such entity, capital stock or such shares of capital stock; (ii) with respect to a partnership, limited liability company, or similar entity, as determined under the laws of the jurisdiction of organization of such entity, units, interests, or other partnership or limited liability company interests; or (iii) any other equity ownership or participation;

(c) "Contract" means any legally binding written or oral agreement, contract, subcontract, lease, instrument, note, license or sublicense;

(d) "material adverse effect" means, when used in connection with Progress or Duke, as the case may be, any change, effect, event, occurrence or state of facts (i) that is materially adverse to the business, assets, properties, financial condition or results of operations of such person and its subsidiaries taken as a whole but excluding any of the foregoing resulting from (A) changes in international or national political or regulatory conditions generally (in each case, to the extent not disproportionately affecting the applicable person and its subsidiaries, taken as a whole, as compared to similarly situated persons), (B) changes or conditions generally affecting the U.S. economy or financial markets or generally affecting any of the segments of the industry in which the applicable person or any of its subsidiaries operates (in each case, to the extent not disproportionately affecting the applicable person and its subsidiaries, taken as a whole, as compared to similarly situated persons), (C) the announcement or consummation of, or compliance with, this Agreement, or (D) any taking of any action by such party at the written request of the other party, or (ii) that prevents or materially delays such person from performing its material obligations under this Agreement or consummation of the transactions contemplated hereby;

(e) "person" means an individual, corporation, partnership, limited liability company, joint venture, association, trust, unincorporated organization or other entity;

(f) "subsidiary" means, with respect to any person, any other person, whether incorporated or unincorporated, of which more than 50% of either the equity interests in, or the voting control of, such other person is, directly or indirectly through subsidiaries or otherwise, beneficially owned by such first person; and

(g) "knowledge" means (i) with respect to Progress, the actual knowledge of the persons listed in Section 8.03(g) of the Progress Disclosure Letter, and (ii) with respect to Duke, the actual knowledge of the persons listed in Section 8.03(g) of the Duke Disclosure Letter.

Section 8.04 Interpretation and Other Matters. (a) When a reference is made in this Agreement to an Article, Section or Exhibit, such reference shall be to an Article or Section of, or an Exhibit to, this Agreement unless otherwise indicated. The table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. Whenever the words "include," "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation." The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms defined in this Agreement shall have the defined meanings when used in any certificate or other document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms. Any agreement, instrument or statute defined or referred to herein or in any agreement or instrument that is referred to herein means such agreement, instrument or statute as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. References to a person are also to its permitted successors and assigns.

(b) Each of Duke and Progress has or may have set forth information in its respective disclosure letter in a section thereof that corresponds to the section of this Agreement to which it relates. A matter set forth in one section of a disclosure letter need not be set forth in any other section of the disclosure letter so long as its relevance to the latter section of the disclosure letter or section of this Agreement is readily apparent on the face of the information disclosed in the disclosure letter to the person to which such disclosure is being made. The fact that any item of information is disclosed in a disclosure letter to this Agreement shall not be construed to mean that such information is required to be disclosed by this Agreement. Such information and the dollar thresholds set forth herein shall not be used as a basis for interpreting the terms "material," "material adverse effect" or other similar terms in this Agreement.

(c) Duke agrees to cause Merger Sub to comply with its obligations under this Agreement.

Section 8.05 Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each party and delivered to the other parties.

Section 8.06 Entire Agreement; No Third-Party Beneficiaries. This Agreement (including the documents and instruments referred to herein) and the Confidentiality Agreement (i) constitute the entire agreement, and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter of this Agreement and (ii) except for the provisions of Section 5.08 (which shall be enforceable by the Indemnified Parties) and except for the rights of Progress's shareholders to receive the Merger Consideration after the Effective Time in the event the Merger is consummated, are not intended to confer upon any person other than the parties any rights or remedies. The representations and warranties in this Agreement are the product of negotiations among the parties and are for the sole benefit of the parties. Any inaccuracies in such representations and warranties are subject to waiver by the parties in accordance with the terms of this Agreement without notice or liability to any other person. The representations and warranties in this Agreement may represent an allocation among the parties of risks associated with particular matters regardless of the knowledge of any of the parties and may have been qualified by certain disclosures not reflected in the text of this Agreement. Accordingly, persons other than the parties may not rely upon the representations and warranties in this Agreement as characterizations of actual facts or circumstances as of the date of this Agreement or as of any other date.

Section 8.07 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflict of laws, except that matters related to the fiduciary obligations of the Progress Board of Directors shall be governed by the laws of the State of North Carolina.

Section 8.08 Assignment. Neither this Agreement nor any of the rights, interests or obligations under this Agreement shall be assigned, in whole or in part, by operation of law or otherwise by any of the parties hereto without the prior written consent of the other party. Any attempted or purported assignment in violation of the preceding sentence shall be null and void and of no effect whatsoever. Subject to the preceding two sentences, this Agreement shall be binding upon, inure to the benefit of, and be enforceable by, the parties and their respective successors and assigns.

Section 8.09 Enforcement.

(a) The parties agree that irreparable damage would occur and that the parties would not have any adequate remedy at law in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, without the necessity of posting bonds or similar undertakings in connection therewith, this being in addition to any other remedy to which they are entitled at law or in equity.

(b) Each of the parties (i) irrevocably submits itself to the personal jurisdiction of each state or federal court sitting in the State of Delaware, as well as to the jurisdiction of all courts to which an appeal may be taken from such courts, in any suit, action or proceeding arising out of or relating to this Agreement or any of the transactions contemplated herein, (ii) agrees that every such suit, action or proceeding shall be brought, heard and determined exclusively in the Court of

Chancery of the State of Delaware (provided that, in the event subject matter jurisdiction is unavailable in or declined by the Court of Chancery, then all such claims shall be brought, heard and determined exclusively in any other state or federal court sitting in the State of Delaware), (iii) agrees that it shall not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from such court, (iv) agrees not to bring any suit, action or proceeding arising out of or relating to this Agreement or any of the transactions contemplated herein in any other court, and (v) waives any defense of inconvenient forum to the maintenance of any suit, action or proceeding so brought.

(c) Each of the parties agrees that service of any process, summons, notice or document by U.S. registered mail to its address set forth in Section 8.02 shall be effective service of process for any action, suit or proceeding brought against it, provided, however, that nothing contained in the foregoing clause shall affect the right of any party to serve legal process in any other manner permitted by applicable Law.

Section 8.10 Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible to the fullest extent permitted by applicable law in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

Section 8.11 Waiver of Jury Trial. Each party to this Agreement knowingly and voluntarily waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect of any action, suit or proceeding arising out of or relating to this Agreement.

IN WITNESS WHEREOF, Duke, Merger Sub and Progress have caused this Agreement to be signed by their respective officers thereunto duly authorized, all as of the date first written above.

DUKE ENERGY CORPORATION

By /s/ James E. Rogers
Name: James E. Rogers
Title: Chairman, President and Chief Executive Officer

DIAMOND ACQUISITION CORPORATION

By /s/ David S. Maltz
Name: David S. Maltz
Title: Vice President

PROGRESS ENERGY, INC.

By /s/ William D. Johnson
Name: William D. Johnson
Title: Chairman, President and Chief Executive Officer

— SIGNATURE PAGE TO THE MERGER AGREEMENT—

Exhibit A

1. As of the Effective Time, the size of the Board of Directors of Duke will be increased to 18.
2. All 11 current directors of Duke (the "Duke Designees") will continue as directors as of the Effective Time, subject to their ability and willingness to serve. Seven of the current directors of Progress (the "Progress Designees") will be added to the Board of Directors of Duke as of the Effective Time, subject to their ability and willingness to serve, such seven directors to be designated by Progress, following reasonable consultation with Duke, no later than March 20, 2011.
3. If any Duke Designee is unable or unwilling to serve as a director of Duke as of the Effective Time, Duke will designate a replacement, following reasonable consultation with Progress, which replacement shall be deemed a Duke Designee for all purposes of the Merger Agreement.
4. If any Progress Designee is unable or unwilling to serve as a director of Duke as of the Effective Time, Progress will designate a replacement, following reasonable consultation with Duke, which replacement shall be deemed a Progress Designee for all purposes of the Merger Agreement.
5. As of the Effective Time, the standing Board committees of Duke will consist of Duke's existing committees plus a Regulatory Policy and Operations Committee. At least one Progress Designee will serve on each committee. In determining and recommending committee assignments, the Board and the Corporate Governance Committee will take into account, among other things, the skills and expertise of the directors, the needs of the committees, and the goal that committee workloads be distributed reasonably among the full Board.
6. Progress will designate the chairs of the Compensation Committee and the Audit Committee, and Duke will designate the chairs of each of the other Board committees, in each case following reasonable consultation with the other party, and in each case subject to such individuals' ability and willingness to serve. If any such designated chair is unable or unwilling to serve in such position as of the Effective Time, the party that designated such chair shall designate a replacement from among such party's director designees, following reasonable consultation with the other party.
7. Duke will designate the lead independent director, following reasonable consultation with Progress, subject to such individual's ability and willingness to serve. If the individual so designated as lead independent director is unable or unwilling to serve in such position as of the Effective Time, Duke will designate a replacement from among the Duke Designees, following reasonable consultation with Progress.
8. Prior to the Effective Time, Duke will amend its Principles for Corporate Governance to provide that the normal retirement date for directors will be the annual meeting held in the calendar year following the calendar year in which such director reaches the age of 71.

Exhibit B

Roles and Responsibilities

Chief Executive Officer

- Member of the Board
- Determines Board agenda
- Conduit between Duke and Board
- Develops the strategic plan
- Develops and communicates vision & mission
- Develops public policy positions
- Jointly designates executive management team with Executive Chairman prior to announcement
- Following transition, selects executive management team with input from Executive Chairman
- Develops annual budget for Board approval
- Drives strategic financial and operational results
- Leads the organization
- Represents Duke to the public and investors

Executive Chairman

- Conducts Board meetings
- Supports Board selection process
- Assists in setting Board agenda
- Provides input on public policy positions
- Spokesman on public policy initiatives
  - National and international policy
  - Global initiatives
  - Active role in national and state government relations, in coordination with CEO
- Jointly designates executive management team with CEO prior to announcement
- Following transition, provides input on selection of executive management team
- Represents the Board to the public

Overview of responsibilities

	Primary responsibility		Secondary responsibility	
	Executive Chairman	CEO	Executive Chairman	CEO
• Market/public communications				
• Before federal or international authorities	√			√
• Before state authorities		√	√	
• Rate proceedings		√		
• Financial/earnings call/strategy/appearance at EEI and other industry conferences		√		
• National media on federal/global energy policy	√			√
• Point of contact for merger activities		√	√	
• Responsibility to determine Board agenda		√	√	
• Operational execution		√		
• Corporate strategy		√	√	

Exhibit C

EMPLOYMENT AGREEMENT
TERM SHEET
WILLIAM D. JOHNSON

As soon as reasonably practicable following the execution of this term sheet but in any event prior to the effective date of the closing of the merger (the "Merger") contemplated by the Agreement and Plan of Merger by and among Duke Energy Corporation ("Duke"), Progress Energy, Inc. ("Progress") and Diamond Acquisition Corporation (the "Merger Agreement"), Duke will take such action (or cause its affiliates to take such action) as may be necessary and appropriate to effectuate a new employment agreement to be entered into or assumed by Duke for William D. Johnson (the "Executive"), which agreement shall take effect as of the Merger. Effective upon the closing of the Merger and until such time as a new employment agreement becomes effective, this term sheet shall govern the respective parties' rights and obligations and shall constitute an amendment of the Executive's employment agreement when deemed effective as provided herein. The new employment agreement shall be governed by the following provisions.

1. Basic Premise – The new employment agreement shall be substantially similar to the form of the current employment agreement for Duke's current CEO, except as otherwise described below.
2. Role – The Executive shall be named as President and CEO of Duke effective upon the Merger, which will require conforming changes to the new employment agreement.
3. Term – Three-year term of employment commencing upon the closing of the Merger.
4. Ongoing Compensation
   (a) Annual Base Salary – $1,100,000.
   (b) Short-Term Incentive Plan – The Executive shall be eligible to participate in the applicable Duke short-term incentive plan, with a target opportunity of 125% of annual base salary. The terms and conditions of the Executive's short-term incentive compensation opportunities shall be substantially similar to the short-term incentive compensation opportunities provided to other executive officers of Duke, as determined by the Duke Compensation Committee from time to time.
   (c) Long-Term Incentives – The Executive shall be eligible to participate in the applicable Duke long-term incentive plan, with a target opportunity of 500% of annual base salary. The terms and conditions (e.g., performance measures, vesting schedules, allocation between performance and phantom shares) of the Executive's long-term incentive awards shall be substantially similar to the long-term incentive awards granted to other executive officers of Duke, as determined by the Duke Compensation Committee from time to time.

(d) Adjustments – Given the time period between the effective date of this term sheet and the anticipated date of the closing of the Merger, the Duke Compensation Committee will review benchmark data and reserves discretion to increase the compensation of the Executive if determined to be appropriate after taking into account the compensation provided to CEOs of Duke's peer group.

(e) Employee Benefits – The Executive shall be entitled to employee benefits (e.g., retirement plans, health and insurance plans, perquisites) as determined by the Duke Compensation Committee from time to time.

(f) SERP – The Executive's benefit under the Amended and Restated Supplemental Senior Executive Retirement Plan of Progress Energy, Inc. (the "SERP") shall be treated in the same manner as the benefit of other executives in the SERP who are employed with Duke following the closing of the Merger.

5. Impact of Termination of Employment

(a) If the Executive is involuntarily terminated without cause or quits for good reason following, but prior to the second anniversary of, the closing of the Merger, he will be entitled to severance equal to the benefits provided under the Progress Energy Inc. Management Change-in-Control Plan, as amended from time to time, except that no tax gross-up shall be provided, and the parties shall use their best efforts to structure the severance in a manner that eliminates or reduces the impact of Sections 280G and 4999 of the tax code.

(b) If the Executive is involuntarily terminated without cause or quits for good reason following the second anniversary of, but prior to the third anniversary of, the closing of the Merger, he will be entitled to the severance provided under his current employment agreement, as amended from time to time.

(c) For purposes of determining whether the Executive has "good reason" to terminate employment or a "constructive termination" has occurred, his move to Charlotte, NC, Sections 2.13(b) and 2.13(c) of the Progress Energy, Inc. Management Change-in-Control Plan and Section 8(a)(i) of his current employment agreement, shall be disregarded.

6. Other Matters

(a) Relocation Benefits – The Executive will be reimbursed for direct and indirect relocation costs, provided that the Executive shall not receive a tax gross-up or indemnification for any such relocation costs that constitute income to the Executive.

(b) Advisor Fees – The Executive will be reimbursed for reasonable expenses incurred in connection with the negotiation of this term sheet and the new employment agreement.

(c) Corporate Aircraft – The Executive will be subject to substantially the same policies as currently in effect for Duke's current CEO.

IN WITNESS WHEREOF, the parties signing below have executed this term sheet this 8th day of January, 2011, intending to be legally bound thereby.

DIAMOND ACQUISITION CORPORATION

By: _____

DUKE ENERGY CORPORATION

By: _____

_____
William D. Johnson

Exhibit D

TERM SHEET FOR AMENDMENT TO EMPLOYMENT AGREEMENT JAMES E. ROGERS

As soon as reasonably practicable following the execution of this term sheet, but in any event prior to the Effective Time of the Merger contemplated by the Agreement and Plan of Merger by and among Duke Energy Corporation, Progress Energy, Inc. and Diamond Acquisition Corporation (the "Merger Agreement"), James E. Rogers (the "Executive") and Duke will each use their commercially reasonable efforts to amend (or cause their respective affiliates to amend) the employment agreement by and between the Executive and Duke, dated as of February 19, 2009 (the "Current Agreement"), as may be necessary and appropriate to effectuate the terms of the Executive's employment following the Merger that are set forth below, which amendments shall take effect as of the Effective Time. Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Merger Agreement.

1. Current Agreement – Except as otherwise described below, the Current Agreement shall remain in full force and effect.
2. Role and Responsibilities – The Executive shall serve as Executive Chairman of the Board of Directors of Duke (the "Executive Chair") following the Merger and will cease to be employed as President and Chief Executive Officer of Duke as of the Effective Time. The Executive will continue to report directly to the Board of Directors of Duke and his roles and responsibilities will be those set forth on **Exhibit B** to the Merger Agreement. In no event will the foregoing amendments to the Current Agreement provide the Executive with the right to terminate his employment for "Good Reason" (as defined in the Current Agreement) under Section 10(b) of the Current Agreement.
3. Term – The Executive's term of employment will end on the later of (i) December 31, 2013 and (ii) the second anniversary of the Effective Time, unless terminated earlier pursuant to the terms of the Current Agreement.
4. Ongoing Compensation – The Executive's compensation will remain the same in all respects as under the Current Agreement through December 31, 2013. Should the term of employment continue beyond December 31, 2013 and the Executive continue to serve as Executive Chair as of that date, the Compensation Committee of the Board of Directors of Duke will address the Executive's compensation for the remaining term of his employment at that time.
5. Advisor Fees – The Executive will be reimbursed for reasonable expenses incurred in connection with the negotiation of this term sheet and the amendment to the Current Agreement.

IN WITNESS WHEREOF, the parties signing below have executed this term sheet this 8th day of January, 2011, intending to be legally bound thereby.

DIAMOND ACQUISITION CORPORATION

By: _____

DUKE ENERGY CORPORATION

By: _____

_____
James E. Rogers

Exhibit E

Individual	Position
Lynn Good	Chief Financial Officer
Dhiaa Jamil	Nuclear Generation
Jeff Lyash	Energy Supply
Marc Manly	General Counsel, Corporate Secretary
John McArthur	Regulated Utilities
Mark Mulhern	Chief Administrative Officer
Keith Trent	Commercial Businesses
Jennifer Weber	Human Resources
Lloyd Yates	Customer Operations

In addition, A.R. Mullinax and Paula Sims shall co-lead integration during the transition period following Closing.

Exhibit J: Facts Relied upon to Demonstrate Consistency with Public Interest

The facts relied upon to show that the Transaction is consistent with the public interest are set forth in Part IV of the Application and in the testimony of Dr. Hieronymus attached as Exhibit J.

Exhibit No. J-1

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

APPLICATION
UNDER SECTION 203 OF THE FEDERAL POWER ACT

PREPARED DIRECT TESTIMONY AND EXHIBITS OF WILLIAM H. HIERONYMUS ON BEHALF OF APPLICANTS

Exhibit No. J-1

DIRECT TESTIMONY OF WILLIAM H. HIERONYMUS

Table of Contents

I. PURPOSE, SUMMARY OF ANALYSIS AND CONCLUSIONS

Introduction

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is William H. Hieronymus. I am a Vice President of Charles River Associates ("CRA"). My business address is 200 Clarendon Street, T-33, Boston, MA 02116.

Q. PLEASE SUMMARIZE YOUR RELEVANT PROFESSIONAL BACKGROUND.

A. For the past 35 years, the primary focus of my consulting has been on the electricity industry. For the past 20 years, I have worked primarily on the restructuring of the electricity industry from a fully regulated to a more competitively oriented model, both in the U.S. and abroad. Much of my time has been spent on market power issues. I have testified before the Federal Energy Regulatory Commission ("Commission") and other regulatory bodies on market power on numerous occasions. This includes a number of mergers and acquisitions over the past 15 years, including more than 30 mergers among electric utilities and "convergence" mergers of electric utilities and natural gas pipelines. My resume is attached as Exhibit J-2.

Purpose

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by counsel for Duke Energy Corporation and all of its jurisdictional public utilities (collectively, "Duke Energy")[1] and counsel for Progress Energy, Inc. and all of its jurisdictional public utilities (collectively, "Progress Energy"),[2] together, "Applicants", to evaluate the potential competitive impact of the merger of Duke Energy and Progress Energy on relevant electricity markets.[3] I performed the Competitive Analysis Screen described in Appendix A to the Commission's Merger Policy Statement

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[1] These include the franchised utility operations of Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or "DEC"), Duke Energy Ohio, Inc. ("DEO"), Duke Energy Indiana, Inc. ("DEI"); and Duke Energy Kentucky, Inc. ("DEK"), as well as a number of limited liability companies held as indirect, wholly-owned subsidiaries of one or more of the franchised utilities.

[2] These include Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. ("Progress Energy Carolinas" or "PEC") and Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("Progress Energy Florida" or "PEF").

[3] The exhibits to the Application include a complete list of relevant affiliates of Applicants.

("Order No. 592"),[4] as modified in the Revised Filing Requirements Under Part 33 of the Commission's Regulations.[5] The Competitive Analysis Screen is intended to comport with the Department of Justice and Federal Trade Commission ("DOJ/FTC") Horizontal Merger Guidelines ("Guidelines").

The primary focus of my testimony is to analyze whether the combination of the electric generating assets owned or controlled by Duke Energy and those owned or controlled by Progress Energy potentially could create or enhance the Applicants' ability to increase prices in the relevant geographic electricity markets. I also address the potential impact of the merger on vertical market power, including barriers to entry that might undercut the presumption that long-run generation markets are competitive and, more specifically, the potential to use control over fuels supplies, fuel transportation facilities, or electric transmission to exert vertical market power to increase competitors' costs.

Summary of Analysis and Conclusions

Q. DOES YOUR ANALYSIS INDICATE THAT THE MERGER RAISES COMPETITIVE CONCERNS?

A. No. The only area in which Applicants' supply capabilities overlap is in the Carolinas. As described below, Progress Energy Carolinas and Duke Energy Carolinas both serve wholesale and retail customers in North Carolina and South Carolina. In the Carolinas, Duke Energy Carolinas operates the "DUK" Balancing Authority Area ("BAA"); and Progress Energy Carolinas operates two BAAs: Progress Energy Carolinas-East ("CPLE") and Progress Energy Carolinas-West ("CPLW").[6] While Progress Energy also has an electric utility in Florida, Duke Energy has no generation located in or near Florida. Duke Energy has utility subsidiaries in Ohio, Indiana and Kentucky that own generation in those states, mostly within the Midwest Independent Transmission System

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4 *Inquiry Concerning the Comm'n's Merger Policy Under the Fed. Power Act: Policy Statement*, Order No. 592, FERC Stats. & Regs. ¶ 31,044 (1996), *reconsideration denied*, Order No. 592-A, 79 FERC ¶ 61,321 (1997).

5 *Revised Filing Requirements Under Part 33 of the Comm'n's Regulations*, Order No. 642, FERC Stats. & Regs. ¶ 31,111 (2000), *order on reh'g*, Order No. 642-A, 94 FERC ¶ 61,289 (2001) ("Revised Filing Requirements" or "Order No. 642").

6 CPLE is the larger of the two Progress Energy Carolinas' BAAs, and is east of Duke Energy Carolinas. CPLW is smaller and is west of Duke Energy Carolinas' primary service area, but east of a small portion of it.

Operator, Inc. ("MISO"). These are remote from Progress Energy's generating capability. Duke Energy also owns generation in the PJM Interconnection, L.L.C. ("PJM"), and some wind-powered generation, primarily in Texas and the West. These also are remote from Progress Energy's generation and loads.

In the Carolinas, and in all of the states that abut them, there is no retail access and it is extremely unlikely that any of these states will adopt retail access in the foreseeable future. Under these circumstances, Commission precedent dictates that it is the Available Economic Capacity branch of the Commission's Delivered Price Test ("DPT") that should be considered in evaluating the competitive impacts of the transaction. However, I also conducted an Economic Capacity analysis, as is required by the Commission's Merger Regulations.

As described below, my Available Economic Capacity analysis demonstrates that the merger raises no competitive concerns in the Carolinas. There is a single off-peak period in which the CPLE and the DUK BAAs are each moderately concentrated, post-merger, and the change in the Herfindahl-Hirschman Index ("HHI") is greater than 100 points.[7] There are no failures in CPLW. Commission precedent has found consistently that non-systematic occasional screen failures such as these are a "false positive" indication of market power and are not a cause for concern. This particularly is true when, as here, the failures are in off-peak periods. There are no screen failures in the Available Economic Capacity analyses in any of the other markets that I analyzed.

The results of my Available Economic Capacity analysis are confirmed by actual sales data, including data from the Electric Quarterly Reports ("EQR") for 2008-10. The overwhelming share of power sold from generation controlled by Duke Energy Carolinas and Progress Energy Carolinas is used to serve their native loads, including their regulated sales to municipal utilities and cooperatives located in their BAAs. There is virtually no competition between them for sales to third parties in any geographic

[7] As I discuss below, the HHI change in excess of 100 points in the DUK BAA is misleading in that it arises solely because of the effect of transmission rate depancaking, which clearly is pro-competitive.

market.[8] Duke Energy Carolinas' sales to customers in the Progress Energy BAAs (other than to Progress Energy itself) constituted only a minuscule amount (less than 0.01 percent) of the total energy generation by Duke Energy Carolinas; and Progress Energy Carolinas' sales to customers in the DUK BAA (other than to Duke Energy Carolinas) was even less. Thus, the participation of the Applicants in wholesale markets in which the other Applicant controls substantial generation is trivial at most. Consequently, the combination of Duke Energy and Progress Energy can have no material effect on competition in either the Duke Energy Carolinas or Progress Energy Carolinas BAAs. Since this is the only overlap area between them, this means that there is no material reduction in competition caused by the transaction.

Q. PLEASE SUMMARILY DESCRIBE THE APPLICANTS' GENERATING ASSETS AND WHERE THEY ARE LOCATED.

A. As shown in Table 1 below, Duke Energy currently owns a total of approximately 36,000 MW, primarily in the DUK BAA (approximately 19,000 MW) and in MISO (approximately 12,000 MW), plus a modest amount of generation (approximately 3,100 MW) in PJM,[9] as well as in Texas and the west (approximately 900 MW of wind powered generation). DEO and DEK have proposed to withdraw their transmission assets from MISO and join PJM as of January 1, 2012. Assuming that the change occurs as planned, approximately 5,000 MW of generation owned by DEO and DEK will "move" from MISO to PJM as part of their integration into PJM. Duke Energy Carolinas plans to retire approximately 900 MW of generation and add approximately 1,500 MW of new generation by the summer of 2012, as detailed in its most recent Integrated Resource Plan ("IRP").[10] Additionally, they have long-term purchases of approximately 300 MW.

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[8] Duke Energy and, to a lesser extent, Progress Energy sell significant amounts of energy into PJM. Duke Energy also controls generation in PJM, though Progress Energy does not. Their shares, especially Progress Energy's share, are trivial relative to the size of the PJM market.

[9] About 1,400 MW of Duke Energy's generation that is physically located in PJM currently operate as MISO resources and I have treated them as such here.

[10] *The Duke Energy Carolinas Integrated Resource Plan* (Annual Report), September 1, 2010, filed with the North Carolina Utilities Commission - Docket No. E-100, Sub 128; and the Public Service Commission of South Carolina - Docket No. 2010-10-E. Both Duke Energy Carolinas and Progress Energy Carolinas plan

Progress Energy owns approximately 23,000 MW of generation in three BAAs: in the two Carolina Power & Light BAAs (CPLE and CPLW) (approximately 12,500 MW), and in the Florida Power Corporation BAA ("FPC") (approximately 10,000 MW). Progress Energy Carolinas plans to add approximately 700 MW of new generation by summer 2012, as detailed in its most recent IRP.[11] Additionally, they have long-term purchases of approximately 1,200 MW.

Exhibits J-3 and J-4 detail the generation owned by Duke Energy and Progress Energy, respectively. Additionally, as noted, both companies control some generation under long-term power purchase agreements, which also is reflected in these exhibits.

Table 1: Summary of Generation Owned by Duke Energy and Progress Energy (excludes Purchases)

Market	Duke Energy (MW)	Progress Energy (MW)
DUK*	19,102	0
CPL**	0	12,601
FPC	0	9,996
PJM	3,089	0
MISO***	12,408	0
Other	1.114	0
Total	35,713	22,597

* Duke Energy's owned capacity in DUK increases by 591 MW by summer 2012.

** The total capacity for Progress Energy Carolinas includes some jointly-owned capacity that it operates on behalf of co-owners that are requirements customers. Progress Energy's owned generation in CPL increases by 690 MW by summer 2012.

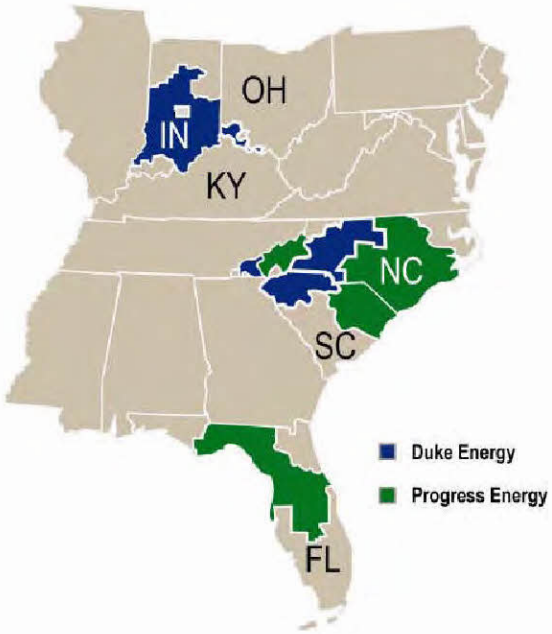
*** Approximately 5,000 MW of this generation possibly moves to PJM in 2012. The analysis reflects this presumption.

The location of Applicants' service territories (in Ohio, Kentucky, Indiana, the Carolinas and Florida) is shown in **Figure 1** below.

further additions and retirements subsequent to 2012. The additions and retirements in 2013 to 2015 approximately balance.

[11] *Progress Energy Carolinas, Integrated Resource Plan*, September 13, 2010, filed with the North Carolina Utilities Commission - Docket No. E-100, Sub 128, and the Public Service Commission of South Carolina - Docket No. 2010- 8-E.

Figure 1: Duke Energy and Progress Energy Service Territories



Q. PLEASE DESCRIBE THE ANALYSES YOU HAVE PERFORMED AND THE CONCLUSIONS YOU REACH BASED ON THE ANALYSES.

A. Given the location of their generation, any potential horizontal impact of the merger of Duke Energy and Progress Energy is limited to the Carolinas, where both companies operate franchised service territories, have captive customers, and own significant generation. In addition, there is a potential impact on markets (BAAs) interconnected to the DUK and CPL BAAs. The two companies share interconnections to five BAAs: PJM, South Carolina Public Service Authority (Santee Cooper) ("SC"), South Carolina Electric & Gas Company ("SCEG"), Tennessee Valley Authority ("TVA"), and Southern Company Services, Inc. ("SOCO").[12] I reviewed Duke Energy's and Progress Energy's power sales in recent years and determined based on that review that no additional markets (*i.e.*, second tier or still more remote) needed to be analyzed.

I conducted a DPT for the DUK and CPL BAAs, as well as for their first-tier interconnections.[13] I analyzed both Economic Capacity and Available Economic

[12] Progress Energy's interconnection to SOCO is via Progress Energy Florida's BAA, not its Carolinas' BAAs.

[13] DUK also is interconnected to Southeastern Power Administration ("SEPA") and Alcoa Power Generating, Inc. - Yadkin Division ("YAD"). CPLE also is interconnected to YAD. I have not conducted a separate analysis of

Capacity. For the Carolinas BAAs, as well as the first-tier BAAs other than, perhaps, PJM, the proper focus of a Delivered Price Test is Available Economic Capacity. This is consistent with the Commission's primary reliance on the results of Available Economic Capacity analyses in non-restructured markets (*i.e.*, where traditional vertically integrated suppliers maintain load-serving responsibility).[14]

Consistent with the Commission's requirement that merger analyses be forward-looking, my analysis is based on expected market conditions in 2012. These conditions are similar to market conditions at present and/or in the recent past, but do take into account relevant near-term generation changes, transmission upgrades, and Duke Energy Ohio and Kentucky's proposed integration into PJM.

As noted earlier, my analysis shows that there is only one Available Economic Capacity screen failure in the DUK and CPLE BAAs; it occurs in the summer off-peak period. There are no screen failures in the CPLW BAA. As discussed below, even these failures are due substantially to pro-competitive depancaking of transmission as a merger condition, rather than to the merger of supply capabilities. There also are no screen failures for Available Economic Capacity in the first-tier markets that I analyzed.

Since all of these markets, other than PJM, are single utility BAAs in which the utility has retained its generation in order to meet its full native load requirements, the non-PJM markets all are very highly concentrated in the Economic Capacity analyses. This is

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SEPA or YAD because these are essentially generation-only BAAs. The Commission has accepted this approach in connection with its orders in Duke Energy's and Progress Energy's triennial market-based rate filings. See, for example, *Duke Energy Carolinas, LLC*, 128 FERC ¶ 61,055 (2009) and *Carolina Power & Light Company*, 128 FERC ¶ 61,052 (2009). I have taken into account in my analysis an allocation of SEPA's generation to preference customers located in the DUK and CPL BAAs.

[14] *See*, for example, *Nevada Power Co.*, 113 FERC ¶ 61,265 at P 15 (2005) (finding that Available Economic Capacity is a more accurate measure for markets where utilities have significant native load obligations). *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, FERC Stats. & Regs. ¶ 31,252, at P 848-50 ("Order No. 697") at P 112. *See also KCP&L*, 113 FERC ¶ 61,704, at PP 31, 35 ("[U]tilities with a native load obligation are obligated to secure and devote resources to serve that native load. Depending on load conditions, some or all of those resources are not available to the wholesale market and the available economic capacity measure accounts for that."). What is less clear is the relative weight to be given to the Economic Capacity and Available Economic Capacity analyses when the market being examined has been restructured to largely eliminate native load obligations but the merger applicants themselves have retained their native load obligations. In the context of this merger, PJM is the only such market. While Economic Capacity analyses are most appropriate to the PJM market itself, the Economic Capacity measure will substantially overstate the Applicants' ability to supply the PJM market.

particularly true for the Duke Energy Carolinas and Progress Energy Carolinas BAAs. The high shares for the load-serving utility mean that even a small share of imports attributed to a merger partner will cause a screen failure. In all three of Applicants' Carolina BAAs, there are Economic Capacity screen failures in all time periods. There also are Economic Capacity screen failures in the shoulder periods in the SC and SCEG markets. These results do not demonstrate any actual competitive harm arising from the merger since, by their very nature, they do not take into account the fact that most of Duke Energy Carolinas' and Progress Energy Carolinas' generation is dedicated to meeting their native load requirements and long term contracts with municipal utilities and cooperatives. It is precisely because Duke Energy Carolinas and Progress Energy Carolinas devote almost all of their generation to meeting native load that the Economic Capacity measure does not provide meaningful insight into the competitive effect of the merger.

As is typical, the Available Economic Capacity results are sensitive to the market price levels used in the analysis.[15] For this reason, I also reviewed Duke Energy's and Progress Energy's sales and purchases in short term markets for recent periods. In relevant part, the purpose of this analysis was to confirm that my calculation of the Available Economic Capacity positions of Duke Energy Carolinas and Progress Energy Carolinas (*i.e.,* short, long or very long) based on the prices used in my analysis were consistent with their actual market participation.

As described later in my testimony, the prices that I used in my analysis were derived primarily from Applicants' system lambdas for 2009 and 2010, adjusted to reflect forecast fuel price levels for the 2012 modeled year. In addition, I assessed the price levels that would balance each Applicant's supply stack with their average load for the period, having taken into account both their long term wholesale sales obligations and retail loads. I also reviewed the capacity factors for each type of capacity that the

[15] If prices reflect the price level that just balances an integrated utility's load and generation, it will have zero Available Economic Capacity, other than the generation, if any, that has dispatch costs between 100 percent and 105 percent of the system lambda. The averaging of prices and load and capacity balances inherit in creating a DPT analysis restricted to 10, rather than 8,760, time periods means that Available Economic Capacity can be positive or negative even for a utility that is exactly in balance in each hour.

Applicants own to determine which units, with what fuel and heat rate, typically set prices in the time period. Finally, I also took into account energy prices forecasted by Ventyx, a third-party vendor of energy market data.[16]

As noted above, to further check on the validity of the price levels I selected for my analyses, I also reviewed Duke Energy Carolinas' and Progress Energy Carolinas' EQR data. The conclusion reached in my DPT analyses that Progress Energy Carolinas has relatively little Available Economic Capacity is consistent with the low level of short-term sales that it makes, which trend downward from about 5 percent of output in 2008 to about 1 percent of output in 2010. Only .041 percent of its sales were into the DUK BAA, More importantly, only 0.003 percent of its sales were to buyers in the Progress Energy Carolinas BAAs that could be deemed to be competitive as between the two companies. Duke Energy Carolinas also has relatively little Available Economic Capacity. This is consistent with its short term wholesale sales, which trend downward from about 5 percent of output to about 2 percent between 2008 and 2010.[17] Duke Energy Carolinas' total wholesale sales in 2008-2010 represented only 7.7 percent of its total sales in those years, with remaining power being sold at retail. Furthermore, only 0.067 percent of these total sales were sold in the Progress Energy Carolinas BAAs. Most relevant, only 0.007 percent of Duke Energy Carolinas' sales into the Progress Energy Carolinas BAAs were sold to entities other than Progress Energy Carolinas.

In addition to analyzing Applicants' Carolinas markets and the markets that are first tier to them, I examined other potentially relevant markets, specifically MISO, where Duke Energy (DEI) will continue to own about 7,000 MW of generation assuming DEO and DEK move to PJM, and the Progress Energy's FPC BAA, where Progress Energy owns approximately 10,000 MW of generation. I demonstrate herein that "the extent of the business transactions in the same geographic markets (i.e., MISO and FPC) is *de*

[16] Ventyx also was the source of the fuels prices used to update price levels from historic to forecast 2012 levels.

[17] Short term sales do not include requirements sales since the latter are, by definition, longer term.

minimis"[18] such that a full Competitive Analysis Screen is not required with respect to these markets.

With respect to MISO, all of Progress Energy's generation in the Carolinas is located in BAAs that are at least two wheels away from MISO (via, *e.g.*, PJM or TVA); its generation in Florida is located at least three wheels away from MISO (via, *e.g.*, SOCO and TVA); and Progress Energy has sold/delivered relatively little energy to MISO in the past three years, as reported in its EQRs.[19] Thus, Progress Energy and Duke Energy do not compete in MISO; in other words, the extent of Progress Energy's business transactions in MISO is *de minimis*.

With respect to Progress Energy's FPC balancing authority area, all of Duke Energy's generation in the Carolinas is located in a BAA at least two wheels away from FPC (via Southern); its generation in MISO and PJM is at least three wheels away from FPC (via, *e.g.*, Southern and TVA); and Duke Energy has sold/delivered no energy into Florida in the past three years, as reported in its EQRs.[20] Thus, Progress Energy and Duke Energy do not compete in FPC; in other words, the extent of Duke Energy's business transactions in FPC is *de minimis*.

Q. PLEASE DETAIL THE QUANTITATIVE RESULTS OF THE DELIVERED PRICE TEST ANALYSES BASED ON AVAILABLE ECONOMIC CAPACITY IN EACH OF THE RELEVANT MARKETS.

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[18] *See* 18 C.F.R. § 33.3(a)(2)(i) (2010).

[19] Over the past 3 years, such sales averaged less than 200 GWh, less than 0.3 percent of its generation and a still much smaller share of the MISO market. Moreover, the fact that Progress Energy Carolinas has no Available Economic Capacity in the DPT conducted for either TVA or PJM, the two markets between Progress Energy Carolinas and MISO, means that an analysis of the MISO BAA would show that it has a zero share and that the HHI change therefore would be zero.

[20] In the past three years, Duke Energy Carolinas sold very small amounts of power to Progress Energy Florida and Florida Power and Light. These sales were not delivered in Florida but rather sunk either in the Progress Energy Carolinas or the Southern Company BAAs.

A. First, consider the three Carolina BAAs belonging to Applicants (see Exhibit J-5). Tables 2 through 5 below summarize these results.[21] Table 2 shows the results for the DUK market.

Table 2: Available Economic Capacity, DUK (no rate depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,082	26.6%	4,072	1,126	1
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,086	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,352	37.7%	3,587	1,575	-
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	809	23.5%	3,448	832	-
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,503	44.2%	7,922	2,180	-
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,067	25.3%	4,221	857	-
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	438	-
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,875	34.4%	5,457	1,427	-
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,187	434	-
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	21	0.9%	2,337	411	-

As Table 2 shows, the DUK market is generally unconcentrated or moderately concentrated, though there is one time period, the winter super peak, when it is highly concentrated. Duke Energy's pre-merger market shares vary widely, from less than one percent to more than 40 percent. Progress Energy has essentially no available capacity that is economic in the DUK market, so there is no increase in HHIs arising directly from the merger.

Table 3: Available Economic Capacity, DUK Base Case (with depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,085	26.6%	4,072	1,129	5
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,085	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,349	37.6%	3,587	1,573	(2)
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	985	28.6%	3,448	1,073	241
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,505	44.2%	7,922	2,186	7
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,121	26.5%	4,223	926	69
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	436	(2)
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,874	34.4%	5,457	1,427	(1)
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,228	496	63
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	20	0.9%	2,337	414	3

[21] Note that the entries in the tables for "Duke" and "Progress" represent energy affiliated with the utilities in the Carolinas as well as any affiliated generation allocated into the markets (*e.g.*, Duke Energy generation in PJM and in MISO).

As a merger condition, the Commission historically has required that transmission rates be depancaked and Applicants have assumed that this requirement applies to this transaction. Depancaking can cause HHI changes since Progress Energy Carolinas' generation that previously was uneconomic in the DUK BAA may now have become economic (as might other generation flowing out of or through the Progress Energy Carolinas' BAAs). The primary result of depancaking is that some Progress Energy Carolinas' generation that previously was uneconomic for delivery into the DUK BAA becomes economic due to the lower transmission cost. The result is shown in Table 3 above. As a consequence, 179 MW of Progress Energy Carolinas' available energy becomes economic as a result of the depancaking and is deemed to be delivered to the DUK market.[22] This creates a screen failure in the Summer Off-Peak period. This is a peculiar "failure" because it does not arise from combining two market participants who previously competed, but rather results from a pro-competitive reduction in transmission rate pancaking that increases the amount of capacity that is economic in the DUK market. Self-evidently, a screen failure that arises solely because the cost of imports decreases cannot signify a reduction in the competitiveness of the market.

Depancaking has a similar, and equally misleading, concentrating effect on the CPLE BAA market.

Table 4: Available Economic Capacity, CPLE (no rate depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	172	7.3%	2,343	438	1
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	98	4.0%	2,431	491	7
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	96	3.1%	3,136	364	-
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,472	33.8%	4,359	1,336	186
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	764	16.6%	4,606	555	-
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	267	5.2%	5,126	468	4
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	54	1.1%	5,113	474	-
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	732	17.4%	4,210	636	111
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	507	12
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	197	4.3%	4,624	415	7

[22] The additional energy attributed to Progress Energy (and Duke Energy) from the rate depancaking is not directly evident from this and subsequent tables. The difference between pre-merger MWs for the two applicants relative to post-merger combined MWs reflects the total effect.

As Table 4 shows, the pre-merger CPLE market is unconcentrated in all but one time period, the Summer Off-Peak in which the market is moderately concentrated both pre- and post-merger. In that period uniquely, Progress Energy Carolinas has a large amount of Available Economic Capacity. While Progress Energy Carolinas has Available Economic Capacity in 7 of the 10 time periods, amounts in all other periods are modest.[23] As shown in Table 3 (the DUK market summary), Duke Energy had 809 MW of generation that was economic in the DUK market in that time period. As shown in Table 4, 132 MW of the Duke Energy Available Economic Capacity in this time period is also economic in the CPLE market even without depancaking. The effect of the merger for that single time period is to increase the market HHI by nearly 200 points. Since the market is moderately concentrated, this is a screen failure.

As was the case with the analysis of the DUK market, taking depancaking into account increases the merger partner's market share, results in a somewhat higher HHI level and HHI change, and creates the illusion that depancaking is anti-competitive.

Table 5: Available Economic Capacity, CPLE Base Case (with depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	213	9.1%	2,343	442	6
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	139	5.7%	2,431	444	(41)
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	296	9.4%	3,136	382	19
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,489	34.2%	4,359	1,364	214
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	912	19.8%	4,606	645	90
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	496	9.4%	5,272	430	(35)
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	60	1.2%	5,113	464	(11)
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	746	17.7%	4,210	598	73
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	499	4
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	196	4.2%	4,624	414	6

As reflected in Table 5, depancaking transmission rates increases the amount of Duke Energy Carolinas' generation that is economic in CPLE by an additional 17 MW, resulting in a post-merger market share of 34.2 percent as compared to the 33.8 percent

[23] CPLE Available Economic Capacity is calculated after netting off any negative Available Economic Capacity in CPLW. This reflects, correctly, the current joint dispatch of Progress Energy Carolinas generation in the two BAAs.

reflected in Table 4.[24] This slightly magnifies the size of the HHI change relative to the 186 points shown in Table 4). This higher HHI change is a spurious result. However, the 186 point HHI change in a moderately concentrated market in the Table 4 analysis occurs even in the absence of depancaking. This is the only true Available Economic Capacity screen failure in Applicants' Carolinas BAAs.

This single screen failure does not signal a real competitive problem.[25] First of all, the single screen failure is in an off-peak period. As the Commission has found on a number of occasions, isolated screen failures in off-peak periods are not of concern.[26] The generation that operates during off-peak load conditions is baseload nuclear and coal-fired generation that cannot easily or profitably be withheld from the market in order to artificially raise market prices.

Table 6 below shows the results for CPLW. This analysis assumes that depancaking occurs. Since the results show no screen violations or near violations, a case without depancaking was not developed.

Table 6: Available Economic Capacity, CPLW

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	65	8.2%	-	0.0%	799	398	64	8.0%	799	401	3
S_SP2	$ 55	39	4.8%	-	0.0%	799	449	63	7.9%	799	425	(23)
S_P	$ 40	24	3.1%	-	0.0%	770	373	99	12.4%	799	417	43
S_OP	$ 35	36	4.5%	-	0.0%	799	388	89	11.2%	799	451	63
W_SP	$ 80	78	13.3%	-	0.0%	585	415	78	13.3%	585	418	3
W_P	$ 40	3	0.5%	-	0.0%	712	442	62	8.5%	726	397	(45)
W_OP	$ 35	7	0.9%	-	0.0%	783	407	8	1.0%	783	405	(1)
SH_SP	$ 55	62	9.2%	-	0.0%	676	465	59	8.8%	676	440	(24)
SH_P	$ 35	5	0.7%	-	0.0%	676	450	5	0.7%	676	456	6
SH_OP	$ 33	8	1.2%	-	0.0%	676	380	8	1.1%	676	385	4

[24] The HHIs also change by small amounts, sometimes negative amounts as a result of depancaking. Depancaking results in small changes in the shares of individual suppliers and in some cases small changes in the amount of imports into the BAAs.

[25] It also is notable that the 1,340 MW of Progress Energy's Available Economic Capacity is barely economic at the prices used in this analysis. Indeed, if I had used a price of $33/MW (the shoulder off-peak price) instead of the $35/MW price that I used, none of it would have been economic.

[26] *See FirstEnergy Corp.*, 133 FERC ¶ 61,222 at PP 49-50 (2010); *USGen. New England, Inc,* 109 FERC ¶ 61,361 at P 23 (2004); *Ohio Edison Co.*, 94 FERC ¶ 61,291 at 62,044 (2001); *Commonwealth Edison Co.*, 91 FERC ¶ 61,036 at 61,134 (2000).

As shown in Table 6, Progress Energy is short of capacity in each time period in the CPLW BAA. Since CPLW is not a dominant "home" utility under the AEC measure, the market is unconcentrated, pre- and post-merger, in all time periods. Since any remaining Progress Energy Carolinas' Available Economic Capacity not needed to meet CPLW load remains in the CPLE BAA, Progress Energy Carolinas never has Available Economic Capacity in CPLW. The elimination of pancaking of transmission rates generally increases Duke Energy's market share. Since Duke Energy is not a large participant in CPLW, and Duke Energy's share increase sometimes is at the expense of a larger participant, the HHI sometimes actually is reduced as a result of depancaking.

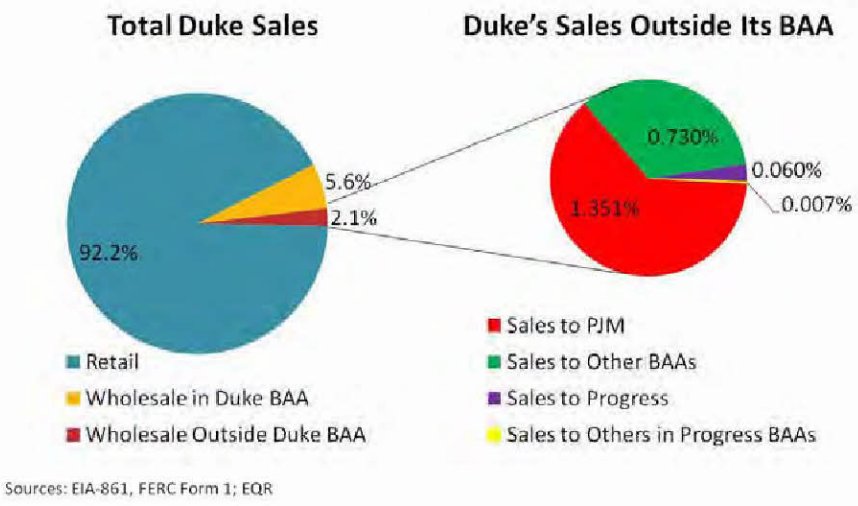
Q. EARLIER IN YOUR TESTIMONY YOU DISCUSSED THE IMPORTANCE OF PRICE LEVELS IN AVAILABLE ECONOMIC CAPACITY ANALYSES. THESE ANALYSES INDICATE THAT DUKE ENERGY CAROLINAS SHOULD BE A SMALL SELLER IN THE PROGRESS ENERGY CAROLINAS BAAS AND THAT PROGRESS ENERGY SHOULD BE AN EVEN SMALLER SELLER IN THE DUKE ENERGY CAROLINA BAA. DO EQR DATA CONFIRM THIS?

A. Yes, the EQR data do support the results of my analysis. Let me first note that there is significant municipal and cooperative load in both North Carolina and South Carolina. However, essentially all of it is served under long term, primarily cost-based contracts, primarily with Applicants. Most of these contracts are either full requirements or, for purchasers that have some generation of their own, partial requirements contracts. For these reasons, there is little opportunity for other sellers, including Duke Energy and Progress Energy, to sell to these wholesale customers outside of these long-term contracts. Further, to the extent that Duke Energy's sales into the Progress Energy Carolinas BAAs are to Progress Energy Carolinas rather than to a municipal or cooperative load, and Progress Energy Carolinas' sales into the DUK BAA are to Duke Energy rather than to a municipal or cooperative load, there is no competitive impact of the merger. The relevant competition question is whether, and to what degree, Duke Energy Carolinas and Progress Energy Carolinas currently compete with each other to sell to third parties in each other's markets. Since Duke Energy and Progress Energy do not make sales to municipal or

cooperative load or to other third parties in the other's markets, there is no loss of a competitor in that market.

Available data (from EQRs and other sources) demonstrate that there is little competition for such customers in the Carolinas' BAAs in which Applicants own generation. This is shown in Exhibit J-6 and in the following figures. The first chart illustrates the disposition of Duke Energy Carolinas' sales in 2008-10.

Figure 2: Duke Energy Carolinas' Energy Sales, 2008-2010

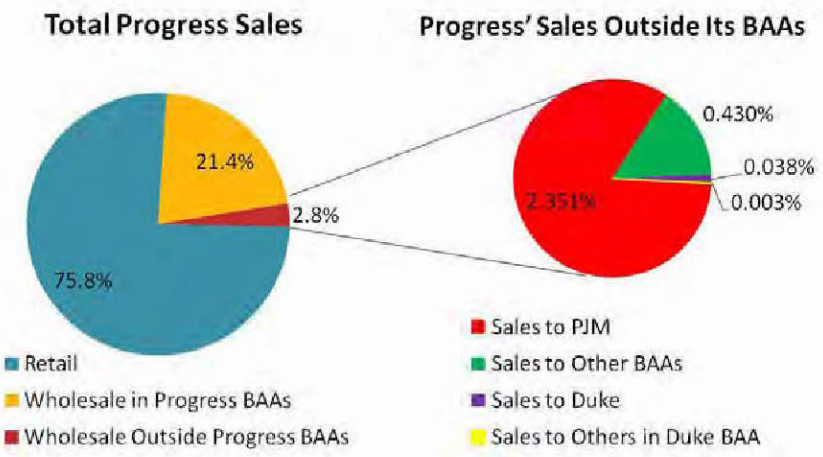


Sources: EIA-861, FERC Form 1; EQR

Duke Energy Carolinas' total wholesale sales in 2008-2010 represented only 7.7 percent of its total sales in that year, with remaining power being sold at retail. Furthermore, only 0.067 percent of these total sales were sold in the Progress Energy Carolinas BAAs. Most relevant, only 0.007 percent of Duke Energy Carolinas' sales were sold to entities in the Progress BAA other than to Progress Energy Carolinas.

The numbers are even smaller for Progress Energy Carolinas, as shown on the following chart.

Figure 3: Progress Energy Carolinas' Energy Sales, 2008-2010



Sources: EIA-861, FERC Form 1; EQR

Progress Energy Carolinas' 2008-10 wholesale sales were 24.2 percent of its total sales. However, this higher percentage of wholesale sales is due primarily to Progress Energy Carolinas' somewhat higher wholesale requirements load. Its sales into the DUK BAA were 0.041 percent of its total sales. Its sales into the DUK BAA to entities other than Duke Energy Carolinas were a miniscule 0.003 percent of its total sales.

Q. WHAT DO YOU CONCLUDE FROM THIS REVIEW OF THESE DATA?

A. These data confirm what is shown in the Available Economic Capacity analysis for these markets. Duke Energy is a small seller into the Progress Energy Carolinas BAAs and Progress Energy Carolinas is a still smaller seller into the DUK BAA. Still more importantly, the review of sales by the Applicants to third parties further illustrates that the two entities do not compete significantly to sell to third parties in the area in which their supply capabilities overlap. The combination of the two companies therefore cannot have a significant effect on competition in these markets.

Q. DID YOU PERFORM AVAILABLE ECONOMIC CAPACITY ANALYSES FOR ANY OTHER BAAS?

A. Yes. I performed Available Economic Capacity Analyses for each of the BAAs that are first tier to Applicants' Carolinas utilities. As I noted earlier, with the exception of PJM, none of these has retail access and the utilities in them remain vertically integrated. Even in the case of PJM, the primary abutting utility, Dominion Virginia Power, does not have

retail access. There are no screen failures in the Available Economic Capacity analyses in any of these markets, as I detail later in my testimony.

Q. DID YOU ALSO PERFORM ECONOMIC CAPACITY ANALYSES FOR APPLICANTS' CAROLINA BAAS AND THE FIRST TIER MARKETS?

A. Yes. As I discussed earlier in this summary, the Economic Capacity markets in the Applicants' Carolinas BAAs are highly concentrated and the merger causes substantial Economic Capacity screen failures. There also are a few Economic Capacity screen failures in first tier markets. These results are more fully portrayed in my exhibits and are discussed later in my testimony. However, they do not indicate a competitive concern, since the Economic Capacity branch of the DPT is of little if any relevance in assessing the competitive impact of a merger in markets, such as these, where nearly all of suppliers' capacity (including the Applicants') is required to be reserved to serve native and contractual loads under the active regulation of state commissions.

Q. ARE THERE HORIZONTAL COMPETITIVE EFFECTS IN ANY OTHER GEOGRAPHIC MARKETS?

A. No. As I described earlier, the effect of the merger in the MISO market (containing a material amount of Duke Energy capacity) and the Progress Energy Florida market (containing significant Progress Energy capacity) is *de minimis*, largely as a result of distance and also because Applicants have little unused economic capacity that is available to sell into those distant markets after meeting their load obligations. Consistent with the Commission's regulations, I considered potentially affected customers to be entities directly interconnected to the merging parties, as well as entities that have purchased electricity from the merging parties in the past two years.[27] With respect to direct interconnections, I examined the PJM, SC, SCEG, TVA and SOCO markets.[28] With respect to other parties purchasing electricity from Duke Energy or Progress Energy during the past two years, I focused on those in the Southeast region proximate to the Carolinas. Other than the first tier entities that already were to be

[27] 18 C.F.R. § 33.3(c)(2) (2010).

[28] *See* note 13.

analyzed for that reason, none of the other Southeastern BAAs were areas in which either Applicant made material sales.[29]

Q. ARE THERE HORIZONTAL COMPETITIVE EFFECTS IN ANY OTHER PRODUCT MARKETS?

A. No. There are no market-based capacity or ancillary services markets in the Southeast region, so that there is no basis in fact or data for analyzing these markets.[30] Long-term capacity markets are presumed to be competitive absent special factors that limit the ability of new generation to be sited or receive fuel.

Q. DOES THE MERGER RAISE ANY VERTICAL MARKET POWER CONCERNS?

A. No. The merger does not raise any vertical market power concerns. There are no issues related either to transmission ownership and operation, or to the merger-related combination of electric generation assets with fuel supplies or fuel delivery systems.

Duke Energy's Ohio, Kentucky and Indiana transmission assets are under the control of MISO. DEO and DEK have proposed to withdraw their transmission assets from MISO and join PJM as of January 1, 2012. Duke Energy Carolinas' transmission is subject to a Commission-approved Open Access Transmission Tariff ("OATT"), and has an "Independent Entity" ("IE"), MISO, that serves as a coordinator of certain transmission functions and an "Independent Monitor" ("IM"), Potomac Economics, Ltd., to monitor the transparency and fairness of the operation of its transmission system.

The transmission of Progress Energy Carolinas and Progress Energy Florida is subject to Commission-approved OATTs.

Although Duke Energy has natural gas local distribution companies ("LDCs") operating in Ohio and northern Kentucky, it owns no interstate gas transmission pipelines used to

[29] PJM was by far the largest export market for both Duke Energy Carolinas and Progress Energy Carolinas, accounting for more than two-thirds of export sales for both. In 2009, Progress Energy also made significant sales into MISO, but in 2010 they fell to only 25 GWh.

[30] 18 C.F.R. § 33.3(c)(1) (2010).

serve other shippers.[31] Progress Energy does not own an LDC or any interstate or intrastate gas transmission pipelines. Duke Energy has firm interstate pipeline transportation reservations to serve its LDC customers in Ohio and Kentucky, but these LDCs are remote from Progress Energy. Neither of the Applicants' Carolina utilities operates LDCs, and their gas consumption as generators is modest. Neither company owns coal mines. There are no other barriers to entry that raise competitive concerns. Duke Energy and Progress Energy do not have dominant control over generating sites. In the Carolinas, as elsewhere, there has been some entry by merchant generators, demonstrating that there are no characteristics unique to the Carolinas that prevent entrants from acquiring sites.

In short, the merger does not create or enhance vertical market power.

Q. YOU MENTION AT THE OUTSET OF YOUR TESTIMONY THAT THE COMPETITIVE ANALYSIS SCREEN IN APPENDIX A OF THE COMMISSION'S MERGER POLICY STATEMENT IS INTENDED TO COMPORT WITH THE DOJ/FTC HORIZONTAL MERGER GUIDELINES. HOW DO THE RECENT DOJ/FTC MODIFICATIONS TO THE GUIDELINES AFFECT THE COMMISSION'S ANALYSIS?

A. On August 19, 2010, the DOJ and FTC issued updated Horizontal Merger Guidelines ("DOJ 2010 Guidelines").[32] Among the relevant changes in the Guidelines is the way markets are defined by HHIs. The HHI presumed to delineate an unconcentrated market increases from 1000 to 1500, and mergers in unconcentrated markets are deemed unlikely to have adverse competitive effects. Moderately concentrated markets are no longer classified by HHIs between 1000 and 1800, but by HHIs between 1500 and 2500. Highly concentrated markets are no longer classified by HHIs above 1800, but by HHIs above 2500. Under the DOJ 2010 Guidelines, mergers involving an increase in the HHI of less than 100 points are unlikely to have adverse competitive effects; mergers in moderately or highly concentrated markets that involve an increase in the HHI of more than 100

[31] Duke Energy owns a very short interstate gas pipeline, K-O Transmission Company, which runs under the Ohio River to serve the Duke Energy LDCs noted above.

[32] http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf.

points potentially raise significant competitive concerns; and mergers in highly concentrated markets that involve an increase in the HHI of 200 points or more will be presumed to be likely to enhance market power in the absence of substantial evidence to the contrary. These thresholds are not intended to be used as a rigid screen to distinguish acceptable from anticompetitive mergers, but rather they identify cases in which further examination of a merger may be required to ensure that there will be no anticompetitive effects.

Because the Commission's regulations were based on the DOJ/FTC Horizontal Merger Guidelines that existed previous to the 2010 changes to the Guidelines, my analysis uses the FERC conventions based on the older thresholds for defining market concentration and acceptable HHI changes rather than the revised DOJ/FTC guidelines.

Q. WOULD THE MERGER FULLY PASS THE MODIFIED COMPETITIVE ANALYSIS SCREEN PROPOSED BY DOJ/FTC?

A. The screen failures in both the DUK and CPLE markets would be eliminated, since the market HHI, post-merger, is below 1,500. This is true whether or not depancaking of rates is considered.

II. DESCRIPTION OF THE PARTIES

Duke Energy

Q. PLEASE DESCRIBE DUKE ENERGY.

A. Duke Energy is a public utility holding company. Duke Energy's regulated utility operations operate in five states in the Southeast and Midwest, including electric service to customers in the Carolinas, Ohio, Kentucky and Indiana, and retail gas service to customers in Ohio and Kentucky.

As described earlier, the Duke Energy electric utility operating companies are DEC, DEI, DEO and DEK. DEO and DEK also distribute and sell natural gas in Ohio and Kentucky, respectively. These electric and gas operations are subject to the rules and regulations of FERC, as well as state regulatory commissions in North Carolina, South Carolina, Ohio, Indiana and Kentucky.

The Duke Energy operating companies and their jurisdictional affiliates are authorized to sell power at market based rates, with the exception of sales within the DUK BAA. DEO is the only one of the operating companies in a state (Ohio) that has implemented retail competition. Approximately 85 percent of DEO's former native load continues to be served by Duke Energy companies, either as native load or as a Competitive Retail Electric Service supplier.

DEO and DEK have proposed to withdraw their transmission assets from MISO and join PJM as of January 1, 2012, which, assuming that the change occurs as planned, will result in approximately 5,000 MW of generation owned by DEO and DEK "moving" from MISO to PJM. Duke Energy currently owns about 3,000 MW of generation in PJM.

Duke Energy Generation Services ("DEGS") is a non-regulated affiliate of Duke Energy that develops wind, solar and biopower projects. DEGS' wind power in commercial operation in reflected in Exhibit J-3. Additionally, it has more than 5,000 MW of wind energy projects in the development pipeline, and has committed more than $1 billion to its wind power business since its launch in 2007. DEGS also builds, owns and operates electric generation for large energy consumers, municipalities, utilities and industrial

facilities. DEGS manages 6,300 MW of power generation at 21 facilities in the United States.[33] DEGS also has created solar photovoltaic, biomass, energy storage and a commercial transmission business.

Q. PLEASE PROVIDE ADDITIONAL DETAIL ON DUKE'S CONTROLLED GENERATION.

A. Information concerning Duke's generation is contained in Exhibit J-3,[34] which reflects current generation as well as 2012 generation and purchases. Of greatest relevance to this analysis is the generation controlled by Duke Energy Carolinas. Currently, Duke Energy Carolinas owns 19,102 MW of generation, consisting of 5,173 MW of nuclear capacity, 7,654 MW of coal-fired capacity, 1,066 MW of conventional hydro capacity, 3,119 MW of combustion turbines and 2,090 MW of pumped storage capacity.

Progress Energy

Q. PLEASE DESCRIBE PROGRESS ENERGY.

A. Progress Energy is a public utility holding company. Progress Energy owns two major electric utilities that serve customers in the Carolinas (Progress Energy Carolinas) and Florida (Progress Energy Florida). Progress Energy Carolinas' retail service area includes much of the eastern half of North Carolina, the northeastern quadrant of South Carolina and the Asheville area in western North Carolina. Progress Energy Florida's retail service area includes portions of central Florida, including metropolitan St. Petersburg, Clearwater and the greater Orlando area.

These electric operations are subject to the rules and regulations of FERC, as well as state regulatory commissions in North Carolina, South Carolina, and Florida. Neither Progress Energy Carolinas nor Progress Energy Florida operates in states that have implemented retail competition.

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[33] None of this generation is "controlled" by Duke Energy in the sense that the Commission deems an entity to control generation. *See* note 62.

[34] Data in Exhibits J-3 and J-4 represent summer capacity ratings.

Progress Energy Carolinas and Progress Energy Florida are authorized to sell power at market based rates, with the exception of sales within CPLW and CPLE and sales within Peninsular Florida.

Progress Energy does not have a competitive retail supply business.

Q. PLEASE PROVIDE MORE INFORMATION CONCERING PROGRESS'S CONTROLLED GENERATION.

A. Progress's controlled generation is summarized in Exhibit J-4. Of greatest interest to analyzing the competitive effects of this transaction is the generation controlled by Progress Energy Carolinas. Currently, Progress Energy Carolinas owns or controls 12,601 MW of generation, consisting of 3,482 MW of nuclear capacity,[35] 5,204 MW of coal capacity,[36] 543 MW of combined cycle capacity, 3,144 MW of combustion turbines and 228 MW of hydro.

[35] This includes 486 MW of nuclear generation owned by the third-party co-owners of the generation.

[36] This includes 210 MW of coal-fired generation owned by the third-party co-owners of the generation.

III. FRAMEWORK FOR THE ANALYSIS

Q. WHAT ARE THE GENERAL MARKET POWER ISSUES RAISED BY MERGER PROPOSALS?

A. Market power is the ability of a firm profitably to maintain prices above competitive levels for a significant period of time. Market power analysis of a merger proposal examines whether the merger would cause a material increase in the merging firms' market power or a significant reduction in the competitiveness of relevant markets. The focus is on the effects of the merger, which means that the merger analysis examines those business areas in which the merging firms are competitors. This is referred to as horizontal market power assessment. In most instances, a merger will not affect competition in markets in which the merging firms do not compete. In the context of the proposed merger, therefore, the focus is properly on those markets in which Duke Energy and Progress Energy are actual or (under some circumstances) potential competitors. The analysis is intended to measure the adverse impact, if any, of the elimination of a competitor as a result of the combination.

Potential vertical market effects of the merger relate to the merging firms' ability and incentives to use their market position over a product or service to affect competition in a related business or market. For example, vertical effects could result if the merger of two electric utilities created an opportunity and incentive to operate transmission in a manner that created market power for the generation activity of the merged company that did not exist previously. The Commission has identified market power as also arising from dominant control over potential generation sites or over fuels supplies and delivery systems. Such dominant control could undercut the presumption that long-run generation markets are competitive.

Q. WHAT ARE THE MAIN ELEMENTS IN DEVELOPING AN ANALYSIS OF MARKET POWER?

A. Understanding the competitive impact of a merger requires defining the relevant market (or markets) in which the merging firms participate. Participants in a relevant market include all suppliers, and in some instances potential suppliers, who can compete to

supply the products produced by the merging parties and whose ability to do so diminishes the ability of the merging parties to increase prices. Hence, determining the scope of a market is fundamentally an analysis of the potential for competitors to respond to an attempted price increase. Typically, markets are defined in two dimensions: geographic and product. Thus, the relevant market is composed of companies that can supply a given product (or its close substitute) to customers in a given geographic area.

Horizontal Market Power Issues

Q. HOW HAS THE COMMISSION TYPICALLY EXAMINED PROPOSED MERGERS INVOLVING ELECTRIC UTILITIES?

A. In December 1996, the Commission issued Order No. 592,[37] the "Merger Policy Statement," which provides a detailed analytic framework for assessing the horizontal market power arising from electric utility mergers. This analytic framework is organized around a market concentration analysis. The Commission adopted the DOJ/FTC *Horizontal Merger Guidelines* methodology of measuring market concentration levels by the HHI as its principal screen for merger-related market power. To determine whether a proposed merger requires further investigation because of a potential for a significant anti-competitive impact, the DOJ and FTC consider the level of the HHI after the merger (the post-merger HHI) and the change in the HHI that results from the combination of the market shares of the merging entities. The Commission adopted the then-current *Guidelines*' standards for market classification. Markets with a post-merger HHI of less than 1000 are considered "unconcentrated." The DOJ and FTC generally consider mergers in such markets to have no anti-competitive impact. Markets with post-merger HHIs of 1000 to 1800 are considered "moderately concentrated." In those markets, mergers that result in an HHI change of 100 points or fewer are considered unlikely to have anti-competitive effects. Finally, post-merger HHIs of more than 1800 are considered to indicate "highly concentrated" markets. The *Guidelines* suggest that in these markets, mergers that increase the HHI by 50 points or fewer are unlikely to have a significant anti-competitive impact, while mergers that increase the HHI by more than 100 points are considered likely to reduce market competitiveness. On November 15,

[37] Order No. 592, FERC Stats and Regs. ¶ 31,044 (1996).

2000, the Commission issued its Revised Filing Requirements Under Part 33 of the Commission's Regulations,[38] which affirmed the screening approach to mergers consistent with the Appendix A analysis set forth in the Merger Policy Statement, and codified the need to file a screen analysis and the exceptions therefrom. As noted above, in 2010, the DOJ/FTC *Merger Guidelines* were revised, incorporating changes in the definition of market concentration based on HHIs.[39]

Appendix A of the Merger Policy Statement, the Competitive Analysis Screen, specifies a "delivered price" screening test, referred to as the DPT herein, to measure Economic Capacity, defined as energy that can be delivered into a destination market at a delivered cost less than 105 percent of the destination market price. The DPT screening test also provides for an analysis of Available Economic Capacity, defined as Economic Capacity over and above that required to meet native load and other long-term obligations that meets the delivered price test.

If a proposed merger raises no market power concerns (*i.e.*, passes the Appendix A screen), the inquiry generally is terminated. Both the Merger Policy Statement and the Revised Filing Requirements accept that merger applications involving no overlap in relevant geographic markets do not require a screen analysis or filing of the data needed for the screen analysis.[40]

The DPT is intended to be a conservative screen to determine whether further analysis of market power is necessary. If the Appendix A analysis shows that a company will not be able to exercise market power in the destination markets where their generation resides, it generally follows that the applicants will not have market power in more broadly defined and more geographically remote markets. The screen is the first step in determining whether there is a need for further investigation. If the screening test is not passed, leaving open the issue of whether the merger will create market power, the Commission

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[38] Order No. 642, Final Rule in Docket No. RM98-4-000, 18 CFR Part 33, 93 FERC ¶ 61,164 (2000) ("Revised Filing Requirements").

[39] *See* note 32 and corresponding text.

[40] 18 C.F.R. ¶ 33.3(a)(2)(i) (2010).

invites applicants to propose mitigation remedies targeted to reduce potential anti-competitive effects to safe harbor levels. In the alternative, the Commission will undertake a proceeding to determine whether unmitigated market power concerns mean that the merger is contrary to the public interest.

Q. WHAT PRODUCTS HAS THE COMMISSION GENERALLY CONSIDERED?

A. The Commission generally has been concerned with three relevant product markets: non-firm energy, short-term capacity (firm energy) and long-term capacity. Both Economic Capacity and Available Economic Capacity[41] are used as measures of energy. I note that competitive conditions in the energy market in peak periods closely correlate with conditions in capacity markets.

Under the Economic Capacity and Available Economic Capacity measures, energy production capability that is attributed to a market participant is that capacity controlled by it that can reach the destination market, taking transmission constraints and costs into account, at a variable cost no higher than 105 percent of the destination market price. As described above, the two measures differ as to the treatment of capacity used to meet native load requirements.

The Commission has determined that long-term capacity markets are presumed to be competitive, unless special factors exist that limit the ability of new generation to be sited or receive fuel.[42]

Order No. 642 directs applicants to analyze relevant ancillary services markets (specifically, reserves and imbalance energy) "when the necessary data are available." In the Carolinas, which is the focus of the competition analysis, there are no formalized

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[41] As I noted in the Summary of Conclusions and discuss in more detail below, Available Economic Capacity is the relevant measure in the context of non-restructured markets such as those in the Carolinas.

[42] The market for long-term capacity generally does not need to be analyzed since the Commission has concluded as a generic matter that the potential for entry ensures that the long-term capacity market is competitive. *See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Servs. by Pub. Utils.; Recovery of Stranded Costs by Pub. Utils. & Transmitting Utils.*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,657 (1996). The presumption that long-term capacity markets are competitive can be overcome if the applicants have dominant control over power plant sites or fuels supplies and delivery systems. This exception is addressed below.

ancillary services markets. Ancillary services are either self-provided or provided as part of the transmission tariffs. The lack of such markets means that the relevance of an analysis of ancillary services is questionable and, in any event, the requisite data do not exist.

Q. HOW HAS THE COMMISSION ANALYZED GEOGRAPHIC MARKETS?

A. Traditionally, the Commission has defined the relevant geographic markets as centered on the areas where applicants own generation and on the balancing authority areas directly interconnected with the applicants' generation. Both Order No. 592 and the Revised Filing Requirements continue to define the relevant geographic market in terms of destination markets.[43] Further, in a merger context, the Commission considers as potential additional destination markets other utilities that historically have been customers of the applicants.

Destination markets typically are defined as individual BAAs (previously, control areas). However, the Commission's practice has been to aggregate customers that have the same supply alternatives into a single destination market, and Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") generally are default markets where applicable.[44] The Commission's indicative screens for purposes of determining eligibility to obtain authority to sell at market-based rates also use BAAs or RTOs/ISOs as default geographic markets.[45] In cases where transmission constraints exist within an RTO/ISO, the Commission also has considered submarkets as separate geographic markets.[46]

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[43] 18 C.F.R. 33.3(c)(2) (2010). "Identify each wholesale power sales customer or set of customers (destination market) affected by the proposed transaction. Affected customers are, at a minimum, those entities directly interconnected to any of the merging entities and entities that have purchased electricity at wholesale from any of the merging entities during the two years prior to the date of the application." *Id.*

[44] Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,890-1 (2000), citing *Atlantic City Elec. Co.*, 80 FERC ¶ 61,126 (1997); *Consolidated Edison, Inc.*, 91 FERC ¶ 61,225 (2000). To the extent there are internal transmission constraints within these markets, the Commission has considered smaller markets within these single control areas as potentially relevant.

[45] *Order No. 697* at P 231.

[46] *Id.* at P 246 (citing to a number of Commission decisions involving electric utility mergers).

In the context of the instant merger, as discussed in the summary and detailed below, the appropriate focus of the competitive analysis is on the DUK, CPLE and CPLW BAAs, and the BAAs that are directly interconnected with them. I also considered the effect of the merger on MISO and the PEF BAA markets, but demonstrate that the degree of competition between the merging parties is *de minimis*.

Vertical Market Power Issues

Q. WHAT ARE THE POTENTIALLY RELEVANT VERTICAL MARKET POWER ISSUES?

A. In the Revised Filing Requirements, the Commission set out several vertical issues potentially arising from mergers with input suppliers. The principal issue identified is whether the merger may create or enhance the ability of the merged firm to exercise market power in downstream electricity markets by control over the supply of inputs used by rival producers of electricity. Three potential abuses have been identified: the upstream firm has the ability to raise rivals' costs or foreclose them from the market in order to increase prices received by the downstream affiliate; the upstream firm has the ability to facilitate collusion among downstream firms; or transactions between vertical affiliates could be used to frustrate regulatory oversight of the cost/price relationship of prices charged by the downstream electricity supplier.[47] The downstream products to be analyzed in a vertical analysis are the same as in the horizontal analysis.

With respect to the vertical analysis, the Commission proposes defining the downstream geographic and product markets in the same manner as in the horizontal analysis. For upstream markets, the relevant geographic market has not been defined by the Commission. In concept, it should include the area in which suppliers to generators competing in the downstream market are located.

[47] While Order No. 642 identifies these three types of effects, the third is more properly an effect on rates and regulation, review criteria that exist separately from market power.

Q. HOW DOES THE FRAMEWORK FOR ASSESSING VERTICAL MARKET POWER DIFFER FROM THE HORIZONTAL ANALYSIS FRAMEWORK?

A. For the vertical market power screen, the Commission's focus is on the structural competitiveness of downstream and upstream product markets, as measured by HHIs. The main difference from the horizontal analysis is that in the vertical analysis, the focus is not on the change in HHIs resulting from the merger, but on the structure of those upstream and downstream product markets in geographic markets in which one or both merging parties sells upstream products and in which the other or both merging parties sells downstream products.

Q. WHAT ARE THE VERTICAL ISSUES THAT THE COMMISSION HAS FOUND REQUIRE INVESTIGATION IN THE CONTEXT OF MERGERS BETWEEN ELECTRIC UTILITIES AND GAS TRANSPORTATION PROVIDERS?

A. The Commission has expressed its concern, in decisions addressing "convergence mergers" between electric utilities and natural gas pipelines and in Order No. 642, that vertical mergers "may create or enhance the incentive and/or ability for the merged firm to adversely affect prices and output in the downstream electricity market and to discourage entry by new generators."[48]

In addition to the three generic areas of vertical concern noted above, the Commission also has expressed concerns that (a) convergence mergers involving an upstream gas supplier serving the downstream merger partner, as well as competitors of that partner, could result in preferential terms of service; and (b) a pipeline serving electric generation could provide commercially valuable information to newly affiliated electricity generating or marketing operations.

Finally, the Commission also has expressed the concern that an entity that controls electric transmission could use that control to favor its own generation.

[48] Order No. 642, FERC Stats. & Regs. ¶ 31,111 at 31,904 (2000).

Q. HOW DOES THE COMMISSION DIRECT THAT VERTICAL MARKET POWER ISSUES BE ANALYZED?

A. The Commission has stated that a necessary condition for a convergence merger to cause a vertical concern is that both the upstream and downstream markets are highly concentrated.[49] In other words, the screen is passed if the downstream (or upstream) market is not highly concentrated, irrespective of the degree of concentration of the upstream (or downstream) market. In the context of this merger, which does not involve ownership of interstate natural gas pipelines *per se*, but merely control over shares of delivery capacity, a potential consideration is Duke Energy's and Progress Energy's contractual rights to use the interstate pipeline delivery system into the relevant markets. Notwithstanding the analysis framework set forth in Order No. 642, merger applicants' contractual transportation rights have not been at the core of past vertical market power inquiries, and the Commission has recognized that open access gas pipeline regulations prevent sellers from withholding such capacity.[50]

I have not conducted a vertical analysis of this merger because the "merging entities currently do not provide inputs to electricity products (i.e., upstream relevant products) and electricity products (i.e., downstream relevant products) in the same geographic markets."[51] Although Duke Energy operates LDCs in Ohio and Kentucky, Progress Energy does not own an LDC. Moreover, Duke Energy's LDCs are geographically remote from the Carolina markets of primary interest in evaluating this transaction. Both companies' utilities in the Carolinas operate primarily nuclear and coal-fired generation fleets; as a result their contractual natural gas transportation rights are small relative to

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[49] "[H]ighly concentrated upstream and downstream markets are necessary, but not sufficient, conditions for a vertical foreclosure strategy to be effective . . . ." *Id.* at 31,911. "A vertical merger can create or enhance the incentive and ability of the merged firm to adversely affect electricity prices or output in the downstream market by raising rivals' input costs if market power could be exercised in both the upstream and downstream geographic markets." *Id.* at 31,904. This was confirmed in *Energy East.* "Applicants correctly conclude that because they have shown that the downstream markets are not highly concentrated, there is no concern about foreclosure or raising rivals' costs in this case." *Energy East Corp.*, 96 FERC ¶ 61,322 at 62,229 (2001).

[50] As the Commission noted in *Order No. 697* in connection with market-based rate authority, "its open access regulations adequately prevent sellers from withholding interstate pipeline capacity. In addition, interstate pipeline capacity held by firm shippers that is not utilized or released is available from the pipeline on an interruptible basis." Order No. 697 at P 430.

[51] 18 CFR 33.4(a)(2)(i) (2010).

parties serving natural gas customers or burning large amounts of gas in boilers. Since Duke Energy's gas transportation assets are remote from Progress Energy's generation, there is no "convergence" of control over electric generation and gas transportation of the type that concerned the Commission in crafting Order No. 642.

With respect to ownership of electric transmission facilities, the Commission in the past has focused on the extent to which the transmission owner provides open-access transmission or has transferred operational control over its transmission facilities to an ISO or an RTO. Applicants' transmission systems are either controlled by RTOs, or subject to Commission-approved OATTs. Further, Duke Energy Carolinas' transmission currently is overseen by an Independent Entity and monitored by an Independent Monitor, which will continue post-merger.

IV. DESCRIPTION OF METHODOLOGY

Q. PLEASE SUMMARIZE THE METHODOLOGY THAT YOU USED TO ANALYZE THE COMPETITIVE EFFECTS OF THE MERGER.

A. I evaluated the competitive effects of the merger using the delivered price test outlined in Appendix A and the Revised Filing Requirements. I implemented this analysis using a proprietary CRA model called the "Competitive Analysis Screening Model" ("CASm"). The source and methodology for the data required to conduct the delivered price test are described in Exhibit J-7. A technical description of CASm is provided in Exhibit J-8. As is appropriate for this merger in which neither party controls significant upstream assets, the focus is on horizontal effects of the merger.[52]

Q. WHAT DESTINATION MARKETS DID YOU CONSIDER?

A. Consistent with the instructions in the Revised Filing Requirements, I identified the destination markets that could potentially be impacted by the merger. The first step in determining the potentially relevant markets is to identify where each of the Applicants own or control generation. I previously provided an illustration of the service territories of the Applicants in Figure 1.

Tables 7 to 9 below present a summary of the location of Applicants' generation, taking into consideration long-term purchases, retirements and additions as of summer 2012.

Table 7: Applicants' Generation and Purchases in Carolinas (2012 MW)

Market	Duke Energy	Progress Energy
DUK	19,963	0
CPL	0*	14,514

* Progress Energy Carolinas has a long-term purchase of capacity and energy from a third-party generating facility in DUK (Broad River). When economic, this generation is treated as if located in CPL.

[52] Consistent with 18 C.F.R. §§ 33.3(a)(2)(i), 33.4(a)(2) (2010), a numeric vertical analysis is not needed since the merging entities "do not provide inputs to electricity products (*i.e.*, upstream relevant products) and electricity products (*i.e.*, downstream relevant products) in the same geographic markets" and/or "the extent of the business transactions in the same geographic market is *de minimis*."

Table 8: Applicants' Generation in PJM and MISO (Current Location) (2012 MW)

Market	Duke Energy	Progress Energy
PJM	3,089	0
MISO*	12,606	0
* Includes 198 MW of Duke Energy's generation in OVEC.		

Table 9: Applicants' Generation and Purchases in Other Markets (2012 MW)

Market	Duke Energy	Progress Energy
FPC	0	12,031
WECC	421	0
ERCOT	495	0

Given the location of Applicants' generation, and based on my review of supply conditions and market structure, I analyzed the following relevant geographic markets: DUK, CPLE, and CPLW; their first-tier interconnected markets (PJM, SC, SCEG, TVA and SOCO); and MISO and FPC.

Q. WHAT TIME PERIODS/LOAD CONDITIONS DID YOU ANALYZE?

A. I examined ten time periods/load conditions in the context of the DPT. I used these ten time periods for both the Economic Capacity and Available Economic Capacity analyses. While the taxonomy is largely dictated by Commission policy and precedent, it is useful to recall that the origin of the DPT time periods is to provide snapshots that reflect a broad range of system conditions. Broadly, I evaluated hourly load data to aggregate similar hours. I defined periods within three seasons (Summer, Winter and Shoulder) to reflect the differences in unit availability, load and transmission capacity. Hours were first separated into seasons to reflect differences in generating availability and then further differentiated by load levels during each season.[53] For each season, hours were

[53] Appendix A requires applicants to evaluate the merger's impact on competition under different system conditions. For example, aggregating summer peak and shoulder peak conditions may mask important differences in unit availability and, therefore, a merger could potentially affect competition differently in these seasons. Thus, applicants are directed to evaluate enough sufficiently different conditions to show the merger's impact across a range of system conditions. On the other hand, the DOJ/FTC *Horizontal Merger Guidelines* discuss the ability to "sustain" a price increase, and a finding that a structural test (like the HHI statistic)

segmented into peak- and off-peak periods.[54] The periods evaluated (and the designations used to refer to these periods in exhibits) are:

SUMMER (June-July-August)

Super Peak 1 (S_SP1):	Top load hour
Super Peak 2 (S_SP2):	Top 10% of peak load hours
Peak (S_P):	Remaining peak hours
Off-peak (S_OP):	All off-peak hours

WINTER (December-January-February)

Super Peak (W_SP):	Top 10% of peak load hours
Peak (W_P):	Remaining peak hours
Off-peak (W_OP):	All off-peak hours

SHOULDER (March-April-May-September-October-November)

Super Peak (SH_SP):	Top 10% of peak load hours
Peak (SH_P):	Remaining peak hours
Off-peak (SH_OP):	All off-peak hours

Q. WHAT "COMPETITIVE" PRICE LEVELS DID YOU ANALYZE IN YOUR ANALYSES?

A. I evaluated conditions assuming destination market prices ranging from prices in the Off-Peak periods in which only baseload generation is economic to high prices in the highest Summer Super Peak period during which all but the least economic generation is in merit. In Order No. 642, the Commission indicated that sub-periods within a season should be determined by load levels rather than by time periods. As discussed below, I analyzed each market at prices that range from the levels that would apply at the lowest load levels to those consistent with the highest load levels. These prices analyzed were selected based on a review of several categories of information. The starting point was

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violates the safe harbor for some small subset of hours during the year may not be indicative of any market power problems.

[54] Peak and off-peak hours were defined according to NERC's definition, except that I did not consider Saturdays to be peak days. For the Eastern Time Zone, on-peak hours include Hour Ending (HE) 0800–HE 2300 EST Monday through Saturday and off-peak hours include HE 2400–HE 0700 EST Monday through Saturday. *See* http://www.nerc.com/files/opman_12-13Mar08.pdf.

Duke Energy Carolinas' and Progress Energy Carolinas' system lambdas for 2009 and 2010. A review of the methodologies used by the utilities in creating the lambda data demonstrated that the system lambdas would be valid measures of market prices. Lambdas were adjusted to the 2012 year for the analysis to reflect changes in the price of the relevant fuel.

Because Available Economic Capacity analyses are sensitive to price assumptions, I cross-checked the lambda-based prices in a variety of ways. I compared the supply stacks of Applicants' generation against load levels characteristic in each time period to determine what units typically are on the margin in each period. I reviewed the capacity factors of Applicants' generating units to determine in which periods they were likely to be inframarginal, marginal or extramarginal. I reviewed the Ventyx price forecasts for the area. As a further check, I validated the model results based on the selected prices by comparing the Applicants' short term wholesales sales and, particularly, exports into each other's BAAs predicted by the model, to the actual transactions shown in the EQR filings.

Ultimately, prices generally consistent with the system lambdas were selected. These prices range from $33/MWh in shoulder off-peak to $80/MWh in summer super-peak. These broad ranges of prices should be reflective of a sufficient range of system conditions such that a full effect of the merger is captured in the analyses. In addition, I conducted price sensitivity analyses around these base case prices, which evaluated somewhat higher and lower prices.[55]

Q. PLEASE DESCRIBE THE BASIC MODEL ARCHITECTURE YOU USED IN ANALYZING THIS MERGER.

A. I used CRA's proprietary model, CASm, to perform the analysis. CASm is a linear programming model developed specifically to perform the calculations required in undertaking the DPT and has been used to provide analyses supporting scores of filings before the Commission. The model includes each potential supplier as a distinct "node" or area that is connected via a transportation (or "pipes") representation of the

[55] These sensitivity analyses are provided in workpapers and are discussed in general terms in Exhibit J-7.

transmission network. Each link in the network has its own non-simultaneous limit and cost. Potential suppliers are allowed to use all economically and physically feasible links or paths to reach the destination market. In instances where more generation meets the economic element of the DPT (*e.g.*, 105 percent of the market price) than can actually be delivered on the transmission network, transmission capacity is allocated based on the relative amount of economic generation that each party controls at a constrained interface.

Q. HOW DID YOU ALLOCATE TRANSMISSION CAPACITY?

A. Appendix A notes that there are various methods for allocating transmission and that applicants should support the method used.[56] I allocated transmission based on a prorata, "squeeze down" method based on relative ownership shares of capacity at a transmission interface, rather than on the basis of economics, which would allocate limited transmission first to the generation with the lowest variable costs. The prorata "squeeze-down" method, so-named because it seeks to prorate capacity at each node, is the closest approximation to what the Commission applied in *FirstEnergy*[57] that is computationally feasible. Under this method, shares of available transmission are allocated at each interface, diluting the importance of distant capacity as it gets closer to the destination market. When there is economic supply (*i.e.*, having a delivered cost less than 105 percent of the destination market price) competing to get through a constrained transmission interface into a control area, the transmission capability is allocated to the suppliers in proportion to the amount of economic supply each supplier has outside the interface. This transaction does not change any of the existing priorities for accessing transmission into or between the Applicants. I therefore allocated all available transmission capacity (*i.e.*, transmission capacity that was not already reserved for

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[56] See Order No. 592, FERC Stats. and Regs., ¶ 31,044 at 30,133. "In many cases, multiple suppliers could be subject to the same transmission path limitation to reach the same destination market and the sum of their economic generation capacity could exceed the transmission capability available to them. In these cases, the ATC must be allocated among the potential suppliers for analytic purposes. There are various methods for accomplishing this allocation. Applicants should support the method used." *Id.*

[57] *Ohio Edison Co..,* 80 FERC ¶ 61,039 at 61,106-7. "When there was more economic capacity (or available economic capacity) outside of a transmission interface than the unreserved capability would allow to be delivered into the destination market, the transmission capability was allocated to the suppliers in proportion to the amount of economic capacity each supplier had outside the interface." *Id.*

specific transactions or held for Transmission Reliability Margin ("TRM")) on the interfaces between Duke Energy Carolinas and Progress Energy Carolinas on the same pro rata basis.[58]

Shares on each transmission path are based on the shares of deliverable energy at the source node for the particular path being analyzed. The calculations start at the outside of a network, defined with the destination market as its center, and end at the destination market itself. A series of decision rules are required to accomplish this proration. The purpose of these decision rules is limited to assigning a unique power flow direction to each link for any given destination market analysis. Once the links are given a direction, the complex network can be solved. CASm implements a series of rules to determine the direction of the path. The first rule (and the one expected to be applied most frequently) is based on the direction of the flow under an economic allocation of transmission capacity. Other options take into consideration the predominant flow on the line based on desired volume (the amount of economic capacity seeking to reach the destination market, the number of participants seeking to use a path in a particular direction, and the path direction that points toward the destination market).

The model proceeds to assign suppliers at each node a share equal to their maximum supply capability. At each node, "new" suppliers (those located at the node outside of the next interface) are given a share equal to their supply capability, and the shares of more distant suppliers (those who have had to pass through interfaces more remote from the destination market in order to reach the node) are scaled down to match the line capacity into the node. Ultimately, the shares at the destination market represent the prorated shares of Economic Capacity (or Available Economic Capacity) that is economically and physically feasible.

This is the same modeling architecture that I have used to analyze numerous previous mergers in testimony relied upon by the Commission. A summary of the transmission architecture used in analyzing the relevant markets is included in Exhibit J-7.

[58] Existing 2012 reservations, including Applicants' reservations, are assumed to continue post-merger.

Q. WHAT MEASURE OF SIMULTANEOUS IMPORT TRANSMISSION LIMIT ("SIL") DID YOU USE?

A. Analyses of destination markets require information regarding the amount of energy that can be imported into the market and compete with internal generation. The level of competitive imports is limited to the destination market's SIL. The transmission planning groups at Duke Energy Carolinas and Progress Energy Carolinas calculated SILs for their own BAAs, and for first-tier BAAs[59] (other than PJM). For PJM, I used the SIL calculated for use in my DPT analysis of the recently completed FirstEnergy-Allegheny Energy merger.[60]

Q. WHAT YEAR DID YOUR ANALYSIS COVER?

A. I analyzed 2012 market conditions, consistent with the Order No. 642 requirement that the analysis be forward looking. Strictly speaking, the period used is December 2011 through November 2012.

Even though my analysis approximates 2012 market conditions, the primary source of data on generation and transmission is current and recent historical data. Where appropriate, I adjusted relevant data to approximate expected 2012 conditions. As described in Exhibit J-7, this includes load and generation dispatch (*i.e.*, fuel and other variable) costs. As I detail below, I reflected generation additions and retirements reported in both the Duke Energy Carolinas and Progress Energy Carolinas 2010 IRPs.[61] I also included other planned generation or retirements in the Carolinas (as well as elsewhere) reported to occur by 2012.

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[59] In 2009, the Commission approved SILs for the Southeast Region BAAs. *Order on Simultaneous Transmission Import Limit Studies for the Southeast Region*, 128 FERC ¶ 61,039 (2009). However, because these SILS were for a 2005-2006 historical period, I deemed them not applicable to my analysis, which is based on a 2012 forecast period.

[60] *See* Application of FirstEnergy Corp. and Allegheny Energy, Inc., Docket No. EC10-68-000, Testimony of William H. Hieronymus, June 21, 2010. These SILs take into account the integration of the American Transmission Systems, Inc. into PJM expected to occur on June 1, 2011. The SILs, however, do not take into account the proposed integration of DEO and DEK into PJM expected to occur in 2012. Given the relatively small impact of the merger in PJM, any adjustments to these SILs (up or down) would not have a material effect on the results of my analysis, and would have no effect on my conclusion that there is no material impact on competition in PJM.

[61] *See* notes 10 and 11.

Q. HOW DO YOU ACCOUNT FOR LONG-TERM PURCHASES AND SALES?

A. In the first few years after the Merger Policy Statement was issued, I treated essentially all long-term power arrangements as resulting in a transfer of ownership and control to the purchaser. The Commission's current policy appears to favor assigning control to the contractual party with dispatch rights.[62] For most purchases and sales, I am unable to determine whether the seller or buyer has control[63] and in those cases I assigned control to the buyer. In any event the general treatment of purchases and sales is inconsequential in terms of the results of my analysis, except with respect to those affecting Applicants' contracts. As described below, I have assumed, as appropriate, that contracts transferring control to Applicants are treated as such.

Duke Energy Carolinas has about 270 MW of long-term purchases in 2012 and beyond: Cherokee Cogeneration (88 MW), an allocation of SEPA power (59 MW), and 123 MW of miscellaneous smaller purchases.

Progress Energy Carolinas has about 1,200 MW of long-term purchases in 2012 and beyond: Broad River (850 MW), Rowan (145 MW), and an allocation of SEPA power (95 MW). Progress Energy Carolinas has an additional 133 MW of purchases (Roxboro and Southport) whose contracts ended in December 2009, but for which purchases continue pending resolution of a dispute. I conservatively included these in my analysis as PEC-controlled purchases.

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62 *See* 18 C.F.R. § 33.3(c)(4)(i)(A), stating: Economic capacity means the amount of generating capacity owned or controlled by a potential supplier with variable costs low enough that energy from such capacity could be economically delivered to the destination market. Prior to applying the delivered price test, the generating capacity meeting this definition must be adjusted by subtracting capacity committed under long-term firm sales contracts and adding capacity acquired under long-term firm purchase contracts (*i.e.*, contracts with a remaining commitment of more than one year). The capacity associated with any such adjustments must be attributed to the party that has authority to decide when generating resources are available for operation. Other generating capacity may also be attributed to another supplier based on operational control criteria as deemed necessary, but the applicant must explain the reasons for doing so. *Id.*

63 This uncertainty arises both from ambiguity in the Commission's guidance and a lack of access to contract terms. Some of the ambiguity would remain even with more bright line guidance and full disclosure of contract terms. An example is a unit contingent contract (tolling or otherwise) in which the buyer has the right to nominate output from the unit. However, the seller controls whether the unit is made available (typically subject to penalties for non-availability). Moreover, if the buyer does not nominate the output, the seller frequently has the right to dispatch the plant for its own account. Given this mixture of circumstances, it is not wholly clear which party has "control" in the sense relevant to the Commission's market power tests. This example is not fanciful but is in fact a common type of contract.

Q. WHAT PLANNED GENERATION RETIREMENTS AND ADDITIONS DO YOU REFLECT FOR APPLICANTS?

A. By 2012 (summer), Duke Energy Carolinas has plans to add approximately 1,500 MW of new generation (or uprates), consisting of Buck, a new combined-cycle plant (620 MW); Cliffside 6, a new coal-fired unit (825 MW); and uprates of 59 MW on existing generation. In the same time period, Duke Energy Carolinas plans to retire approximately 900 MW of existing generation, consisting of Buck 3-4 (coal, 113 MW) and 7C-9C (combustion turbines, 62 MW); Cliffside 1-4 (coal, 198 MW); Dan River (coal and combustion turbines, 300 MW); Buzzards Roost (combustion turbine, 176 MW); and Riverbend (combustion turbine, 64 MW).

By 2012 (summer), Progress Energy Carolinas plans to add 690 MW of new generation and uprates, including Richmond County, a new combined-cycle plant (635 MW).

Q. HOW DID YOU TREAT JOINTLY-OWED CAPACITY IN THE CAROLINAS?

A. Progress Energy Carolinas has four jointly-owned plants, consisting of two nuclear plants (Brunswick, 81.67 percent owned; and Harris, 83.83 percent owned) and two coal-fired plants (Mayo, 83.83 percent owned; and Roxboro, 96.3 percent owned[64]). The other owner is North Carolina Eastern Municipal Power Agency ("NCEMPA"). For purposes of my analysis, 100 percent of this jointly-owned generation is treated as Progress Energy Carolinas's, and all of NCEMPA's load in the CPL BAAs is treated as if it is Progress Energy Carolinas' load.[65]

Duke Energy Carolinas has one jointly owned plant, Catawba, a nuclear plant of which it owns 19.25 percent. Co-owners are North Carolina Electric Membership Corporation ("NCEMC") (30.75 percent), North Carolina Municipal Power Agency Number One ("NCMPA1") (37.5 percent) and Piedmont Municipal Power Agency ("PMPA") (12.5 percent). For purposes of my analysis, I treated the generation and load of the Catawba co-owners as separate generation and load nodes in the DUK BAA.

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[64] Only Roxboro Unit 4 is jointly-owned, with Progress Energy Carolinas' ownership interest of the unit of 87.06 percent.

Q. PLEASE DESCRIBE THE WHOLESALE CUSTOMERS IN THE PROGRESS ENERGY CAROLINAS' BALANCING AUTHORITY AREAS.

A. Progress Energy Carolinas has a number of full or partial requirements wholesale customers in its BAAs. Full requirements customers include Town of Black Creek, NC; City of Camden, SC; Fayetteville Public Works Commission (Fayetteville is currently a partial requirements customer, but effective July 1, 2012 will become a full requirements customer); French Broad EMC; Town of Lucama, NC; and Towns of Sharpsburg, Stantonsburg, Waynesville, and Winterville, NC. Most of these customers have long-term contracts with PEC (through at least 2015). The exceptions are City of Camden, whose contract ends December 31, 2013, but is expected to be extended; and French Broad EMC, whose contract ends December 31, 2012. Haywood is a partial requirements customer, but is full requirements for its load in CPL BAA; Haywood also has load in the DUK BAA.

Additionally, Progress Energy Carolinas has contracts with NCEMC, NCEMPA and Piedmont EMC. NCEMPA is a joint owner with Progress Energy Carolinas of Brunswick, Harris, Mayo and Roxboro generation.

Progress Energy Carolinas has a number of different contracts with NCEMC. With two minor exceptions, for a relatively small number of megawatts, these contracts are used to serve its load in the CPLE BAA. All contracts used for this purpose are long-term requirements contracts. One contract, not used to serve load in CPLE, will terminate by the end of 2011. A significant portion of NCEMC's load in the CPL BAAs is met from its share of Catawba.

The primary contract with NCEMPA is a firm partial requirements contract for native load for about half of NCEMPA's load, through 2017. NCEMPA provides for the remainder of its load in the CPL BAAs primarily through its owned generation. The contract with Piedmont EMC also is a partial requirements contract, for native load firm

[65] North Carolina Electric Membership Corporation ("NCEMC") has generation and load in the CPL BAA, as well as in the DUK BAA. I treated NCEMC as a separate generation and load node in the CPL BAA.

for about one-quarter of Piedmont EMC's load, through 2021 (full requirements for load in CPL BAA; Piedmont EMC also has load in the DUK BAA).

In sum, all wholesale customers in the Progress Energy Carolinas' BAAs are served under existing contracts with Progress Energy Carolinas for their load in the BAAs. The loads of the Progress Energy Carolinas BAA municipal customers that are partial requirements customers are fully met by a combination of their own generation and Progress Energy's partial requirements supply.

Q. PLEASE DESCRIBE THE WHOLESALE CUSTOMERS IN THE DUKE ENERGY CAROLINAS BALANCING AUTHORITY AREA.

A. Duke Energy Carolinas has a number of full or partial requirements wholesale customers in its BAA. Full requirements customers include Towns of Highlands, NC, Due West and Prosperity, SC; City of Greenwood, SC; Western Carolina University; Blue Ridge EMC; Piedmont EMC (full requirements for load in Duke BAA, also has load in Progress BAA); Haywood EMC (full requirements for load in Duke BAA, also has load in Progress BAA); and Central EMC (service starts January 1, 2013 on a partial requirements basis with service stepping up to full requirements by 2019 for the Central load in the Duke BAA). Most of these customers have long-term contracts (through at least 2021). All of these contracts are equivalent of native load.

Partial requirements customers include Rutherford EMC, the City of Concord, NC; Towns of Dallas, Forest City, and Kings Mountain, NC; and Lockhart Power Company.. These contracts are in place through at least 2018. All of these contracts are equivalent of native load. They are partial requirements to the extent the customers own some of their own generation.

Additionally, Duke Energy Carolinas has contracts with NCEMC and NCMPA1, both co-owners of Catawba. Duke Energy Carolinas's contracts with NCEMC consist of a Catawba/McGuire backstand agreement for the operating life of Catawba (which can be terminated with 3 years notice by NCEMC); as well as a shaped capacity sale for 72 MW through 2038. Duke Energy Carolinas' contracts with NCMPA1 consist of a Catawba/McGuire backstand agreement and an "instantaneous" agreement that will

terminate December 31, 2011. The backstand contract covers NCMPA1's unmet load requirements resulting from outages at the nuclear facilities. These contracts are equivalent of native load.

Finally, there are three wholesale customers in the DUK BAA that are not customers of Duke Energy Carolinas: PMPA (another co-owner of Catawba), EnergyUnited Electric Membership Corp. ("EnergyUnited") (which has a share of Catawba through NCEMC), and Seneca. PMPA purchases backstand, replacement reserves and supplemental power from Southern Power, although PMPA will purchase backstand from Duke Energy Carolinas starting January 1, 2014. EnergyUnited purchases from NCEMC and Southern Power, and Southern Power also provides for supplemental load. Seneca's requirements load is provided by Southern Power, and Seneca recently agreed to a new contract with Southern Power.

In sum, as with Progress Energy Carolinas, all wholesale customers in the Duke Energy Carolinas' BAA are served under existing contracts with Duke Energy Carolinas or others. The load of the municipal customers that are partial requirements customers is fully met by a combination of their own generation and Duke Energy Carolinas' partial requirements supply. The Catawba co-owners (NCEMC, NCMPA1, and PMPA) have their needs in the DUK BAA fully covered by their own generation or through contacts with Duke Energy Carolinas or others.

V. IMPACT OF THE MERGER ON COMPETITION IN THE SOUTHEAST

Horizontal Market Power

Q. PLEASE IDENTIFY AGAIN THE SOUTHEAST MARKETS YOU ANALYZED.

A. These are the DUK, CPLE, CPLW, SC, SCEG, TVA and SOCO markets. I also include PJM in this group because it is a first-tier interconnection to both DEC and PEC.

Q. WHAT SPECIFIC ANALYSES DID YOU CONDUCT IN THE SOUTHEAST?

A. Consistent with the guidance in the *Merger Policy Statement*, I analyzed both Economic Capacity and Available Economic Capacity. As explained above, however, based on Commission precedent, the focus is on the results of the Available Economic Capacity analyses.

Available Economic Capacity

DUK

Q. PLEASE REVIEW THE RESULTS OF THE AVAILABLE ECONOMIC CAPACITY ANALYSIS FOR THE DUKE ENERGY CAROLINAS BAA.

A. This analysis was discussed at length in my summary of results. For purposes of completeness, I repeat it here (see, also, Exhibit J-5). The results are in Table 10, which is a duplicate of Table 2, and Table 11, which is a duplicate of Table 3.

Table 10: Available Economic Capacity, DUK (no rate depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,082	26.6%	4,072	1,126	1
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,086	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,352	37.7%	3,587	1,575	-
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	809	23.5%	3,448	832	-
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,503	44.2%	7,922	2,180	-
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,067	25.3%	4,221	857	-
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	438	-
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,875	34.4%	5,457	1,427	-
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,187	434	-
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	21	0.9%	2,337	411	-

As shown in Table 10 above, the DUK market remains generally unconcentrated or moderately concentrated. Duke Energy's pre-merger market share ranges from less than 1 percent to more than 40 percent, and Progress Energy has essentially no available economic capacity in the DUK market. As a result, there is no increase in the HHIs arising directly from the merger.

Table 11: Available Economic Capacity, DUK Base Case (with depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,085	26.6%	4,072	1,129	5
S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,085	-
S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,349	37.6%	3,587	1,573	(2)
S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	985	28.6%	3,448	1,073	241
W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,505	44.2%	7,922	2,186	7
W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,121	26.5%	4,223	926	69
W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	436	(2)
SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,874	34.4%	5,457	1,427	(1)
SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,228	496	63
SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	20	0.9%	2,337	414	3

Once transmission rate depancaking is taken into account, there is a single screen failure, in the Summer Off-Peak period, as shown in Table 11 above. This occurs because the depancaking of transmission rates between Duke Energy Carolinas and Progress Energy Carolinas makes some of Progress Energy's Available Economic Capacity economic in DUK, whereas previously it was not economic on a delivered cost basis. Combining this newly economic energy with Duke Energy's Available Economic Capacity creates the screen failure. As I noted previously, the depancaking that is at the root of the screen failure creation is pro-competitive, so that it is ironic that it creates a technical screen failure. The failure is in an off-peak period in which most economic generation is coal and nuclear and the market remains in the lower part of the moderately concentrated range.

CPLE and CPLW

Q. PLEASE ALSO REVIEW THE RESULTS OF YOUR ANALYSES OF THE PROGRESS ENERGY CAROLINAS' AVAILABLE ECONOMIC CAPACITY MARKETS.

A. These results were also discussed extensively in my testimony summary. For completeness, I reproduce them in Table 12 and Table 14, below.

Table 12: Available Economic Capacity, CPLE (no rate depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	172	7.3%	2,343	438	1
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	98	4.0%	2,431	491	7
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	96	3.1%	3,136	364	-
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,472	33.8%	4,359	1,336	186
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	764	16.6%	4,606	555	-
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	267	5.2%	5,126	468	4
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	54	1.1%	5,113	474	-
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	732	17.4%	4,210	636	111
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	507	12
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	197	4.3%	4,624	415	7

Table 13: Available Economic Capacity, CPLE Base Case (with depancaking)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	213	9.1%	2,343	442	6
S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	139	5.7%	2,431	444	(41)
S_P	$ 40	96	3.1%	-	0.0%	3,136	364	296	9.4%	3,136	382	19
S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,489	34.2%	4,359	1,364	214
W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	912	19.8%	4,606	645	90
W_P	$ 40	21	0.4%	246	4.8%	5,126	464	496	9.4%	5,272	430	(35)
W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	60	1.2%	5,113	464	(11)
SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	746	17.7%	4,210	598	73
SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	499	4
SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	196	4.2%	4,624	414	6

In the CPLE BAA, there is a screen failure in the same Summer Off-Peak period in which a failure occurred in the DUK market. As I discussed previously, the failure is magnified by the effects of rate depancaking (see Table 13), but in this case a smaller failure would have occurred even without depancaking (see Table 12). There are no other screen failures and, indeed, in all other time periods the CPLE BAA is unconcentrated.

Table 14: Available Economic Capacity, CPLW

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	65	8.2%	-	0.0%	799	398	64	8.0%	799	401	3
S_SP2	$ 55	39	4.8%	-	0.0%	799	449	63	7.9%	799	425	(23)
S_P	$ 40	24	3.1%	-	0.0%	770	373	99	12.4%	799	417	43
S_OP	$ 35	36	4.5%	-	0.0%	799	388	89	11.2%	799	451	63
W_SP	$ 80	78	13.3%	-	0.0%	585	415	78	13.3%	585	418	3
W_P	$ 40	3	0.5%	-	0.0%	712	442	62	8.5%	726	397	(45)
W_OP	$ 35	7	0.9%	-	0.0%	783	407	8	1.0%	783	405	(1)
SH_SP	$ 55	62	9.2%	-	0.0%	676	465	59	8.8%	676	440	(24)
SH_P	$ 35	5	0.7%	-	0.0%	676	450	5	0.7%	676	456	6
SH_OP	$ 33	8	1.2%	-	0.0%	676	380	8	1.1%	676	385	4

In the CPLW BAA there are no screen failures. This arises from multiple causes. First, the market is unconcentrated, post-merger, in all time periods. Second, Progress Energy Carolinas' share of the market is zero in all time periods. This reflects the fact that there is a shortage of Progress Energy-controlled Available Economic Capacity in CPLW. The remaining load is served with its resources dispatched in CPLE, and that part of CPLW load is deducted from the Progress Energy's Available Economic Capacity in CPLE. Third, Duke Energy's share of the Available Economic Capacity in CPLW is relatively small, despite the fact that depancaking increases it substantially in some time periods.

First-Tier Markets

Q. PLEASE DISCUSS THE AVAILABLE ECONOMIC CAPACITY ANAYSES FOR THE FIVE MARKETS THAT ARE FIRST TIER TO DUKE ENERGY CAROLINAS AND/OR PROGRESS ENERGY CAROLINAS.

A. These results are summarized in Table 15 through Table 19, below and Exhibit J-9. There are no screen failures in any of these markets.

Table 15: Available Economic Capacity, SC

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	8	8.8%	-	0.0%	90	419	8	8.8%	90	415	(5)
S_SP2	$ 55	3	3.6%	-	0.0%	90	420	4	4.6%	90	414	(6)
S_P	$ 40	1	0.3%	-	0.0%	314	5,109	1	0.3%	314	5,109	(1)
S_OP	$ 35	4	1.1%	-	0.0%	401	6,020	4	1.1%	401	6,019	-
W_SP	$ 80	161	16.7%	-	0.0%	969	565	160	16.5%	969	556	(9)
W_P	$ 40	5	0.3%	-	0.0%	1,578	1,686	5	0.3%	1,578	1,683	(2)
W_OP	$ 35	12	1.1%	-	0.0%	1,038	451	12	1.1%	1,038	444	(8)
SH_SP	$ 55	98	5.0%	-	0.0%	1,963	392	150	7.7%	1,963	398	6
SH_P	$ 35	15	0.7%	-	0.0%	2,092	389	19	0.9%	2,092	378	(11)
SH_OP	$ 33	20	1.0%	-	0.0%	1,963	399	27	1.4%	1,963	397	(1)

Beginning with the Santee Cooper BAA (Table 15), the market is unconcentrated in all but three time periods. In these three time periods, Duke Energy's share is small (less than one percent). Progress Energy Carolinas' share of these markets is essentially zero in all time periods. Post-Merger, the model incorporates the depancaking of transmission rates between the Duke Energy Carolinas and the Progress Energy Carolinas BAAs and, therefore, the supply allocated to each entity may be somewhat different between the Pre-Merger and Post-Merger analyses. Regardless, the screen is passed in all time periods. The primary reason why Progress Energy Carolinas' Available Economic Capacity in this market is lower than in the Duke Energy Carolinas market is that transmission rates between Applicants were depancaked but rates between them and Santee Cooper (and other first tier markets) were not. Due to the flatness of Applicants' supply curves, particularly Progress Energy Carolinas' supply curve, most of the Progress Energy Carolinas' available energy that is economic in the Duke Energy Carolinas market post-merger is not economic in the Santee Cooper market.

Table 16 shows the results for the South Carolina Electric & Gas BAA.

Table 16: Available Economic Capacity, SCEG

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	8	1.1%	-	0.0%	725	4,695	8	1.1%	725	4,695	-
S_SP2	$ 55	3	0.4%	-	0.0%	787	4,537	3	0.4%	787	4,536	(1)
S_P	$ 40	1	0.2%	-	0.0%	320	7,157	1	0.2%	320	7,158	1
S_OP	$ 35	2	0.7%	-	0.0%	320	7,154	3	0.9%	320	7,153	-
W_SP	$ 80	207	8.6%	-	0.0%	2,413	2,928	207	8.6%	2,413	2,928	-
W_P	$ 40	2	0.1%	-	0.0%	1,369	1,167	2	0.1%	1,369	1,166	-
W_OP	$ 35	10	1.4%	-	0.0%	750	439	11	1.4%	750	445	6
SH_SP	$ 55	134	5.3%	-	0.0%	2,530	828	157	6.2%	2,530	837	9
SH_P	$ 35	5	0.3%	-	0.0%	1,655	589	6	0.4%	1,645	556	(32)
SH_OP	$ 33	8	0.5%	-	0.0%	1,592	393	10	0.6%	1,584	397	4

This market is highly concentrated in half of the time periods. Again, as a result of rate pancaking, the Progress Energy Carolinas' Available Economic Capacity in its own service area is not economic on a delivered basis in SCEG. Duke Energy's shares also are small in all but one time period. There are no screen failures in this market.

Table 17 shows the results for the Southern Company BAA.

Table 17: Available Economic Capacity, SOCO

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	285	2.2%	-	0.0%	12,998	860	284	2.2%	12,998	856	(4)
S_SP2	$ 55	185	1.4%	-	0.0%	13,041	790	178	1.4%	13,041	791	1
S_P	$ 40	33	0.3%	-	0.0%	10,232	758	30	0.3%	10,232	756	(2)
S_OP	$ 35	104	1.0%	-	0.0%	10,755	643	110	1.0%	10,664	648	5
W_SP	$ 80	550	2.9%	-	0.0%	18,999	1,183	556	2.9%	18,999	1,181	(2)
W_P	$ 40	23	0.2%	-	0.0%	11,597	663	20	0.2%	11,639	657	(6)
W_OP	$ 35	49	0.8%	-	0.0%	6,522	324	66	1.0%	6,373	312	(12)
SH_SP	$ 55	303	2.1%	-	0.0%	14,246	642	324	2.3%	14,347	629	(13)
SH_P	$ 35	6	0.1%	-	0.0%	9,389	553	19	0.2%	9,252	558	5
SH_OP	$ 33	7	0.1%	-	0.0%	7,432	384	26	0.4%	7,361	373	(11)

This very large market is unconcentrated in all but one time period. Duke Energy's share is small in all time periods. Progress Energy's share is zero in all time periods, as it is in all other first tier markets where transmission rates remain pancaked after the merger. There are no screen failures.

Table 18 summarizes the analysis of the TVA BAA.

Table 18: Available Economic Capacity, TVA

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	140	1.6%	-	0.0%	8,801	551	140	1.6%	8,801	546	(4)
S_SP2	$ 55	102	1.0%	-	0.0%	9,936	923	102	1.0%	9,936	920	(3)
S_P	$ 40	91	1.1%	-	0.0%	8,334	596	91	1.1%	8,334	595	-
S_OP	$ 35	79	0.9%	-	0.0%	8,625	1,032	79	0.9%	8,625	1,032	-
W_SP	$ 80	234	1.6%	-	0.0%	14,297	1,487	234	1.6%	14,297	1,487	-
W_P	$ 40	17	0.2%	-	0.0%	8,737	323	17	0.2%	8,733	324	1
W_OP	$ 35	28	0.4%	-	0.0%	7,834	310	27	0.4%	7,834	310	-
SH_SP	$ 55	177	1.6%	-	0.0%	10,883	514	177	1.6%	10,880	508	(6)
SH_P	$ 35	38	0.5%	-	0.0%	8,122	365	39	0.5%	8,119	369	4
SH_OP	$ 33	46	0.6%	-	0.0%	8,339	320	52	0.6%	8,337	322	2

The TVA market is unconcentrated in 8 of the 10 time periods and at the low end of the moderately concentrated range in the others. Duke Energy has a small share in all time periods. Progress Energy has a zero share in all time periods due to the effect of transmission costs and losses.

Table 19 shows the results for the PJM market.

Table 19: Available Economic Capacity, PJM

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	3,364	4.6%	1	0.0%	72,523	604	3,374	4.7%	72,525	604	-
S_SP2	$ 55	2,159	3.3%	-	0.0%	65,065	665	2,246	3.5%	64,980	665	-
S_P	$ 40	2,875	4.7%	-	0.0%	60,598	703	2,875	4.8%	60,596	703	-
S_OP	$ 35	1,571	3.0%	-	0.0%	52,680	903	1,571	3.0%	52,680	903	-
W_SP	$ 80	4,304	5.6%	-	0.0%	76,562	584	4,264	5.6%	76,557	584	(1)
W_P	$ 40	295	0.7%	-	0.0%	44,169	816	295	0.7%	44,169	816	-
W_OP	$ 35	716	1.6%	-	0.0%	43,880	890	716	1.6%	43,880	890	-
SH_SP	$ 55	2,069	3.6%	-	0.0%	57,993	683	2,246	3.9%	57,951	683	(1)
SH_P	$ 35	461	1.2%	-	0.0%	37,235	917	461	1.2%	37,233	917	-
SH_OP	$ 33	950	2.3%	-	0.0%	42,271	883	950	2.3%	42,271	883	-

The PJM market is unconcentrated in all time periods. Duke Energy has a more significant share of the market than in the other markets I have examined. This primarily is because it owns generation that is or will be located in PJM that is not used to serve native load. As with other first-tier markets, Progress Energy has a zero share of the PJM market.

Other Markets

Q. WHAT ANALYSIS DID YOU CONDUCT IN MISO?

A. First, I note that Available Economic Capacity is the right metric for the MISO BAA since there is virtually no retail access in it. Based on the results of the Available Economic Capacity Analyses of the BAAs that are first tier to Progress Energy Carolinas, I know that none of its Available Economic Capacity would be economic delivered into MISO, which is a further wheel away than PJM or TVA, and Progress Energy owns no generation in MISO. I also reviewed Progress Energy Carolinas' EQR filings and confirmed that its historic participation in this market is small. For these reasons, I conclude that the overlap between Duke Energy and Progress Energy in this market area is *de minimis*.

Q. WHAT ANALYSIS DID YOU CONDUCT IN FPC?

A. No analysis was conducted for this market. As noted earlier, it is remote from any of Duke Energy's generation and Duke Energy makes no sales into Florida. Hence there is no overlap between Applicants in this market; at the most even a prospective overlap is *de minimis*.

Q. DID YOU IDENTIFY ANY OTHER MARKETS THAT REQUIRE ANALYSIS BASED ON A REVIEW OF HISTORICAL CUSTOMERS OVER THE PAST TWO YEARS?

A. No. Other than the markets I have discussed, the only market where there are common customers is Louisville Gas & Electric (the "LGEE" BAA). Progress Energy Carolinas made one small sale in the LGEE BAA in 2010 (100 MWh) and none in 2008 or 2009. Duke Energy Carolinas had no sales into LGEE in 2009 and 2010, but sold 1,000 MW to Louisville Gas & Electric in 2008. Given the very small amount of Progress Energy sales into this market, the overlap between Applicants in this market is *de minimis*.

AEC Analysis of 2015 Duke Energy Carolinas and Progress Energy Carolinas Markets

Q. EARLIER IN YOUR TESTIMONY YOU DISCUSSED THE FACT THAT THE IRPs OF BOTH APPLICANTS CONTAIN SIGNIFICANT NEW CONSTRUCTION. HAVE YOU ANALYZED WHETHER THAT NEW CONSTRUCTION WILL CAUSE THE RESULTS YOU FOUND FOR 2012 TO CEASE TO APPLY IN THE RELATIVELY NEAR FUTURE?

A. Yes. I analyzed an AEC case based on 2015 conditions, in the sense that loads and resources were updated to reflect forecasts for that time period. For simplicity, fuels costs and price levels were unchanged from 2012. Both Duke Energy Carolinas and Progress Energy Carolinas are planning generation additions and closures, as discussed earlier in my testimony. Some of the additions, but none of the closures are reflected in the 2012 analyses.

In the period from 2012 to 2015, the additional new generation exceeds closures for both Duke Energy Carolinas and Progress Energy Carolinas, but only by a relatively small amount. In all seasons, the net increase in generation is less than peak load growth, so that reserve margins actually shrink. In addition, there are changes in loads and generation for other sellers that impact HHIs.

The results of the 2015 analyses are shown in Tables 20 through 22. This analysis includes depancaking and hence is fully comparable to the analysis underlying Tables 3, 5 and 6.

Table 20: Available Economic Capacity, DUK (2015)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	128	4.2%	-	0.0%	3,076	760	130	4.2%	3,076	759	(1)
S_SP2	$ 55	322	8.7%	-	0.0%	3,709	636	324	8.7%	3,709	640	4
S_P	$ 40	790	26.8%	-	0.0%	2,949	915	786	26.7%	2,949	913	(2)
S_OP	$ 35	984	27.4%	-	0.0%	3,588	998	1,153	32.1%	3,588	1,273	275
W_SP	$ 80	2,102	32.6%	-	0.0%	6,444	1,416	2,103	32.6%	6,444	1,425	9
W_P	$ 40	205	6.2%	-	0.0%	3,280	400	210	6.4%	3,313	411	11
W_OP	$ 35	21	0.7%	-	0.0%	3,018	452	21	0.7%	3,018	453	1
SH_SP	$ 55	1,120	24.1%	-	0.0%	4,645	936	1,121	24.1%	4,645	928	(8)
SH_P	$ 35	10	0.5%	-	0.0%	2,187	451	10	0.5%	2,202	479	28
SH_OP	$ 33	25	1.1%	-	0.0%	2,304	405	24	1.1%	2,304	405	-

Table 21: Available Economic Capacity, CPLE (2015)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	59	2.7%	-	0.0%	2,194	438	75	3.4%	2,194	434	(4)
S_SP2	$ 55	36	1.6%	-	0.0%	2,301	534	50	2.2%	2,301	473	(61)
S_P	$ 40	101	3.1%	-	0.0%	3,211	361	242	7.5%	3,211	357	(3)
S_OP	$ 35	49	1.1%	1,213	28.3%	4,293	1,024	1,443	33.6%	4,293	1,330	306
W_SP	$ 80	549	12.6%	-	0.0%	4,376	496	714	16.3%	4,376	571	74
W_P	$ 40	24	0.5%	-	0.0%	4,938	506	53	1.0%	5,124	421	(85)
W_OP	$ 35	47	0.9%	-	0.0%	5,166	492	47	0.9%	5,166	477	(15)
SH_SP	$ 55	107	3.2%	-	0.0%	3,374	480	118	3.5%	3,374	385	(96)
SH_P	$ 35	26	0.6%	199	4.5%	4,460	494	225	5.0%	4,460	496	2
SH_OP	$ 33	66	1.5%	-	0.0%	4,534	426	65	1.4%	4,534	426	-

Table 22: Available Economic Capacity, CPLW (2015)

		Pre-Merger						Post-Merger				
		DUKE		PROGRESS				DUKE ENERGY				
Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
S_SP1	$ 80	19	2.3%	-	0.0%	799	399	19	2.3%	799	407	8
S_SP2	$ 55	11	1.4%	-	0.0%	799	462	16	2.0%	799	439	(23)
S_P	$ 40	24	3.1%	-	0.0%	767	375	72	9.0%	796	366	(9)
S_OP	$ 35	11	1.4%	-	0.0%	799	406	90	11.3%	799	449	44
W_SP	$ 80	57	9.8%	-	0.0%	585	367	57	9.7%	585	371	4
W_P	$ 40	3	0.5%	-	0.0%	627	441	7	1.1%	627	390	(51)
W_OP	$ 35	6	0.8%	-	0.0%	730	423	5	0.7%	730	418	(5)
SH_SP	$ 55	29	4.3%	-	0.0%	676	463	27	4.1%	676	445	(19)
SH_P	$ 35	4	0.6%	-	0.0%	676	468	4	0.5%	676	474	6
SH_OP	$ 33	9	1.4%	-	0.0%	676	384	9	1.4%	676	387	2

The comparison shows that there is no material change in results arising from changes in load and generation over this period. In the 2012 analysis in the DUK BAA, the market was not highly concentrated in all but one time period. In 2015, the market is never

highly concentrated. In both years, there is a single screen failure in a moderately concentrated market in the summer off-peak period. The change in HHIs is marginally higher in 2015. In the CPLE BAA, the market is unconcentrated in all periods except the summer off-peak, which is moderately concentrated in both years. As with the DUK analysis, the change in HHIs is marginally larger in the 2015 analysis. The 2015 analysis of the CPLW market is quite similar to the 2012 analysis; the market is unconcentrated in all time periods, Progress Energy has no AEC in any time period and the HHI changes induced by depancaking are approximately zero on average.

Economic Capacity

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF ECONOMIC CAPACITY IN THE DUKE ENERGY CAROLINAS' AND PROGRESS ENERGY CAROLINAS' MARKETS.

A. As typically is true in BAAs consisting of the service territory of a single utility that has not been restructured (*i.e.,* continues to meet load requirements primarily with owned generation), the Economic Capacity markets are highly concentrated. As shown in Exhibit J-10, the utility that is the balancing authority has market shares in the range of 60 to 80 percent, somewhat less in the CPLW BAA. In the CPLE market, Duke Energy's share ranges between 3 and 9 percent. Its share of the CPLW market ranges from 12 to 16 percent. Because the markets already are highly concentrated, these relatively small shares cause screen failures in all time periods. In the Duke Energy Carolinas BAA, Progress Energy's share is in the range of 3 to 6 percent. Because of Duke Energy's high share, even this modest share causes a substantial screen failure in all time periods.

Q. WHAT ARE THE RESULTS OF YOUR ANALYSES OF ECONOMIC CAPACITY IN THE FIRST TIER MARKETS?

A. These results are summarized in Exhibit J-11. With the exception of the PJM market, all of these are unrestructured, single utility markets and hence Economic Capacity is highly concentrated in all time periods.

There are three screen failures in the Santee Cooper BAA, all occurring in the shoulder season. Duke Energy's share is around 6-9 percent and Progress Energy's share is around 9-10 percent.

There also are three screen failures in the South Carolina Electric & Gas BAA, Winter Off-Peak, Shoulder Peak and Shoulder Off-Peak. Duke Energy's share in these time periods is in the range of 6 to 13 percent. Progress Energy's share is 6 to 10 percent.

In the Southern Company BAA, Applicants' combined share of Economic Capacity is in the range of 2 to 4 percent. A significant fraction of this comes from Progress Energy Florida. There are no screen failures.

In the TVA BAA, Applicants' combined share is in the range of 1 to 3 percent. There are no screen failures.

Applicants' combined share of the PJM BAA is in the range of 5 to 6 percent. There are no screen failures.

Vertical Market Power

Q. DOES THE MERGER RAISE VERTICAL MARKET POWER CONCERNS THAT WOULD AFFECT COMPETITION IN THE RELEVANT MARKETS?

A. No. The potential vertical market power concerns involve control over electric transmission, fuels supplies and transportation systems and generating sites.

The merger does not raise electric transmission market power concerns. Duke Energy's Ohio, Kentucky and Indiana transmission assets are under the control of MISO. DEO and DEK have proposed to withdraw their transmission assets from MISO in order to join PJM as of January 1, 2012. Hence, their transmission will remain under the control of an RTO. Duke Energy Carolinas' transmission is subject to a Commission-approved OATT. Moreover, as a result of conditions agreed to in its earlier merger with Cinergy, it has an Independent Entity that serves as a coordinator of certain transmission functions and an Independent Monitor to monitor the transparency and fairness of the operation of its transmission system. Operation of Progress Energy Carolinas' and Progress Energy

Florida's transmission systems also is subject to Commission-approved OATTs. Both Duke Energy Carolinas and Progress Energy Carolinas are participants in the North Carolina Transmission Planning Cooperative, whose purpose is to allow all stakeholders to participate in shaping the future transmission network in North Carolina.

Concerning fuels suppliers and transportation, neither Applicant controls interstate gas transmission lines, fuels supplies or other interstate fuels transportation facilities, with the minor exception of Duke Energy's K-O Transmission Company, which serves its own LDCs. Duke Energy has gas LDCs operating in portions of Ohio and Kentucky. As a result, Duke Energy has firm interstate pipeline transportation to serve its LDC customers in Ohio and Kentucky; however, the area is remote from Progress Energy generation so that no merger-related vertical issues can arise from ownership of the LDC. The Applicants' Carolinas utilities do not operate LDCs and their gas consumption as generators is modest as a result of their fuel mixes.[66] Progress Energy does not own an LDC or any interstate or intrastate gas transmission pipelines in any area.

Q. DO APPLICANTS EXERCISE CONTROL OVER AVAILABLE GENERATION SITES?

A. No. I was unable to identify any barriers to entry that would result from Applicant's control of available generation sites. The relevant geographic markets encompass a relatively large area and include many possible generating sites. Entrants who could compete in areas potentially affected by this merger would not necessarily need to locate new facilities in either company's service areas or connect to their transmission systems. With respect to PJM and MISO, the RTOs control the interconnection process for new generation to be connected to transmission systems. With respect to the Carolinas, there has been entry by merchant generators (e.g., Broad River, Southern Power) that demonstrates that entry is not barred.

[66] My workpapers contain a summary of the pipeline transportation and storage contracts of Progress Energy Carolinas. Duke Energy Carolinas does not have any current contracts, but has a one contract starting May 1, 2011 for gas transportation delivery in connection with its new combined cycle plants.

Q. EARLIER, YOU STATED THAT THE COMMISSION HAS FOUND LONG-TERM MARKETS TO BE PRESUMPTIVELY COMPETITIVE. PLEASE ELABORATE.

A. In Order No. 888, the Commission in referring to a decision in *Entergy Services, Inc.*, noted that "after examining generation dominance in many different cases over the years, we have yet to find an instance of generation dominance in long-run bulk power markets."[67] While the Commission has indicated its intent to review the presumption that long-term markets are competitive, there is no evidence to overcome that presumption in this case.

[67] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,649 n.86 (citation omitted).

VI. CONCLUSION

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION.

A. I recommend that the Commission determine that this merger will not have an adverse effect on competition in markets subject to its jurisdiction.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.

EXHIBITS

Exhibit J-1	Testimony
Exhibit J-2	Resume of William H. Hieronymus
Exhibit J-3	Duke Energy Generation
Exhibit J-4	Progress Energy Generation
Exhibit J-5	DPT Results – Available Economic Capacity (Carolinas)
Exhibit J-6	Applicants' Sales Data
Exhibit J-7	Data and Methodology
Exhibit J-8	Description of CASm Model
Exhibit J-9	DPT Results – Available Economic Capacity (First-Tier Markets)
Exhibit J-10	DPT Results - Economic Capacity (Carolinas)
Exhibit J-11	DPT Results – Economic Capacity (First-Tier Markets)

Tables

WILLIAM H. HIERONYMUS

Ph.D. Economics
University of Michigan

M.A. Economics
University of Michigan

B.A. Social Sciences
University of Iowa

William Hieronymus has consulted extensively to managements of electricity and gas companies, their counsel, regulators, and policymakers. His principal areas of concentration are the economics, structure and regulation of network utilities and associated management, policy, and regulatory issues. Dr. Hieronymus has spent the last twenty years working on the restructuring and privatization of utility systems in the U.S. and internationally. In this context he has assisted the managements of energy companies on corporate and regulatory strategy, particularly relating to asset acquisition and divestiture. He has testified extensively on regulatory policy issues and on market power issues related to mergers and acquisitions. In his thirty-odd years of consulting to this sector, he also has performed a number of more specific functional tasks, including analyzing potential investments; assisting in negotiation of power contracts, tariff formation, demand forecasting, and fuels market forecasting. Dr. Hieronymus has testified frequently on behalf of energy sector clients before regulatory bodies, federal courts, arbitrators and legislative bodies in the United States, the United Kingdom and Australia. He has contributed to numerous projects, including the following:

ELECTRICITY SECTOR STRUCTURE, REGULATION, AND RELATED MANAGEMENT AND PLANNING ISSUES

U.S. Market Restructuring Assignments

- Dr. Hieronymus serves as an advisor to the senior executives of electric utilities on restructuring and related regulatory issues, and he has worked with senior management in developing strategies for shaping and adapting to the emerging competitive market in electricity. Related to some of these assignments, he has testified before state agencies on regulatory policies and on contract and asset valuation.

- For utilities seeking merger approval, Dr. Hieronymus has prepared and testified to market power analyses at FERC and before state commissions. He also has assisted in discussions with the Antitrust Division of the Department of Justice and in responding to information requests. The mergers on which Dr. Hieronymus has testified include both electricity mergers and combination mergers involving electricity and gas companies. Among the major mergers on which he has testified are Northeast Utilities-NSTAR, First Energy-Allegheny, Duke-Cinergy, Sempra (Enova and Pacific Enterprises), Xcel (New Century Energy and Northern States Power), Exelon (Commonwealth Edison and Philadelphia Electric), AEP (American Electric Power and Central and Southwest), Dynegy-Illinois Power, Con Edison-Orange and Rockland, Dominion-Consolidated Natural Gas, NiSource-Columbia Energy, E-on-PowerGen/LG&E and NYSEG-RG&E, Iberdrola-Energy East, Texas Energy Futures-TXU, GDF/Suez and FirstLight and MacQuarie-Puget Sound. He also submitted testimony in mergers that were terminated, usually for unrelated reasons, including Exelon-NRG, EEG (Exelon and PSEG), Constellation-FPL Energy, Entergy-Florida Power and Light, Northern States Power and Wisconsin Energy, KCP&L and Utilicorp and Consolidated Edison-Northeast Utilities. Testimony on similar topics has been filed for a number of smaller utility mergers and for numerous asset acquisitions. Dr Hieronymus has also assisted numerous clients in the pre-merger screening of potential acquisitions and merger partners.

- For utilities seeking to establish or extend market rate authority, Dr. Hieronymus has provided scores of analyses concerning market power in support of submissions under Sections 205 and/or 206 of the Federal Power Act.

- For utilities and power pools engaged in restructuring activities, he has assisted in examining various facets of proposed reforms. Such analysis has included features of the proposals affecting market efficiency and revenue adequacy and those that have potential consequences for market power. Where relevant, the analysis also has examined the effects of alternative reforms on the market performance, and achievement of the client's objectives. In some cases, these analyses have led to testimony and/or participation in stakeholder processes.

- For generators and marketers, Dr. Hieronymus has testified extensively in the regulatory proceedings that took place over the 2003-2010 period concerning the electricity crisis in the WECC that occurred during the period May 2000 through May 2001. His testimony concerned, inter alia, the economics of long term contracts entered into during that period the behavior of market participants during the crisis period and the nexus between purportedly dysfunctional spot markets and forward contracts. He also provided testimony and other regulatory support in dockets concerned with economic and physical withholding, partnership arrangements and bidding and scheduling practices potentially in violation of the ISO tariff.

- For the New England Power Pool (NEPOOL), Dr. Hieronymus examined the issue of market power in connection with NEPOOL's movement to market-based pricing for energy, capacity, and ancillary services. He also assisted the New England utilities in preparing their market power mitigation proposal. The main results of his analysis were incorporated in NEPOOL's market power filing before FERC and in ISO-New England's market power mitigation rules.

- For a coalition of independent generators, he provided affidavits advising FERC on changes to the rules under which the northeastern U.S. power pools operate.

- For both utilities and generators he has testified on a number of occasions on market mitigation rules for the New York City load pocket and their relationship to policy goals such as market-based entry.

Valuation of Utility Assets in North America

- Dr. Hieronymus has testified in state securitization and stranded cost quantification proceedings, primarily in forecasting the level of market prices that should be used in assessing the future revenues and the operating contribution earned by the owner of utility assets in energy and capacity markets. The market price analyses are tailored to the specific features of the market in which a utility will operate and reflect transmission-constrained trading over a wide geographic area. He also has testified in rebuttal to other parties' testimony concerning stranded costs, and has assisted companies in internal stranded cost and asset valuation studies.

- He was the primary valuation witness on behalf of a western utility in an arbitration proceeding concerning the value of a combined cycle plant coming off lease that the utility wished to purchase.

- He assisted a bidder in determining the commercial terms of plant purchase offers as well as assisting clients in assessing the regulatory feasibility of potential acquisitions and mergers.

- He has testified concerning the value of terminated long term contracts in connection with contract defaults by bankrupt power marketers and merchant generators.

- In connection with the Western U.S. long term contracts proceeding, he testified with respect to benchmarking of contracts and to the relationship between market prices and long run marginal costs of new generation.

Other U.S. Utility Engagements

- In a recent arbitration proceeding, Dr. Hieronymus testified with respect to contract terms relating to security provisions for long repaying front-end loaded contract payments.

- Dr. Hieronymus has contributed to the development of several benchmarking analyses for U.S. utilities. These have been used in work with clients to develop regulatory proposals, set cost reduction targets, restructure internal operations, and assess merger savings.

- Dr. Hieronymus was a co-developer of a market simulation package tailored to region-specific applications. He and other senior personnel have conducted numerous multi-day training sessions using the package to help utility clients in educating management regarding the consequences of wholesale and retail deregulation and in developing the skills necessary to succeed in this environment.

- He has made numerous presentations to U.S. utility managements regarding overseas electricity systems and market reforms.

- In connection with nuclear generating plants nearing completion, he has testified in Pennsylvania, Louisiana, Arizona, Illinois, Missouri, New York, Texas, Arkansas, New Mexico, and before the Federal Energy Regulatory Commission regarding plant-in-service rate cases on the issues of equitable and economically efficient treatment of plant costs for tariff-setting purposes, regulatory treatment of new plants in other jurisdictions, the prudence of past system planning decisions and assumptions, performance incentives, and the life-cycle costs and benefits of the units. In these and other utility regulatory proceedings, Dr. Hieronymus and his colleagues have provided extensive support to counsel, including preparation of interrogatories, cross-examination support, and assistance in writing briefs.

- On behalf of utilities in the states of Michigan, Massachusetts, New York, Maine, Indiana, Pennsylvania, New Hampshire, and Illinois, he has submitted testimony in regulatory proceedings on the economics of completing nuclear generating plants that were then under construction. His testimony has covered the likely cost of plant completion; forecasts of operating performance; and extensive analyses of the impacts of completion, deferral, and cancellation upon ratepayers and shareholders. For the senior managements and boards of utilities engaged in nuclear plant construction, Dr. Hieronymus has performed a number of highly confidential assignments to support strategic decisions concerning the continuance of construction.

- For an eastern Pennsylvania utility that suffered a nuclear plant shutdown due to NRC sanctions relating to plant management, he filed testimony regarding the extent to which replacement power cost exceeded the costs that would have occurred but for the shutdown.

- For a major Midwestern utility, Dr. Hieronymus headed a team that assisted senior management in devising its strategic plans, including examination of such issues as plant refurbishment/life extension strategies, impacts of increased competition, and available diversification opportunities.

- On behalf of two West Coast utilities, Dr. Hieronymus testified in a needs certification hearing for a major coal-fired generation complex concerning the economics of the facility relative to competing sources of power, particularly unconventional sources and demand reductions.

- For a large western combination utility, he participated in a major 18-month effort to provide the client with an integrated planning and rate case management system.

- For two Midwestern utilities, Dr. Hieronymus prepared an analysis of intervenor-proposed modifications to the utilities' resource plans. He then testified on their behalf before a legislative committee.

U.K. Assignments (1988-1994)

- Following promulgation of the white paper that established the general framework for privatization of the electricity industry in the United Kingdom, Dr. Hieronymus participated extensively in the task forces charged with developing the new market system and regulatory regime. His work on behalf of the Electricity Council and the twelve regional distribution and retail supply companies focused on the proposed regulatory regime, including the price cap and regulatory formulas, and distribution and transmission use of system tariffs. He was an active participant in industry-government task forces charged with creating the legislation, regulatory framework, initial contracts, and rules of the pooling and settlements system. He also assisted the regional companies in the valuation of initial contract offers from the generators, including supporting their successful refusal to contract for the proposed nuclear power plants that subsequently were canceled as being non-commercial.

- During the preparation for privatization, Dr. Hieronymus assisted several individual U.K. electricity companies in understanding the evolving system, in developing use of system tariffs, and in enhancing commercial capabilities in power purchasing and contracting. He continued to advise a number of clients, including regional companies, power developers, large industrial customers, and financial institutions on the U.K. power system for a number of years after privatization.

- Dr. Hieronymus assisted four of the regional electricity companies in negotiating equity ownership positions and developing the power purchase contracts for a 1,825 megawatt combined cycle gas station. He also assisted clients in evaluating other potential generating investments including cogeneration and non-conventional resources.

- Dr. Hieronymus also has consulted on the separate reorganization and privatization of the Scottish electricity sector. Part of his role in that privatization included advising the larger of the two Scottish companies and, through it, the Secretary of State on all phases of the restructuring and privatization, including the drafting of regulations, asset valuation, and company strategy.

- He assisted one of the Regional Electricity Companies in England and Wales in the 1993 through 1995 regulatory proceedings that reset the price caps for its retailing and distribution businesses. Included in this assignment was consideration of such policy issues as incentives for the economic purchasing of power, the scope of price control, and the use of comparisons among companies as a basis for price regulation. Dr. Hieronymus's model for determining network refurbishment needs was used by the regulator in determining revenue allowances for capital investments.

- He assisted one of the Regional Electricity Companies in its defense against a hostile takeover, including preparation of its submission to the Cabinet Minister who had the responsibility for determining whether the merger should be referred to the competition authority.

Assignments Outside the U.S. and U.K.

- Dr. Hieronymus testified before the federal court of Australia concerning the market power implications of acquisition of a share of a large coal-fired generating facility by a large retail and distribution company.

- Dr. Hieronymus assisted a large state-owned European electricity company in evaluating the impacts of the EU directive on electricity that *inter alia* required retail access and competitive markets for generation. The assignment included advice on the organizational solution to elements of the directive requiring a separate transmission system operator and the business need to create a competitive marketing function.

- For the European Bank for Reconstruction and Development, he performed analyses of least-cost power options and evaluated the return on a major investment that the Bank was considering for a partially completed nuclear plant in Slovakia. Part of this assignment involved developing a forecast of electricity prices, both in Eastern Europe and for potential exports to the West.

- For the OECD he performed a study of energy subsidies worldwide and the impact of subsidy elimination on the environment, particularly on greenhouse gases.

- For the Magyar Villamos Muvek Troszt, the electricity company of Hungary, Dr. Hieronymus developed a contract framework to link the operations of the different entities of an electricity sector in the process of moving from a centralized command- and-control system to a decentralized, corporatized system.

- For Iberdrola, the largest investor-owned Spanish electricity company, he assisted in development of their proposal for a fundamental reorganization of the electricity sector, its means of compensating generation and distribution companies, its regulation, and the phasing out of subsidies. He also has assisted the company in evaluating generation expansion options and in valuing offers for imported power.

- Dr. Hieronymus contributed extensively to a project for the Ukrainian Electricity Ministry, the goal of which was to reorganize the Ukrainian electricity sector and prepare it for transfer to the private sector and the attraction of foreign capital. The proposed reorganization is based on regional electric power companies, linked by a unified central market, with market-based prices for electricity.

- At the request of the Ministry of Power of the USSR, Dr. Hieronymus participated in the creation of a seminar on electricity restructuring and privatization. The seminar was given for 200 invited Ministerial staff and senior managers for the USSR power system. His specific role was to introduce the requirements and methods of privatization. Subsequent to the breakup of the Soviet Union, Dr. Hieronymus continued to advise both the Russian energy and power ministry and the government-owned generation and transmission company on restructuring and market development issues.

- On behalf of a large continental electricity company, Dr. Hieronymus analyzed the proposed directives from the European Commission on gas and electricity transit (open access regimes) and on the internal market for electricity. The purpose of this assignment was to forecast likely developments in the structure and regulation of the electricity sector in the common market and to assist the client in understanding their implications.

- For the electric utility company of the Republic of Ireland, he assessed the likely economic benefit of building an interconnector between Eire and Wales for the sharing of reserves and the interchange of power.

- For a task force representing the Treasury, electricity generating, and electricity distribution industries in New Zealand, Dr. Hieronymus undertook an analysis of industry structure and regulatory alternatives for achieving the economically efficient generation of electricity. The analysis explored how the industry likely would operate under alternative regimes and their implications for asset valuation, electricity pricing, competition, and regulatory requirements.

TARIFF DESIGN METHODOLOGIES AND POLICY ISSUES

- Dr. Hieronymus participated in a series of studies for the National Grid Company of the United Kingdom and for ScottishPower on appropriate pricing methodologies for transmission, including incentives for efficient investment and location decisions.

- For a U.S. utility client, he directed an analysis of time-differentiated costs based on accounting concepts. The study required selection of rating periods and allocation of costs to time periods and within time periods to rate classes.

- For EPRI, Dr. Hieronymus directed a study that examined the effects of time-of-day rates on the level and pattern of residential electricity consumption.

- For the EPRI-NARUC Rate Design Study, he developed a methodology for designing optimum cost-tracking block rate structures.

- On behalf of a group of cogenerators, Dr. Hieronymus filed testimony before the Energy Select Committee of the UK Parliament on the effects of prices on cogeneration development.

- For the Edison Electric Institute (EEI), he prepared a statement of the industry's position on proposed federal guidelines regarding fuel adjustment clauses. He also assisted EEI in responding to the U.S. Department of Energy (DOE) guidelines on cost-of-service standards.

- For private utility clients, Dr. Hieronymus assisted in the preparation both of their comments on draft FERC regulations and of their compliance plans for PURPA Section l33.

- For a state utilities commission, Dr. Hieronymus assessed its utilities' existing automatic adjustment clauses to determine their compliance with PURPA and recommended modifications.

- For DOE, he developed an analysis of automatic adjustment clauses currently employed by electric utilities. The focus of this analysis was on efficiency incentive effects.

- For the commissioners of a public utility commission, Dr. Hieronymus assisted in preparation of briefing papers, lines of questioning, and proposed findings of fact in a generic rate design proceeding.

SALES FORECASTING METHODOLOGIES FOR GAS AND ELECTRIC UTILITIES

- For the White House Sub-Cabinet Task Force on the future of the electric utility industry, Dr. Hieronymus co-directed a major analysis of "least-cost planning studies" and "low-growth energy futures." That analysis was the sole demand-side study commissioned by the task force, and it formed a basis for the task force's conclusions concerning the need for new facilities and the relative roles of new construction and customer side-of-the-meter programs in utility planning.

- For a large eastern utility, Dr. Hieronymus developed a load forecasting model designed to interface with the utility's revenue forecasting system-planning functions. The model forecasts detailed monthly sales and seasonal peaks for a 10-year period.

- For DOE, he directed development of an independent needs assessment model for use by state public utility commissions. This major study developed the capabilities required for independent forecasting by state commissions and provided a forecasting model for their interim use.

- For state regulatory commissions, Dr. Hieronymus has consulted in the development of service area-level forecasting models of electric utility companies.

- For EPRI, he authored a study of electricity demand and load forecasting models. The study surveyed state-of-the-art models of electricity demand and subjected the most promising models to empirical testing to determine their potential for use in long-term forecasting.

- For a Midwestern electric utility, he provided consulting assistance in improving the client's load forecast, and testified in defense of the revised forecasting models.

- For an East Coast gas utility, Dr. Hieronymus testified with respect to sales forecasts and provided consulting assistance in improving the models used to forecast residential and commercial sales.

OTHER STUDIES PERTAINING TO REGULATED AND ENERGY COMPANIES

- In a number of antitrust and regulatory matters, Dr. Hieronymus has performed analyses and litigation support tasks. These cases have included Sherman Act Section 1 and 2 allegations, contract negotiations, generic rate hearings, ITC hearings, and a major asset valuation suit. In a major antitrust case, he testified with respect to the demand for business telecommunications services and the impact of various practices on demand and on the market share of a new entrant. For a major electrical equipment vendor, Dr. Hieronymus testified on damages with respect to alleged defects and associated fraud and warranty claims. In connection with mergers for which he is the market power expert, Dr. Hieronymus assists clients in Hart-Scott-Rodino investigations by the Antitrust Division of the U.S. Department of Justice and the Federal Trade Commission. In an arbitration case, he testified as to changed circumstances affecting the equitable nature of a contract. In a municipalization case, he testified concerning the reasonable expectation period for the supplier of power and transmission services to a municipality. In two Surface Transportation Board proceedings, he testified on the sufficiency of product market competition to inhibit the exercise of market power by railroads transporting coal to power plants.

- For a major owner of the Trans-Alaska Pipeline System he submitted and defended testimony concerning a proposed change in the basis for the allocation of the costs and profits of the pipeline among owners as such allocation had changed as a result of the expiration of a previous agreement and the reduction in pipeline volumes below design capacity.

- For a company proposing to build a new LNG terminal he testified concerning appropriate regulatory treatment of LNG facilities. FERC accepted his position that LNG terminals should be treated in the same way as similarly sited gas fields and hence not regulated. This became the policy for all such projects.

- For a landholder, Dr. Hieronymus examined the feasibility and value of an energy conversion project that sought a long-term lease. The analysis was used in preparing contract negotiation strategies.

- For an industrial client considering development and marketing of a total energy system for cogeneration of electricity and low-grade heat, Dr. Hieronymus developed an estimate of the potential market for the system by geographic area.

- For the U.S. Environmental Protection Agency (EPA), he was the principal investigator in a series of studies that forecasted future supply availability and production costs for various grades of steam and metallurgical coal to be consumed in process heat and utility uses.

Dr. Hieronymus has been an invited speaker at numerous conferences on such issues as market power, industry restructuring, utility pricing in competitive markets, international developments in utility structure and regulation, risk analysis for regulated investments, price squeezes, rate design, forecasting customer response to innovative rates, intervener strategies in utility regulatory proceedings, utility deregulation, and utility-related opportunities for investment bankers.

Prior to rejoining CRA in June 2001, Dr. Hieronymus was a Member of the Management Group at PA Consulting, which acquired Hagler Bailly, Inc. in October 2000. He was a Senior Vice President of Hagler Bailly. In 1998, Hagler Bailly acquired Dr. Hieronymus's former employer, Putnam, Hayes & Bartlett, Inc. He was a Managing Director at PHB. He joined PHB in 1978. From 1973 to 1978 he was a Senior Research Associate and Program Manager for Energy Market Analysis at CRA. Previously, he served as a project director at Systems Technology Corporation and as an economist while serving as a Captain in the U.S. Army.

Duke Energy Generation and Purchases [1/]

Balancing Authority/ RTO	Plant Name	Summer Capacity MW	Ownership Share	Ownership Interest MW
DUK (Current Generation)				
DUK	Belews Creek	2,220	100.00%	2,220
DUK	Buck	431	100.00%	431
DUK	Cliffside	760	100.00%	760
DUK	Dan River	324	100.00%	324
DUK	G G Allen	1,127	100.00%	1,127
DUK	Marshall	2,078	100.00%	2,078
DUK	Riverbend	518	100.00%	518
DUK	W S Lee	452	100.00%	452
DUK	McGuire	2,200	100.00%	2,200
DUK	Catawba	2,258	19.25%	435
DUK	Oconee	2,538	100.00%	2,538
DUK	Bad Creek	1,360	100.00%	1,360
DUK	Cowans Ford	325	100.00%	325
DUK	Jocassee	730	100.00%	730
DUK	Keowee	152	100.00%	152
DUK	Other Hydro	589	100.00%	589
DUK	Buzzard Roost	176	100.00%	176
DUK	Lincoln Combustion	1,267	100.00%	1,267
DUK	Mill Creek	595	100.00%	595
DUK	Rockingham	825	100.00%	825
	Subtotal	20,926		19,102
Planned Retirement By Summer 2012				
DUK	Buck 3-4 (5/15/11)	(113)	100.00%	(113)
DUK	Buck 7-9 (6/1/12)	(62)	100.00%	(62)
DUK	Cliffside 1-4 (10/1/11)	(198)	100.00%	(198)
DUK	Dan River 1-3,5 (2012)	(300)	100.00%	(300)
DUK	Riverbend 8-11 (6/1/12)	(64)	100.00%	(64)
DUK	Buzzard Roost 6-15 (6/1/12)	(176)	100.00%	(176)
	Subtotal	(913)		(913)
Planned Capacity Additions by 2012				
DUK	Jocassee 1+2 (uprate)	50	100.00%	50
DUK	Bridgewater Hydro (uprate)	9	100.00%	9
DUK	Buck CC (12/31/11)	620	100.00%	620
DUK	Cliffside (6/30/12)	825	100.00%	825
	Subtotal	1,504		1,504
DEC Purchases				
	Cherokee Cogen			88
	SEPA Allocation			59
	Misc Purchases			123
				270
	DUK, Total Owned and Purchased, Current			19,372 [2/]
	DUK, Total Owned and Purchased, 2012			19,963

Balancing Authority/ RTO	Plant Name	Summer Capacity MW	Ownership Share	Ownership Interest MW
MISO [3/]				
MISO	Walter C Beckjord 1-5, GTs [4/]	892	100.00%	892
MISO	Walter C Beckjord 6 [4/]	414	37.50%	155
MISO	Dicks Creek [4/]	136	100.00%	136
MISO	East Bend [4/]	600	69.00%	414
MISO	Miami Fort 6, GTs [4/]	219	100.00%	219
MISO	Miami Fort 7-8 [4/]	1,020	64.00%	653
MISO	Woodsdale [4/]	462	100.00%	462
MISO	W H Zimmer [4/]	1,300	46.50%	605
MISO	Vermillion Energy Facility [4/]	568	75.00%	426
MISO	Cayuga	1,104	100.00%	1,104
MISO	Connersville	86	100.00%	86
MISO	Edwardsport	160	100.00%	160
MISO	Gibson 1-4	2,512	100.00%	2,512
MISO	Gibson 5	620	50.05%	310
MISO	Markland	45	100.00%	45
MISO	Miami Wabash	80	100.00%	80
MISO	Noblesville	286	100.00%	286
MISO	R Gallagher	560	100.00%	560
MISO	Wabash River 2-7	676	100.00%	676
MISO	Madison	576	100.00%	576
MISO	Henry County	129	100.00%	129
MISO	Wheatland	460	100.00%	460
MISO	St. Paul Cogeneration	33	100.00%	33
PJM	Conesville 4 [5/]	780	40.00%	312
PJM	J M Stuart [5/]	2,350	39.00%	916
PJM	Killen Station [5/]	610	33.00%	201
				12,408
PJM [6/]				
PJM	Lee Energy Facility [7/]	568	100.00%	568
PJM	Washington Energy Facility [7/]	617	100.00%	617
PJM	Fayette Energy Facility [7/]	614	100.00%	614
PJM	Hanging Rock Energy Facility [7/]	1,220	100.00%	1,220
PJM	North Allegheny	70	100.00%	70
	PJM, Total			3,089
OVEC				
OVEC	Kyger Creek [8/]	993	9.00%	89
OVEC	Clifty Creek [8/]	1,203	9.00%	108
	OVEC, Total			198

Balancing Authority/ RTO	Plant Name	Summer Capacity MW	Ownership Share	Ownership Interest MW	
WECC					
WACM	Happy Jack	29	100.00%	29	
WACM	Silver Sage	42	100.00%	42	
WACM	Kit Carson	51	100.00%	51	
PACE	Three Buttes	99	100.00%	99	
PACE	Top of the World Wind Energy	200	100.00%	200	
	WECC, Total			421	
ERCOT					
ERCOT	Ocotillo	59	100.00%	59	
ERCOT	Notrees	153	100.00%	153	
ERCOT	Sweetwater Wind Project	585	48.40%	283	
	ERCOT, Total			495	
Total, Owned and Purchased, Current				**35,984**	9/
Total, Owned and Purchased, 2012				**36,574**	9/

Notes:

1/ Seasonal ratings may not match ratings used for other purposes.

2/ Excludes some small solar generating units owned by a Duke Energy affiliate (less than 10 MW).

3/ Ratings from EIA 860 Generator Database, as updated by Duke Energy.

4/ The facilities are expected to be transferred to PJM in 2012.

5/ These co-owned generators (Conesville, J M Stuart and Killen Station) are physically located in the PJM footprint but are directly connected to facilities under the control of MISO and operate as MISO Network Resources.

6/ Based on EIA 860, as updated (see note 2 above). These ratings differ slightly from the capacity figures used in PJM in its 2009 PJM Load, Capacity and Transmission Report, January 13, 2010 used for purposes of market-wide data (http://www.pjm.com/documents/reports/eia-reports.aspx).

7/ These units are committed to PJM through May 31, 2012 as a result of PJM's capacity auction (RPM).

8/ These units are committed to serving load obligations in MISO.

9/ Excludes some small solar generating units owned by a Duke Energy affiliate.

Progress Energy Generation and Purchases

Balancing Authority Area	Unit Name	Summer Capacity (MW)	Ownership Share	Ownership Interest (MW)
CPLE/CPLW				
CPLW	Asheville	703.0	100.00%	703.0
CPLE	Blewett	74.0	100.00%	74.0
CPLE	Brunswick	1,858.0	81.67% [1/]	1,858.0
CPLE	Cape Fear	380.0	100.00%	380.0
CPLE	Darlington County	801.0	100.00%	801.0
CPLE	H B Robinson	916.0	100.00%	916.0
CPLE	Harris	900.0	83.83% [1/]	900.0
CPLE	L V Sutton	659.0	100.00%	659.0
CPLE	Lee	472.0	100.00%	472.0
CPLW	Marshall	5.0	100.00%	5.0
CPLE	Mayo	742.0	83.83% [1/]	742.0
CPLE	Morehead	12.0	100.00%	12.0
CPLE	Richmond	1,287.0	100.00%	1,287.0
CPLE	Roxboro	2,424.0	96.30% [1/]	2,424.0
CPLE	Tillery	89.0	100.00%	89.0
CPLE	W H Weatherspoon	304.0	100.00%	304.0
CPLW	Walters	112.0	100.00%	112.0
CPLE	Wayne County	863.0	100.00%	863.0
	Subtotal			**12,601.0**
Planned Capacity Additions by 2012				
CPLE	Richmond (6/1/11)	635.0	100.00%	635.0
CPLE	H B Robinson Uprate	25.0	100.00%	25.0
CPLE	Harris 1 Uprate	30.0	100.00%	30.0
	Subtotal			**690.0**
PEC Purchases [2/]	**Counterparty/Facility**			
DUK	Broad River [3/]			850.0
CPL	Roxboro (contract ended 12/31/09, purchase continue)			47.0
CPL	Southport (contract ended 12/31/09, purchase continue)			86.0
CPL	Southern Company (Rowan)			145.0
CPL	SEPA Allocation			95.0
	Subtotal			**1,223.0**
	CPLE, CPLW, Total Owned and Purchased, Current			**13,824.0**
	CPLE, CPLW, Total Owned and Purchased, 2012			**14,514.0**
FPC				
FPC	Anclote	1,011.0	100.00%	1,011.0
FPC	Avon Park	48.0	100.00%	48.0
FPC	Bayboro	174.0	100.00%	174.0
FPC	Crystal River Units 1-2	869.0	100.00%	869.0
FPC	Crystal River Unit 3	860.0	91.78%	789.3
FPC	Crystal River Units 4-5	1,442.0	100.00%	1,442.0

Balancing Authority Area	Unit Name	Summer Capacity (MW)	Ownership Share	Ownership Interest (MW)
FPC	DeBary	645.0	100.00%	645.0
FPC	G E Turner	149.0	100.00%	149.0
FPC	Higgins	113.0	100.00%	113.0
FPC	Hines Energy Complex	1,912.0	100.00%	1,912.0
FPC	Intercession City	987.0	100.00% [4/]	987.0
FPC	P L Bartow	1,310.0	100.00%	1,310.0
FPC	Rio Pinar	12.0	100.00%	12.0
FPC	Suwannee River	284.0	100.00%	284.0
FPC	Tiger Bay	205.0	100.00%	205.0
FPC	University of Florida	46.0	100.00%	46.0
	Subtotal			**9,996.3**

PEF Purchases	**Counterparty/Facility**	
	QF Dade County Resource Recovery	43.0
	QF El Dorado	114.2
	QF Lake Cogen	110.0
	QF Lake County Resource Recovery	12.8
	QF LFC Jefferson	8.5
	QF LFC Madison	8.5
	QF Mulberry	115.0
	QF Orange Cogen (CFR Biogen)	74.0
	QF Orlando Cogen	79.2
	QF Pasco County Resource Recovery	23.0
	QF Pinellas County Resource Recovery 1	40.0
	QF Pinellas County Resource Recovery 2	14.8
	QF Ridge Generating Station	39.6
	Southern Co. UPS [5/]	412.0
	Shady Hills	478.0
	Vandolah	462.0
	Subtotal	**2,034.6**
	Total, FPC	**12,030.9**

Total, Owned and Purchased, Current	**25,854.9**
Total, Owned and Purchased, 2012	**26,544.9**

Notes:

1/ Progress Energy controls these jointly owned facilities and supplies output to its joint owner to serve their load. This load is included in PEC load.

2/ Not listed are smaller renewable purchases, such as Buncombe County Landfill, Hydrodyne Industries, and Madison Hydro Partners.

3/ The purchase contract specifies 835 MW, but the transmission reservation is for 850 MW.

4/ PEF is a joint owner (with Georgia Power Company) of a 143 MW CT at Intercession City site. Georgia Power has the exclusive right to the output of this facility June-September, and PEF has the exclusive right for the remainder of the year.

5/ PEF purchases 412 MW from SOCO's Scherer 3 and Miller 1-4 units.

Available Economic Capacity

Carolinas Markets

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
No Rate Depancaking													
DUK	S_SP1	$ 80	1,081	26.6%	1	0.0%	4,072	1,125	1,082	26.6%	4,072	1,126	1
DUK	S_SP2	$ 55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,086	-
DUK	S_P	$ 40	1,352	37.7%	-	0.0%	3,587	1,575	1,352	37.7%	3,587	1,575	-
DUK	S_OP	$ 35	809	23.5%	-	0.0%	3,448	832	809	23.5%	3,448	832	-
DUK	W_SP	$ 80	3,503	44.2%	-	0.0%	7,922	2,180	3,503	44.2%	7,922	2,180	-
DUK	W_P	$ 40	1,067	25.3%	-	0.0%	4,221	857	1,067	25.3%	4,221	857	-
DUK	W_OP	$ 35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	438	-
DUK	SH_SP	$ 55	1,875	34.4%	-	0.0%	5,457	1,427	1,875	34.4%	5,457	1,427	-
DUK	SH_P	$ 35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,187	434	-
DUK	SH_OP	$ 33	21	0.9%	-	0.0%	2,337	411	21	0.9%	2,337	411	-
CPLE	S_SP1	$ 80	170	7.2%	2	0.1%	2,343	437	172	7.3%	2,343	438	1
CPLE	S_SP2	$ 55	66	2.7%	32	1.3%	2,431	484	98	4.0%	2,431	491	7
CPLE	S_P	$ 40	96	3.1%	-	0.0%	3,136	364	96	3.1%	3,136	364	-
CPLE	S_OP	$ 35	132	3.0%	1,340	30.8%	4,359	1,150	1,472	33.8%	4,359	1,336	186
CPLE	W_SP	$ 80	764	16.6%	-	0.0%	4,606	555	764	16.6%	4,606	555	-
CPLE	W_P	$ 40	21	0.4%	246	4.8%	5,126	464	267	5.2%	5,126	468	4
CPLE	W_OP	$ 35	54	1.1%	-	0.0%	5,113	474	54	1.1%	5,113	474	-
CPLE	SH_SP	$ 55	176	4.2%	556	13.2%	4,210	525	732	17.4%	4,210	636	111
CPLE	SH_P	$ 35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	507	12
CPLE	SH_OP	$ 33	57	1.2%	140	3.0%	4,624	408	197	4.3%	4,624	415	7

Available Economic Capacity

Carolinas Markets

				Pre-Merger						Post-Merger				
				DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price		MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
With Rate Depancaking														
DUK	S_SP1	$	80	1,081	26.6%	1	0.0%	4,072	1,125	1,085	26.6%	4,072	1,129	5
DUK	S_SP2	$	55	1,294	27.2%	-	0.0%	4,757	1,086	1,294	27.2%	4,757	1,085	-
DUK	S_P	$	40	1,352	37.7%	-	0.0%	3,587	1,575	1,349	37.6%	3,587	1,573	(2)
DUK	S_OP	$	35	809	23.5%	-	0.0%	3,448	832	985	28.6%	3,448	1,073	241
DUK	W_SP	$	80	3,503	44.2%	-	0.0%	7,922	2,180	3,505	44.2%	7,922	2,186	7
DUK	W_P	$	40	1,067	25.3%	-	0.0%	4,221	857	1,121	26.5%	4,223	926	69
DUK	W_OP	$	35	26	0.9%	-	0.0%	3,049	438	26	0.9%	3,049	436	(2)
DUK	SH_SP	$	55	1,875	34.4%	-	0.0%	5,457	1,427	1,874	34.4%	5,457	1,427	(1)
DUK	SH_P	$	35	14	0.7%	-	0.0%	2,187	434	14	0.6%	2,228	496	63
DUK	SH_OP	$	33	21	0.9%	-	0.0%	2,337	411	20	0.9%	2,337	414	3
CPLE	S_SP1	$	80	170	7.2%	2	0.1%	2,343	437	213	9.1%	2,343	442	6
CPLE	S_SP2	$	55	66	2.7%	32	1.3%	2,431	484	139	5.7%	2,431	444	(41)
CPLE	S_P	$	40	96	3.1%	-	0.0%	3,136	364	296	9.4%	3,136	382	19
CPLE	S_OP	$	35	132	3.0%	1,340	30.8%	4,359	1,150	1,489	34.2%	4,359	1,364	214
CPLE	W_SP	$	80	764	16.6%	-	0.0%	4,606	555	912	19.8%	4,606	645	90
CPLE	W_P	$	40	21	0.4%	246	4.8%	5,126	464	496	9.4%	5,272	430	(35)
CPLE	W_OP	$	35	54	1.1%	-	0.0%	5,113	474	60	1.2%	5,113	464	(11)
CPLE	SH_SP	$	55	176	4.2%	556	13.2%	4,210	525	746	17.7%	4,210	598	73
CPLE	SH_P	$	35	33	0.7%	389	8.5%	4,591	495	422	9.2%	4,591	499	4
CPLE	SH_OP	$	33	57	1.2%	140	3.0%	4,624	408	196	4.2%	4,624	414	6
CPLW	S_SP1	$	80	65	8.2%	-	0.0%	799	398	64	8.0%	799	401	3
CPLW	S_SP2	$	55	39	4.8%	-	0.0%	799	449	63	7.9%	799	425	(23)
CPLW	S_P	$	40	24	3.1%	-	0.0%	770	373	99	12.4%	799	417	43
CPLW	S_OP	$	35	36	4.5%	-	0.0%	799	388	89	11.2%	799	451	63
CPLW	W_SP	$	80	78	13.3%	-	0.0%	585	415	78	13.3%	585	418	3
CPLW	W_P	$	40	3	0.5%	-	0.0%	712	442	62	8.5%	726	397	(45)
CPLW	W_OP	$	35	7	0.9%	-	0.0%	783	407	8	1.0%	783	405	(1)
CPLW	SH_SP	$	55	62	9.2%	-	0.0%	676	465	59	8.8%	676	440	(24)
CPLW	SH_P	$	35	5	0.7%	-	0.0%	676	450	5	0.7%	676	456	6
CPLW	SH_OP	$	33	8	1.2%	-	0.0%	676	380	8	1.1%	676	385	4

Applicants' Sales Data

Duke Energy Carolinas' Generation and Sales

	Type	2008 (MWh)	2009 (MWh)	2010 (MWh)	Total (MWh)	Percent	Source
1	Total Duke Carolinas Generation	85,846,145	80,577,153	84,845,228	251,268,526		Form EIA-861
2	Retail Sales	77,246,972	74,443,058	79,553,460	231,243,490	92.2%	Form EIA-861
3	Sales for Resale	8,229,109	5,386,629	5,889,571	19,505,309		Form EIA-861
4	Sales inside Duke BAA	4,773,892	4,412,686	4,934,413	14,120,991	5.6%	[3] - [5]
5	Sales outside Duke BAA	3,455,217	973,943	955,158	5,384,318	2.1%	EQR
6	Sales to PJM	1,867,406	804,536	714,799	3,386,741	1.351%	EQR
7	Sales to Other BAAs	1,499,904	132,963	196,947	1,829,814	0.730%	[5]-[6]-[8]
8	Sales to Progress BAAs	87,907	36,444	43,412	167,763		EQR
9	Sales to Progress Energy	75,120	34,464	40,046	149,630	0.060%	[8]-[10]
10	Sales to Progress BAAs other than to Progress Energy	12,787	1,980	3,366	18,133	0.007%	EQR

Progress Energy Carolinas' Generation and Sales

	Type	2008 (MWh)	2009 (MWh)	2010 (MWh)	Total (MWh)	Percent	Source
1	Total Progress Carolinas Generation	55,727,432	56,013,177	58,188,728	169,929,337		Form EIA-861
2	Retail Sales	43,786,847	42,980,718	45,703,382	132,470,947	75.8%	Form EIA-861
3	Sales for Resale	14,328,970	13,965,922	13,998,620	42,293,512		Form EIA-861
4	Sales inside Progress BAAs	11,795,391	12,015,693	13,551,664	37,362,748	21.4%	[3] - [5]
5	Sales outside Progress BAAs	2,533,579	1,950,229	446,956	4,930,764	2.8%	EQR
6	Sales to PJM	2,241,947	1,468,901	397,315	4,108,163	2.351%	EQR
7	Sales to Other BAAs	266,771	445,182	39,638	751,591	0.430%	[5]-[6]-[8]
8	Sales to Duke BAA	24,861	36,146	10,003	71,010		EQR
9	Sales to Duke Energy	22,237	34,825	9,500	66,562	0.038%	[8]-[10]
10	Sales to Duke BAA other than to Duke Energy	2,624	1,321	503	4,448	0.003%	EQR

EQR Data (Short-Term Energy Sales)

Duke Energy Carolinas	**2008**	**2009**	**2010**
Total Sales (MWh)	4,134,654	1,363,796	1,029,643
Sales into Progress Energy Carolinas BAA (MWh)	87,907	36,444	43,412
Share of DEC's Sales into Progress Energy Carolinas BAA	2.13%	2.67%	4.22%
Sales into Progress Energy Carolinas BAA (MWh)	87,907	36,444	43,412
Sales to PEC (MWh)	74,520	34,464	40,046
Sales to Others (MWh)	13,387	1,980	3,366
Sales to Wholesale Customers with Load in BAA (MWh)*	75	50	925
Sales to PEC (%)	84.77%	94.57%	92.25%
Sales to Others (%)	15.23%	5.43%	7.75%
Sales to Wholesale Customers with Load in BAA (%)*	0.09%	0.14%	2.13%

Progress Energy Carolinas	**2008**	**2009**	**2010**
Total Sales (MWh)	2,952,714	2,016,855	597,404
Sales into Duke Energy Carolinas BAA (MWh)	24,861	36,146	10,003
Share of PEC's Sales into Duke Energy Carolinas BAA	0.84%	1.79%	1.67%
Sales into Duke Energy Carolinas BAA (MWh)	24,861	36,146	10,003
Sales to DEC (MWh)	22,237	34,825	9,500
Sales to Others (MWh)	2,624	1,321	503
Sales to Wholesale Customers with Load in BAA (MWh)**	-	-	-
Sales to DEC (%)	89.45%	96.35%	94.97%
Sales to Others (%)	10.55%	3.65%	5.03%
Sales to Wholesale Customers with Load in BAA (%)**	0.00%	0.00%	0.00%

* Sales to NCEMC. Other reported buyers were AEP, BNP Paribas Energy, Cargill, Conoco Phillips, Constellation, The Energy Authority, Lehman Brothers, Merrill Lynch, PJM, J. Aron, Tenaska, and TVA.

** Other reported buyers were Cargill, The Energy Authority, SCEG and Southeastern Power Administration.

Source: EQRs (as compiled by Ventyx)

MODELING AND DATA INPUTS

CASm is a proprietary linear programming model developed specifically to perform the calculations required in undertaking the delivered price test. The model includes each potential supplier as a distinct "node" or area that is connected via a transportation (or "pipes") representation of the transmission network. Each link in the network has its own non-simultaneous limit and cost. Potential suppliers are allowed to use all economically and physically feasible links or paths to reach the destination market. In instances where more generation meets the economic facet of the delivered price test than can actually be delivered on the transmission network, scarce transmission capacity is allocated based on the relative amount of economic generation that each party controls at a constrained interface. The model incorporates Simultaneous Import Limits ("SILs") as required by the Commission.

I conducted the competitive analysis screen using the existing market structure and publicly available data on generation and transmission capacity. The data inputs were adjusted to reflect 2012 conditions as a representative year (*e.g.*, to reflect updated fuel prices, load, and generation). A complete set of the input data used in my analysis is contained in my workpapers.[1]

A. Regions Modeled

I included as potential suppliers all entities within three wheels of the destination market.[2] The model includes all significant generation and load sources, including traditional utilities, non-utility and merchant generators, municipal utilities and cooperatives. Each entity is generally

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[1] My workpapers contain both a public and a confidential/proprietary set of workpapers. The public workpapers contain the basic input data and outputs of the analyses I have conducted. The confidential workpapers contain the CRA's proprietary CASm model and associated databases (to allow an entity to replicate my delivered price test analyses), and information that requires confidential treatment. A confidential/proprietary agreement is provided as part of the public workpapers that allows an entity access to the confidential/proprietary workpapers.

[2] Potential suppliers were selected in recognition of the Commission's guidance regarding the number of wheels a potential supplier can realistically travel and still be considered a player in the destination market. For example, in *FirstEnergy*, the Commission limited the number of wheels "a supplier could reasonably travel to reach the destination market," recognizing that "[m]ore distant suppliers would face considerable losses and transmission costs." The Commission limited the potential suppliers to those within four wheels. *Ohio Edison Co.,* 80 FERC ¶ 61,039, *reh'g denied*, 81 FERC ¶ 61,109 (1997), *reh'g denied*, 85 FERC ¶ 61,203 (1998).

Also, the request for comments on the use of computer models in merger analysis suggests that "three wheels has been deemed adequate." Inquiry Concerning the Commission's Policy on the Use of Computer Models in Merger Analysis, Notice of Request for Written Comments and Intent to Convene a Technical Conference, Docket No. PL98-6-000, April 16, 1998, at 24. I conservatively excluded suppliers in some regions, such as utilities in Canada, that are technically within three wheels of some of the destination markets.

modeled as an individual "node."[3] For most of the regions included in the model, including the relevant regional transmission organizations ("RTOs"), balancing authority areas were used to aggregate generation and transmission assets.

B. Generating Resources

The main sources for data on generating plant capability are the EIA-860 and EIA-411 reports. I also have reviewed data from Ventyx, The Velocity Suite's databases ("Ventyx"),[4] which are also largely based on these same public reports, planning reports and Integrated Resource Plans ("IRPs"),[5] and prior filings made by the companies. These data sources provide information on capacity (nameplate and seasonal (summer and winter) net dependable capacity ("NDC") ratings), planned retirements and additions, operating status, primary and secondary fuel, and ownership, including jointly-owned units. NDC ratings were used for the analyses, with the summer ratings used for the shoulder time periods. Planned retirements and known capacity additions through 2012 were reflected in the analysis; otherwise all units with operating status listed as "Operating" were included in the analysis. For jointly-owned plants, shares were assigned to each of the respective owners, except as specified below and in the testimony. The capacity representing shares of jointly-owned units was "moved" in most regions of the model from its actual physical location to the geographic location of the owner, to the extent the owner is a load-serving entity. Firm transmission to the owner's balancing authority area is assumed to be in place. For example, this treatment was used for moving OVEC generation to its respective owners' location in PJM and MISO.

Each supplier's generating resources were adjusted to reflect long-term (one year or more) capacity purchases and sales where they could be identified from publicly available data.[6] The

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[3] The term "nodes" is used in CASm to denote a region or bubble where load, generation, or transmission assets are aggregated.

[4] Ventyx is a set of databases, analytical tools and forecasts that is widely used in the industry.

[5] *See, e.g., The Duke Energy Carolinas Integrated Resource Plan* (Annual Report), September 1, 2010, filed with the North Carolina Utilities Commission - Docket No. E-100, Sub 128; *Progress Energy Carolinas, Integrated Resource Plan*, September 13, 2010, filed with the North Carolina Utilities Commission - Docket No. E-100, Sub 128, and the Public Service Commission of South Carolina - Docket No. 2010 - 8 – E; *Annual Report of the North Carolina Utilities Commission;* November 30, 2010; and *Progress Energy Florida's 2010 Ten-Year Site Plan*, April 1, 2010, filed with the Florida Public Service Commission.

[6] Sources for such information include FERC Form 1 and EIA Forms 411 and 412, utility resource plans and NERC's Electricity Supply and Demand database (as compiled by Ventyx). Requirements contracts generally are

capacity representing firm purchases and sales, analogous to the treatment of jointly-owned units, was "moved" in the model from its actual physical location to the geographic location of the buyer. Generation ownership was adjusted to reflect the transfer of control by assuming that the sale resulted in a decrease in capacity for the seller and a corresponding increase in capacity for the buyer.[7] Consistent with guidance provided in Appendix A, it was assumed that system power sales were comprised of the lowest-cost supply for the seller unless a more representative price could be identified.[8] Public data on purchases and sales, however, are not entirely complete or consistent across sources. In any event, adjustments to generating capacity for long-term sales and purchases is primarily relevant for the Applicants. The generation database is intended to reflect 2012 conditions and I have included only a limited amount of new generation that is coming on-line by 2012.[9] DEO and DEK have proposed to withdraw their transmission assets from MISO and join PJM as of January 1, 2012.[10] To reflect this, approximately 5,200 MW of generation, primarily generation owned by DEO and DEK, was "moved" from MISO to PJM as part of their integration into PJM. About 5,000 MW of Duke Energy's load obligations was also moved to PJM.[11]

Because the delivered price test is intended to evaluate energy products, seasonal capacity was de-rated to approximate the actual availability of the units in each period. That is, it was

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treated as the equivalent of native load and potential supplier's Economic Capacity was not adjusted to reflect them.

7 Consistent with this assumption, non-utility generation ("NUGs") were assumed to be under the control of the purchasing utility. The Revised Filing Requirements direct applicants to consider whether operational control of a unit is transferred to the buyer. Such information generally is not readily available for non-applicants. Therefore, I treated long-term sales as being under the control of the purchaser

8 "[T]he lowest running cost units are used to serve native load and other firm contractual obligations" (Order No. 592 at 30,132). The lowest-cost supply that was available year-round (i.e., excluding hydro) was used. To the extent that long-term sales could be identified specifically as unit sales, the capacity of the specific generating unit was adjusted to reflect the sale, and the variable element of the purchase price attributed to the sale was the variable cost of the unit. The dispatch price for system purchases was based on the energy price reported for long-term purchases in FERC Form 1 (or similar forms, as reported in Ventyx) where such purchases could be identified and a variable cost price determined. In instances where the purchases could not be matched with FERC Form 1 data, the dispatch price was estimated.

9 As I discuss in my testimony, I evaluated a 2015 snapshot, reflecting generation additions/retirements expected by that date and expected load growth, but holding all other assumptions constant.

10 *See* http://www.pjm.com/markets-and-operations/market-integration/~/media/markets-ops/duke-integration/duke-request.ashx

11 *See* http://www.pjm.com/markets-and-operations/market-integration/~/media/planning/res-adeq/load-forecast/summer-2010-peaks-and-5cps.ashx. I assumed that Duke Energy was responsible for 85 percent of load in the Duke Zone.

assumed that generation capacity would be unavailable during some hours of the year for either (planned) maintenance or forced (unplanned) outages. Data reported in the NERC "Generating Availability Data System" ("GADS") was used to calculate the "average equivalent availability factor" to estimate total outages, and the "average equivalent forced outage rate" to estimate forced outages for fossil and nuclear plants.[12] Based on a review of historical planned outages (as reported in the FERC Form 714), scheduled maintenance was assumed to occur mostly in the shoulder season (80 percent), with remainder scheduled during the winter season. Forced outages were assumed to occur uniformly throughout the year.

Supply curves were developed for each potential supplier in the model, based on estimates of each unit's incremental costs. The incremental cost is calculated by multiplying the fuel cost for the unit by the unit's efficiency (heat rate) and adding any additional variable costs that may apply, such as costs for variable operations and maintenance ("VO&M") and costs for environmental controls.[13]

Data used to derive incremental cost estimates for each unit were taken from the following sources:

- Heat Rates – EIA Form 860, supplemented by data reported in Ventyx's database. (Note that the most recently available data from the Form 860 date back to 1995, so much of the heat rate data is based on information reported by Ventyx.)[14]

- Fuel Costs - Futures prices and Regional Projections. Regional dispatch costs for natural gas and oil units were derived from futures market data and spot price history (2012 data, retrieved in January 2011). For gas-fired units, I relied on 2012 NYMEX Henry Hub natural gas futures contract prices and applied

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[12] GADs reported data from 2005-2009 was used in most instances. In addition to thermal unit availability, hydro unit availability and generation are specified for each time period. For each of the time periods analyzed, hydro capacity factors have been assigned to each unit based on historical operation. Capacity factors for hydro units were based on five years of Form 923 monthly generation data, reported maximum capacities and, where necessary, assumptions regarding minimum capacity (assumed to be 15 percent of maximum if no data is available).

[13] For NUGs, the incremental costs were estimated on the basis of the energy price reported in relevant regulatory filings, if available. Otherwise, NUGs were assumed to be must-run and the variable costs set to zero. New merchant and utility capacity included in the analysis was priced assuming an average full-load heat rate of 10,000 Btu/kWh for combustion turbines and 7,000 Btu/kWh for combined cycle plants. These values were derived from an evaluation of existing technology. Variable O&M costs for new units were assumed to be the same as for existing units.

[14] For combined-cycle units, Ventyx provides information on the combined-cycle and peaking (*e.g.*, duct-firing) modes of operation and I have incorporated this information where available.

regional basis differentials. I used these data to estimate regional delivered commodity prices for all gas-fired units modeled. Basis differentials were estimated from a review of regional market center and Henry Hub prices from EIA. The NYMEX Henry Hub price, plus each region's basis differential equals my estimated regional price. For oil-fired units, I relied on the NYMEX futures contract for light sweet crude oil. I estimated delivered residual and distillate oil prices based on a multi-year analysis of delivered refined products versus spot crude oil prices. I used plant specific coal prices (from FERC Form 423 (January 2009 to October 2010) supplemented by Ventyx's Spot prices available data) as the basis for my coal unit dispatch cost and escalated to 2012 using information in EIA's 2009 Annual Energy Outlook (table 15). In instances where no forecast was available for a given unit, I used regional average price estimate as my default. In addition, I assumed that supercritical coal units had a maximum dispatch cost of $30/MWh.

- Variable O&M – $1/MWh for gas and oil steam units, $3/MWh for scrubbed coal-fired units and $2/MWh for other coal-fired units (generic estimates based on trade and industry sources). Additional Variable O&M adders for other unit types are shown in my workpapers. As noted, these Variable O&M costs are generic estimates by plant type and do not necessarily match actual individual unit O&M costs. Notably, Variable O&M accounts for a minor portion of the dispatch costs used in the analysis, and, importantly, the specific O&M assumption tends not to alter the merit order of the generic types of generation.

- Environmental Costs – All units covered by Phase II of the Clean Air Act Amendments of 1990 (CAAA) are assessed a variable dispatch adder to cover costs associated with SO2 emissions. This unit-specific cost is calculated using the SO2 content of fuel burned at the unit as reported in FERC Form 423 (adjusting for emissions reduction equipment at the facility) and an SO2 allowance cost of $30/ton.[15] In addition to SO2, the unit dispatch costs also reflect the impact of existing NOx trading programs in the Northeast (OTR). Unit-specific data on NOx rates (lbs/mmBtu) were taken from the EPA's "2000 Acid Rain Program Emission Scorecard."[16] The NOx allowance price for the OTR was assumed to be $680/ton.[17]

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[15] Consistent with my methodology for estimating coal prices, I used plant specific estimates of SO2 emissions as the basis for my coal unit dispatch cost. When there was no estimate for a given unit, I defaulted to a regional average SO_2 estimate. SO_2 costs are from Evolution Markets LLC.

[16] In cases where unit-specific data were not available, such as for new capacity, the following boiler level assumptions were applied, based on the unit's fuel type: Coal – 0.4; Oil – 0.2; Natural Gas – 0.1.

[17] NOx rates were derived from EPA's Acid Rain Program Emission Scorecard and NOx allowance price is from Evolution Markets LLC.

C. Transmission

The Commission's Appendix A analysis specifies that the transmission system be modeled on the basis of inter-balancing authority area transmission capability using transmission prices based on transmission providers' maximum non-firm OATT rates, except where lower rates can be documented. This dictates a transportation representation of the transmission network, and the structure of CASm was designed to conform to Appendix A. This representation remains appropriate for some regions in the United States (*i.e.*, those where transmission service is still generally provided under each transmission owner's OATT). Basing tariffs on OATT rates is increasingly modified by RTO transmission pricing arrangements, however, and the Commission has instructed applicants to account for them.[18] I incorporated the RTO arrangements in my modeling of transmission rates and limits and have also explicitly incorporated SILs into my modeling assumptions.

Balancing area-to-balancing area transmission capability was taken primarily from postings on the various transmission operators' Open Access Same-Time Information System ("OASIS"). OASIS reports Total Transfer Capability ("TTC"), firm Available Transfer Capability ("ATC") and non-firm ATC. Data generally are provided monthly for a twelve-month period starting with the next month. Given that I apply a SIL into each destination market, the overall amount of rival capacity into the destination market is limited by the SIL.

A summary of the posted OASIS data is provided in workpapers, which also show the assumed values for all of the transmission paths in the analysis. For the direct interconnections to DUK, CPLE and CPLW, I used the average of Applicants' Monthly TTC posting and decremented it for TRM.[19] I also adjusted the TTCs to reflect the schedules between balancing authority areas included in the analysis in each time period, as discussed below. Monthly ATC or TTC values were used in other regions of the Southeast in most instances. For other regions where transmission is no longer posted on a balancing area-to-balancing area basis, I have generally used values from older filings or used information from other sources, although I would note that the

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[18] *See Revised Filing Requirements Under Part 33 of the Commission's Regulations*, Order No. 642, FERC Stats. & Regs. [Regs. Preambles July 1996-Dec. 2000] ¶ 31,111 at 31,890 (2000), *on reh'g*, Order No. 642-A, 94 FERC ¶ 61,289 (2001). ("Revised Filing Requirements" or "Order No. 642").

[19] For the limits between DUK and the two CPL BAAs, I used postings from Progress Energy Carolinas' OASIS.

assumption on transmission capacity in the regions outside of the Carolinas has an insignificant non-material impact on the results of my analysis.

Consistent with Order No. 592, the ceiling rates in Schedule 8 (Non-Firm Point-to-Point Transmission Service) of each utility's Order No. 888 filings were used as the basis for transmission rates for utilities that are not part of RTO arrangements.[20] In many instances, utilities report both on-peak and off-peak ceiling rates in its Order No. 888 filing. If so, the applicable transmission rate for the on- and off-peak periods were used. If not, the filed ceiling rate was applied for all periods. Ancillary service charges from Schedules 1 (Scheduling, System Control and Dispatch Service) and 2 (Reactive Supply and Voltage Control from Generation Sources Service) of Order No. 888 filings were added where applicable to determine the final rates. For the RTOs, I have used information on their respective OASIS sites to calculate the applicable transmission rates.

Losses, which are assumed to be 2.8 percent, are assessed for each wheel incurred along the path to deliver power to the destination market but are not added for the final wheel into the destination market.

D. SILS

I relied on SIL data provided by Applicants. Applicants provided me with an analysis of the SIL into DUK, CPLE, CPLW and their first-tier markets (SC, SCEG, SOCO and TVA) for three seasonal snapshots: Summer, Winter and Spring. For each market, Applicants provided the First Contingency Incremental Transfer Capability ("FCITC") and the interchange schedules that they have modeled by season. The SIL from Applicants' study is the sum of the FCITC minus interchange (where interchange is defined as a negative value for imports). My analysis accounts for the agreements underlying the interchange by moving generation resources between balancing authority areas. Therefore, the remaining transmission capability into a market is the portion of the SIL that has not already been accounted for in my modeling. For example, one of the interchange schedules included in Applicants' SIL analysis is an 850 MW reservation from DUK to CPLE to

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[20] In instances where transmission data were not reported in dollars per MWh, the $/MW rates were converted to $/MWh rates using the "Appalachian" method. *Appalachian Power Co.*, 39 FERC ¶ 61,296 at 61,965 (1987). In some instances, I used rates posted on the transmission operators' OASIS offerings page, which may be lower than the ceiling rates provided in Schedule 8. In instances when data was not available, I assumed default transmission rates of $2/MWh and $1/MWh for peak and off-peak periods, respectively.

reflect Progress Energy Carolinas' long-term power purchase agreement with respect to the Broad River peaking facility located in DUK. In my analysis, I treat Broad River as a resource in CPLE during times when the peaking facility is economic to operate based on the assumptions in the DPT and, therefore, I have modeled the interchange capability related to the Broad River schedule and account for this by assuming 850 MW of the SIL is already used.[21] This accounting for how much of the interchange has already been modeled is done in each time period to determine the amount of SIL available for suppliers, including Applicants, outside of the market. A detailed accounting of the interchange modeled in each market by time period is provided in workpapers.

E. Allocation of Limited Transmission

Appendix A notes that there are various methods for allocating transmission, and that applicants should support the method used.[22] For purposes of this analysis, limited transmission capacity was allocated using a prorata "squeeze-down" method, so-named because it seeks to prorate capacity at each node and is the closest approximation to what the Commission applied in *FirstEnergy*[23] that is computationally feasible. Under this method, shares of available transmission are allocated at each interface, diluting the importance of distant capacity as it gets closer to the destination market. When there is economic supply (*i.e.*, having a delivered cost less than 105 percent of the destination market price) competing to get through a constrained transmission interface into a balancing authority area, the transmission capability is allocated to the suppliers in proportion to the amount of economic supply each supplier has outside the interface.

Shares on each transmission path are based on the shares of deliverable energy at the source node for the particular path being analyzed. The calculations start at the outside of a

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[21] The treatment of non-SIL transmission capabilities is symmetric. For example, when Broad River is economic, I decrement the non-SIL TTC rating from DUK to CPLE to reflect that a portion of the transfer capability along the path is used by PEC to import Broad River into the CPLE market.

[22] *See Inquiry Concerning the Commission's Merger Policy Under the Federal Power Act: Policy Statement*, Order No. 592, FERC Stats. & Regs.[Regs. Preambles 1996-2000] ¶ 31,044 at 30,133(1996) ("Merger Policy Statement" or "Order No. 592") ("In many cases, multiple suppliers could be subject to the same transmission path limitation to reach the same destination market and the sum of their economic generation capacity could exceed the transmission capability available to them. In these cases, the ATC must be allocated among the potential suppliers for analytic purposes. There are various methods for accomplishing this allocation. Applicants should support the method used."), *reconsideration denied*, Order No. 592-A, 79 FERC ¶ 61,321 (1997).

[23] *Ohio Edison Co.* at 61,106-07: "When there was more economic capacity (or available economic capacity) outside of a transmission interface than the unreserved capability would allow to be delivered into the destination market, the transmission capability was allocated to the suppliers in proportion to the amount of economic capacity each supplier had outside the interface."

network, defined with the destination market as its center, and end at the destination market itself. A series of decision rules are required to accomplish this proration. The purpose of these decision rules is limited to assigning a unique power flow direction to each link for any given destination market analysis. Once the links are given a direction, the complex network can be solved. CASm implements a series of rules to determine the direction of the path. The first rule (and the one expected to be applied most frequently) is based on the direction of the flow under an economic allocation of transmission capacity. Other options take into consideration the predominant flow on the line based on desired volume (the amount of economic capacity seeking to reach the destination market, the number of participants seeking to use a path in a particular direction, and the path direction that points toward the destination market). Directions can also be set manually.

The model proceeds to assign suppliers at each node a share equal to their maximum supply capability. At each node, "new" suppliers (those located at the node outside of the next interface) are given a share equal to their supply capability, and the shares of more distant suppliers (those who have had to pass through interfaces or SILs more remote from the destination market in order to reach the node) are scaled down to match the line capacity into the node. Ultimately, the shares at the destination market represent the prorated shares of Economic Capacity (or Available Economic Capacity) that is economically and physically feasible.[24] Additional details on how CASm allocates transmission is provided in Exhibit J-8.

F. Prices

As described in Exhibit J-1, information I reviewed to select the prices that I used in my analysis included (i) Applicants' system lambdas for 2009 and 2010, adjusted to reflect forecast fuel price differences for the 2012 modeled year; (ii) the price levels that would balance each Applicant's supply stack with their average load for the period; (iii) the capacity factors for each type of capacity that the Applicants own to determine which units, with what fuel and heat rate, typically sets prices in the time period; (iv) energy prices forecasted by Ventyx; and (v) EQR data. The underlying data for each of these items is provided in workpapers.

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[24] The allocation of imports in the model sometimes results in slight underutilization of the SILs. The effect can be slight changes in pre- to post-merger market size.

G. Load

Load values were generally based on information from FERC Form 714, which contains information on historical hourly load and forecasted peak and energy, IRPs and other planning documents. For loads on the Duke Energy Carolinas' and Progress Energy Carolinas' systems, I used information on peak load from the IRPs.[25] These loads, and others in the model, were then shaped based on the hourly load pattern for Duke Energy Carolinas in its FERC Form 714. In instances where reliable load estimates were unavailable, I conservatively assumed the entity had sufficient load such that they did not have any Available Economic Capacity.

For PJM, I have used the same basic assumptions that I developed for my recent analysis in connection with the FirstEnergy-Allegheny Energy merger,[26] but updated to reflect 2012 load levels and to incorporate the DEO and DEK load and resources becoming part of PJM.[27] Specifically, first I assumed that AEP and Virginia Power continue to have full load-serving responsibilities and use their lowest cost generation to meet load. Second, I assumed that New Jersey, Maryland and Delaware auctioned load will continue to be served by the parties that won recent auctions and, if they are generation owners, that they would serve load using their own generation. Based on a review of results available at the time of my analysis in June 2010, this means that approximately 70 percent of these loads are met by dedicated resources. As with the AEP and Virginia Power loads, I assume that these generation-owning parties serve the tranches they won with their lowest-cost generation. Third, , I assumed that in the Pennsylvania utilities' auctions, the major Pennsylvania utility shares are limited to 65 percent of their POLR loads and that they in fact achieve those shares and serve their loads from their lowest-cost local generation (as the Commissions' regulations mandate that I assume). Under this set of assumptions, about 70 percent of total PJM load is assumed to have generation committed to serving it in an Available

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[25] Duke Energy Carolinas' load was adjusted to be consistent with my modeling of the Catawba facility by excluding NCEMC's loads related to its ownership share in Catawba (which is included in Duke Energy Carolinas' IRP forecast). Load for PEC was split between CPLE and CPLW based on information from Applicants (about 10 percent of PEC's loads are in CPLW).

[26] *See Application of FirstEnergy Corp. and Allegheny Energy, Inc.*, Docket No. EC10-68-000, Testimony of William H. Hieronymus, June 21, 2010.

[27] As noted earlier, I assumed Duke Energy served 85 percent of load in the Duke Zone using its lowest cost generation located in PJM. For Duke Energy's resources remaining in MISO, I estimated its load obligation as the difference between Cinergy's load (as reported in its FERC Form 714) and Duke Energy's load obligations in PJM.

Economic Capacity sense, leaving only about 30 percent available to compete in the Southeast markets that are the focus of my analysis in connection with this transaction.

H. Sensitivity Analyses

I have conducted price sensitivity analyses in which market prices were either increased or decreased by 10 percent. These are "one-off" sensitivity analyses where I have relied on the same input data as contained in my base case analysis except for changing the assumed market price. The numerical results are provided in workpapers.

Increasing prices by 10 percent significantly increases Progress Energy Carolinas' Available Economic Capacity. The effect is to cause one additional screen failure in the CPLE BAA, in a shoulder period, and screen failures in the same two periods in the DUK BAA (assuming no rate depancaking) as the screen failures in the CPLE BAA. The same screen failures occur in the CPLE BAA when depancaking is taken into account. There are additional failures in the DUK BAA when transmission rate pancaking is eliminated. As described in Exhibit J-1, failures arising from depancaking cannot signal a market power problem. There are no failures in CPLW. These results, while somewhat more concerning than the base case results, still result in non-systematic occasional screen failures such as I discuss in my testimony.

Conversely, decreasing prices by 10 percent significantly reduces Applicants' and particularly Progress Energy Carolinas' Available Economic Capacity. There are no screen failures in any time period in any of the three BAAs, irrespective of whether rates are assumed to be depancaked or not.

These sensitivities are useful in illustrating the flatness of supply curves in the regions of the time period price levels and hence the extent to which results are price-sensitive. However, they are less useful than sensitivities in Economic Capacity analyses. For Available Economic Capacity, raising prices without changing anything else creates a mis-match between prices and load levels and hence artificially increases, or decreases, Available Economic Capacity by amounts that can significantly alter results.

I. Historical Sales Information

Historical sales information was based on information from Applicants' FERC Form 1 and their Electronic Quarterly Reports ("EQRs"). These data are summarized in Exhibit J-6, discussed in my testimony and details included in my workpapers.

COMPETITIVE ANALYSIS SCREENING MODEL (CASm)

Charles River Associates' Competitive Analysis Screening model ("CASm") is designed to perform the calculations required in order to conduct a market power analysis under Appendix A of the FERC Merger Policy Statement ("Order No. 592" or "Appendix A") and the Revised Filing Requirements.[1] The delivered price test specified in Appendix A requires an analysis of market concentration for a large number of markets under a number of different conditions. CASm facilitates this process by performing the required calculations.

The primary requirement of Appendix A is to assess potential suppliers to a market using a "delivered price test." This test involves comparing variable generation costs plus delivery costs (transmission rates, transmission losses and ancillary services) to a "market price." If the delivered cost of generation is less than 105 percent of the market price, the generation is considered economic. Economic generation is further limited to the amount that can be delivered into the market, given transmission capability and constraints.

CASm is a linear programming ("LP") model that implements the prescribed delivered price test by determining -- for each destination market, for each relevant time period, and for each relevant supply measure -- potential supply to the destination market both pre- and post-merger (or transaction). In effect, CASm determines the relevant geographic market by applying the delivered price test, based on the economics of production and delivery (transmission rates, transmission losses and ancillary services), and also based on the physical transmission capacity available to the competing suppliers on an open access basis. This requires a delivery route for the energy on the established transmission paths, each of which has a capability, transmission rate and transmission losses associated with it. CASm finds the supply that can be delivered to the destination market consistent with cost minimization and the delivered price test.

As a formal matter, CASm minimizes the production and transmission costs of supplying demand in the destination market. Any shortfall in demand is filled by a hypothetical generator located in the destination market that can produce an unlimited amount of energy at 105 percent of the market price. On this basis, any supplier who can profitably supply energy to the destination market will do so, to the maximum extent that their cost structure and the transmission system allow. This formulation ensures that no supplied generation is uneconomic; the hypothetical generator will undercut all such suppliers.

CASm determines pre- and post-merger market shares and calculates concentration (as measured by the Herfindahl-Hirschman Index, or HHI) and the change in HHIs.

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[1] CASm has been used in analyzing numerous mergers and power plant acquisitions as well as market-based rate authority proceedings before the Commission.

To undertake these analyses, CASm solves a series of scenarios involving a network of interconnected suppliers. By limiting suppliers based on the economics of generation and delivery, or by limiting the interconnections between those suppliers based on the transmission capability, each Appendix A analysis can be completed. CASm includes a simplified depiction of the transmission system, essentially a system of "pipes" with independent, fixed capacity between and among utilities.

The following sections describe:

- What data inputs are required to operate CASm
- How different analyses are undertaken in CASm
- What outputs CASm produces; and
- How CASm is implemented.

INPUT DATA

Market Participants

The largest element of the required data for CASm relates to individual market participants, which generally are utilities with both generating capacity and load obligations. In addition, some market participants may have load obligations but no generating capacity (*e.g.*, transmission dependent utilities, or TDUs) or have generating capacity but no load obligations (*e.g.*, merchant capacity). CASm regards all distinct market participants as having the ability to both supply and consume electricity. The particular circumstances of each analysis will determine the extent to which each activity is possible.

Nodes

In CASm, a node is a location where electricity is generated or consumed, or where it may "split" or change direction. All market participants are defined as having a unique node, and hence unique location in the transportation network. Total simultaneous import limits can be imposed at each node to mirror reliability restrictions.

Output Capability

Each market participant may have generating ability, which is defined generically in terms of any number of "tranches" of generation having both a quantity (MW) and dispatch cost ($/MWh). This output capability and cost may differ over time, for example because of planned and unplanned outage rates and fuel prices. CASm has a number of data inputs available for modifying the

underlying physical availability of generating assets to get the relevant "supply curve" for any given model period.

Destination Market Prices

For each destination market, a prevailing market price is defined. The destination market price is used to calculate a threshold price that potential suppliers must meet to be included in the market for the delivered price test.

Interconnections

Interconnections represent the network that links market participants together. These interconnections are represented as a "transportation" network, where flows are specifically directed.

Lines

A line between two nodes in CASm may represent either a single line, or the combined effect of a number of lines. Each line has an upper limit on the flow, and losses may occur on the line. Because capacity on the line may represent physical limits less firm commitments, limits are allowed to be different, depending on the direction of the flow. Limits on the simultaneous flow on combinations of lines can be imposed to simulate the effect of loopflow or reliability constraints. Limits can also be imposed on the total amount of supply into a Node.

Scenarios

The final input area for CASm is related to scenario definition. Scenarios define which parties are considering merging, which load periods are relevant, and so on. In effect, the scenarios define a number of individual analyses to be performed, and how they should be compared to each other for reporting purposes. CASm can solve scenarios either as separate LP programs or, in instances where there are no changes in the underlying data or network, CASm can solve a single scenario and then calculate the changes "virtually" using the underlying results of the initial scenario. When solving separate pre and post scenarios, CASm uses the same decisions in the post scenario as in the pre scenario, although there may be slight differences if the model can find two alternative solutions that meet the LP's requirements.

Accounting for Ownership

It is sometimes necessary to merge the results for several nodes, or to split them, based on ownership changes between scenarios. CASm has a "report as" function that will merge the results of several nodes into a single one to correctly account for ownership. Also, CASm may "impute"

all or part of any tranche in the supply curve of a node to any other node to account for shared ownership. This feature is used by CASm primarily for vertical market analysis.

REQUIRED CALCULATIONS

Appendix A's delivered price test defines two different supply measures to evaluate:

- **Economic Capacity** is the amount of capacity that can reach a market at a cost (including transmission rates, transmission losses and ancillary services) no more than 105 percent of the destination market price.

- **Available Economic Capacity** is the amount of Economic Capacity that is available after serving native load and other net firm commitments with the lowest cost units.

For every analysis, the following process is undertaken:

First, a Linear Programming (LP) problem is solved. The LP construction is slightly different, depending on the underlying assumptions of each of the supply measures. CASm includes two options for allocating scarce transmission capacity. CASm has a "proration" option, which is called "squeeze-down." This is discussed in detail below. Another option is an economic allocation of limited transfer capability. Under this option, where available supply exceeds the ability of the network to deliver that capacity to the destination market, the least-cost supply is allocated the available transmission capacity.

The final step involves calculating what can be delivered to the destination market, after accounting for line losses. CASm allocates total system losses amongst suppliers on the basis on how much they injected, and how far away (how many wheels) they are from the destination market.

Economic Capacity

For the Economic Capacity analysis, CASm solves an LP with the following form:

minimize cost for supplies at the destination market

subject to:

supply cost at destination < system lambda + 5%, for all suppliers

supply < quantity, for each node and tranche

supply + flows in = flows out + "demand", for each node

line flows are adjusted for losses, for all interconnections

line flows < available limit, for all interconnections (constrained network only)

sum over lines (flow * simultaneous factor) <= simultaneous limit, for all limits

sum over nodes (net injection * flowgate factor) <= flowgate limit, for all limits

The objective is slightly different when transmission capacity is to be prorated. The objective then becomes:

minimize cost for supplies at the destination market; and

minimize divergence from calculated pro rata "share," for each supplier

And, where ownership imputation is being used, the following constraints are added:

sum over economic tranches <= imputed share of economic tranches, for all owners at each imputed node

Available Economic Capacity

For the Available Economic Capacity analysis, CASm solves an LP with the following form:

minimize cost for supplies at the destination market

subject to:

supply cost at destination < system lambda + 5%, for all suppliers

supply < quantity (less native load), for each node and tranche

supply + flows in = flows out + "demand", for each node

line flows are adjusted for losses, for all interconnections

line flows < available limit, for all interconnections (constrained network only)

sum over lines (flow * simultaneous factor) <= simultaneous limit, for all limits

sum over nodes (net injection * flowgate factor) <= flowgate limit, for all limits

This is different from the economic capacity analysis only to the extent that potential suppliers are required to meet their load obligations prior to participating in the market.

When transmission capacity is to be prorated the objective becomes:

minimize cost for supplies at the destination market; and

minimize divergence from calculated pro rata "share," for each supplier

And, where ownership imputation is being used, the following constraints are added:

sum over economic tranches <= imputed share of economic tranches, for all owners at each imputed node

OUTPUTS

The primary output from CASm is a report that summarizes the results of different analyses. For each destination market, load period and FERC analysis type, CASm reports the following for both pre- and post-merger:

- Supplied MW
- Market Share
- HHIs

This report also shows the change in HHIs post-merger compared to pre-merger.

CASm also produces a transmission report that shows the detail of each node, and the injections and flows between them. Finally, a summary of the results for each market is also produced.

"SQUEEZE-DOWN" PRORATION

In the "squeeze-down" proration algorithm, prorated shares on each line are based on the weighted shares of deliverable energy at the source node for that line. As discussed more fully below, weighted shares at the destination market node are calculated by a recursive algorithm that starts at the "outside" of the network then calculates shares on each line until it reaches the "middle." Specifically, where available supply exceeds the ability of the network to deliver that capacity to the destination market, suppliers are allocated shares at each node, and hence each outgoing line, based on the results of an algorithm that considers both supply and transfer capability at each node. Starting at the "outside" of the network, CASm calculates a share at each node that is based on a proportion of the incoming transfer capability (and the share of that capability allocated to each supplier), and the maximum economic supply available at that node. When the algorithm reaches the destination market, a total share of the incoming transfer capability has been determined.

This algorithm requires that all possible paths are simultaneously feasible, which, in turn, requires that each line be assigned a unique "direction." The steps of the proration algorithm include:

1. A C++ program enumerates all possible paths to the destination, the cost of transmission on each path and the maximum possible flow on the path. A "wheel limit," or maximum number of point-to-point links, may be imposed on paths.

2. The minimum "entry cost" for each supplier is calculated. This cost is the injection cost of the cheapest generator that has capacity for possible delivery to the destination.

3. Paths for which the entry cost plus the transmission cost are higher than 105% of the destination market price are rejected as being uneconomic.

4. To the extent remaining paths are not simultaneously feasible (because, for example, suppliers can seek to use the paths in both directions), a series of decision rules for determining the direction of the line are undertaken (in the following order):

    - Instructions can be manually input as to the chosen direction of a line.
    - Merger-case decisions should be consistent with base-case decisions.
    - The direction of the line as determined in an economic allocation of available transmission is applied.
    - The direction heading toward a destination market, if it is clear, is chosen.
    - The direction that retains the maximum potential volume-weighted flow on the line (calculated from the paths that depend on this line) is chosen.
    - The direction on which the maximum number of economic paths depend is chosen.

If these other options fail to reach a feasible solution, manual input will be required.

5. If there are simultaneous limits, they are checked for feasibility. All lines that have a worsening effect on a simultaneous constraint, given their defined flow direction, are checked against the simultaneous limit. If they would exceed the simultaneous limit if fully utilized, then their maximum capacity is prorated downwards in proportion to their respective limit participation factors. In this way, no set of targets will be produced that could not be delivered in a way that is feasible with the simultaneous limits.

6. Proration begins at nodes furthest from the destination market (where only exports, and no imports are being attempted). Suppliers at these nodes are assigned a "share" equal to their maximum economic supply capability.

7. Proration continues at the next set of nodes that should consist only of nodes with inflows from "resolved" nodes from step 5. Suppliers at these nodes are assigned a "share" equal to their

maximum economic supply capability. Suppliers from the "resolved" nodes have their shares scaled down to match the transmission capacity into the node.

8. To the extent an iteration of the algorithm does not resolve any additional nodes and the destination market has not yet been reached (i.e., a loop is detected), flow is disallowed from any unresolved node to the furthest and smallest node affected by a loop.

9. The proration has been completed when the destination market node has been resolved. At that point, the "shares" at the destination market represent the prorated shares of deliverable energy.

10. If ownership at a node is to be "imputed," or credited to another node, further proration targets are calculated. First, only those tranches that can deliver to the destination within 105% of the market price are considered. A factor representing the share each owner has of these economic tranches is calculated. For each owner, a constraint is calculated that limits the sum of injections attributed to that owner to be not more than that owner's "share" of the target calculated above. In this way, the proportion of ownership of economic capacity at a node is fairly reflected in the final solution outcome.

11. Injections for each supplier are "capped" at the calculated shares, and these injections are then checked for economic feasibility. While suppliers need not deliver their energy to the destination in exactly the way that their share was calculated, the solution is still both economically and physically feasible. The final solution represents the least-cost method of delivering these supplies.

CASM IMPLEMENTATION

CASm has been implemented using GAMS (Generalized Algebraic Modeling System). GAMS is a programming language which supports both data manipulation and calls to many mainstream mathematical modeling systems. The linear programming problems generated by CASm are solved by BDMLP or CPLEX. The path enumeration program has been written in Microsoft Visual C++ version 5.

Available Economic Capacity

First-Tier Markets

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
SC	S_SP1	$ 80	8	8.8%	-	0.0%	90	419	8	8.8%	90	415	(5)
SC	S_SP2	$ 55	3	3.6%	-	0.0%	90	420	4	4.6%	90	414	(6)
SC	S_P	$ 40	1	0.3%	-	0.0%	314	5,109	1	0.3%	314	5,109	(1)
SC	S_OP	$ 35	4	1.1%	-	0.0%	401	6,020	4	1.1%	401	6,019	-
SC	W_SP	$ 80	161	16.7%	-	0.0%	969	565	160	16.5%	969	556	(9)
SC	W_P	$ 40	5	0.3%	-	0.0%	1,578	1,686	5	0.3%	1,578	1,683	(2)
SC	W_OP	$ 35	12	1.1%	-	0.0%	1,038	451	12	1.1%	1,038	444	(8)
SC	SH_SP	$ 55	98	5.0%	-	0.0%	1,963	392	150	7.7%	1,963	398	6
SC	SH_P	$ 35	15	0.7%	-	0.0%	2,092	389	19	0.9%	2,092	378	(11)
SC	SH_OP	$ 33	20	1.0%	-	0.0%	1,963	399	27	1.4%	1,963	397	(1)
SCEG	S_SP1	$ 80	8	1.1%	-	0.0%	725	4,695	8	1.1%	725	4,695	-
SCEG	S_SP2	$ 55	3	0.4%	-	0.0%	787	4,537	3	0.4%	787	4,536	(1)
SCEG	S_P	$ 40	1	0.2%	-	0.0%	320	7,157	1	0.2%	320	7,158	1
SCEG	S_OP	$ 35	2	0.7%	-	0.0%	320	7,154	3	0.9%	320	7,153	-
SCEG	W_SP	$ 80	207	8.6%	-	0.0%	2,413	2,928	207	8.6%	2,413	2,928	-
SCEG	W_P	$ 40	2	0.1%	-	0.0%	1,369	1,167	2	0.1%	1,369	1,166	-
SCEG	W_OP	$ 35	10	1.4%	-	0.0%	750	439	11	1.4%	750	445	6
SCEG	SH_SP	$ 55	134	5.3%	-	0.0%	2,530	828	157	6.2%	2,530	837	9
SCEG	SH_P	$ 35	5	0.3%	-	0.0%	1,655	589	6	0.4%	1,645	556	(32)
SCEG	SH_OP	$ 33	8	0.5%	-	0.0%	1,592	393	10	0.6%	1,584	397	4
SOCO	S_SP1	$ 80	285	2.2%	-	0.0%	12,998	860	284	2.2%	12,998	856	(4)
SOCO	S_SP2	$ 55	185	1.4%	-	0.0%	13,041	790	178	1.4%	13,041	791	1
SOCO	S_P	$ 40	33	0.3%	-	0.0%	10,232	758	30	0.3%	10,232	756	(2)
SOCO	S_OP	$ 35	104	1.0%	-	0.0%	10,755	643	110	1.0%	10,664	648	5
SOCO	W_SP	$ 80	550	2.9%	-	0.0%	18,999	1,183	556	2.9%	18,999	1,181	(2)
SOCO	W_P	$ 40	23	0.2%	-	0.0%	11,597	663	20	0.2%	11,639	657	(6)
SOCO	W_OP	$ 35	49	0.8%	-	0.0%	6,522	324	66	1.0%	6,373	312	(12)
SOCO	SH_SP	$ 55	303	2.1%	-	0.0%	14,246	642	324	2.3%	14,347	629	(13)
SOCO	SH_P	$ 35	6	0.1%	-	0.0%	9,389	553	19	0.2%	9,252	558	5
SOCO	SH_OP	$ 33	7	0.1%	-	0.0%	7,432	384	26	0.4%	7,361	373	(11)

Available Economic Capacity

First-Tier Markets

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
TVA	S_SP1	$ 80	140	1.6%	-	0.0%	8,801	551	140	1.6%	8,801	546	(4)
TVA	S_SP2	$ 55	102	1.0%	-	0.0%	9,936	923	102	1.0%	9,936	920	(3)
TVA	S_P	$ 40	91	1.1%	-	0.0%	8,334	596	91	1.1%	8,334	595	-
TVA	S_OP	$ 35	79	0.9%	-	0.0%	8,625	1,032	79	0.9%	8,625	1,032	-
TVA	W_SP	$ 80	234	1.6%	-	0.0%	14,297	1,487	234	1.6%	14,297	1,487	-
TVA	W_P	$ 40	17	0.2%	-	0.0%	8,737	323	17	0.2%	8,733	324	1
TVA	W_OP	$ 35	28	0.4%	-	0.0%	7,834	310	27	0.4%	7,834	310	-
TVA	SH_SP	$ 55	177	1.6%	-	0.0%	10,883	514	177	1.6%	10,880	508	(6)
TVA	SH_P	$ 35	38	0.5%	-	0.0%	8,122	365	39	0.5%	8,119	369	4
TVA	SH_OP	$ 33	46	0.6%	-	0.0%	8,339	320	52	0.6%	8,337	322	2
PJM	S_SP1	$ 80	3,364	4.6%	1	0.0%	72,523	604	3,374	4.7%	72,525	604	-
PJM	S_SP2	$ 55	2,159	3.3%	-	0.0%	65,065	665	2,246	3.5%	64,980	665	-
PJM	S_P	$ 40	2,875	4.7%	-	0.0%	60,598	703	2,875	4.8%	60,596	703	-
PJM	S_OP	$ 35	1,571	3.0%	-	0.0%	52,680	903	1,571	3.0%	52,680	903	-
PJM	W_SP	$ 80	4,304	5.6%	-	0.0%	76,562	584	4,264	5.6%	76,557	584	(1)
PJM	W_P	$ 40	295	0.7%	-	0.0%	44,169	816	295	0.7%	44,169	816	-
PJM	W_OP	$ 35	716	1.6%	-	0.0%	43,880	890	716	1.6%	43,880	890	-
PJM	SH_SP	$ 55	2,069	3.6%	-	0.0%	57,993	683	2,246	3.9%	57,951	683	(1)
PJM	SH_P	$ 35	461	1.2%	-	0.0%	37,235	917	461	1.2%	37,233	917	-
PJM	SH_OP	$ 33	950	2.3%	-	0.0%	42,271	883	950	2.3%	42,271	883	-

Economic Capacity

Carolinas Markets

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
DUK	S_SP1	$ 80	18,301	75.4%	804	3.3%	24,268	5,756	19,109	78.7%	24,268	6,259	502
DUK	S_SP2	$ 55	16,594	73.0%	852	3.8%	22,744	5,404	17,478	76.9%	22,744	5,973	569
DUK	S_P	$ 40	13,433	75.8%	604	3.4%	17,733	5,801	14,039	79.2%	17,733	6,319	519
DUK	S_OP	$ 35	10,431	70.5%	672	4.5%	14,793	5,061	11,149	75.4%	14,793	5,748	687
DUK	W_SP	$ 80	17,529	71.7%	1,036	4.2%	24,442	5,226	18,573	76.0%	24,442	5,839	613
DUK	W_P	$ 40	12,016	70.8%	750	4.4%	16,983	5,083	12,809	75.4%	16,983	5,746	664
DUK	W_OP	$ 35	8,681	65.9%	766	5.8%	13,165	4,449	9,461	71.9%	13,165	5,232	783
DUK	SH_SP	$ 55	14,073	70.9%	800	4.0%	19,851	5,114	14,873	74.9%	19,851	5,687	573
DUK	SH_P	$ 35	8,372	69.4%	478	4.0%	12,066	4,903	8,936	74.1%	12,066	5,557	654
DUK	SH_OP	$ 33	7,863	68.9%	486	4.3%	11,407	4,835	8,392	73.6%	11,407	5,477	642
CPLE	S_SP1	$ 80	404	2.6%	12,007	78.3%	15,337	6,191	12,420	81.0%	15,337	6,613	422
CPLE	S_SP2	$ 55	397	2.7%	11,392	77.3%	14,737	6,043	11,790	80.0%	14,737	6,460	417
CPLE	S_P	$ 40	685	5.6%	8,629	70.1%	12,305	4,987	9,371	76.2%	12,305	5,838	851
CPLE	S_OP	$ 35	632	5.3%	8,555	71.5%	11,968	5,171	9,202	76.9%	11,968	5,945	773
CPLE	W_SP	$ 80	869	5.4%	10,431	64.5%	16,166	4,268	11,316	70.0%	16,166	4,975	707
CPLE	W_P	$ 40	1,051	7.7%	8,140	59.4%	13,697	3,653	9,300	67.9%	13,697	4,670	1,017
CPLE	W_OP	$ 35	1,082	8.7%	7,015	56.1%	12,511	3,292	8,131	65.0%	12,511	4,296	1,003
CPLE	SH_SP	$ 55	617	4.4%	9,710	68.7%	14,132	4,825	10,333	73.1%	14,132	5,432	607
CPLE	SH_P	$ 35	1,048	8.8%	7,346	61.6%	11,926	3,912	8,436	70.7%	11,926	5,042	1,130
CPLE	SH_OP	$ 33	979	9.1%	6,090	56.3%	10,821	3,315	7,091	65.5%	10,821	4,359	1,044
CPLW	S_SP1	$ 80	228	15.0%	779	51.4%	1,516	2,936	1,007	66.4%	1,516	4,480	1,545
CPLW	S_SP2	$ 55	225	14.8%	792	52.2%	1,516	3,013	1,008	66.5%	1,516	4,487	1,474
CPLW	S_P	$ 40	182	15.0%	493	40.7%	1,211	1,994	679	56.1%	1,211	3,251	1,257
CPLW	S_OP	$ 35	183	15.1%	506	41.8%	1,210	2,071	690	57.1%	1,210	3,347	1,276
CPLW	W_SP	$ 80	129	11.7%	551	49.9%	1,106	2,717	680	61.5%	1,106	3,878	1,161
CPLW	W_P	$ 40	145	11.6%	591	47.4%	1,246	2,477	740	59.4%	1,246	3,620	1,143
CPLW	W_OP	$ 35	160	13.8%	455	39.3%	1,158	1,843	617	53.3%	1,158	2,951	1,108
CPLW	SH_SP	$ 55	192	15.0%	673	52.8%	1,276	3,068	856	67.1%	1,276	4,559	1,491
CPLW	SH_P	$ 35	159	15.9%	392	39.0%	1,005	1,865	558	55.6%	1,005	3,173	1,308
CPLW	SH_OP	$ 33	163	16.2%	393	39.1%	1,005	1,883	567	56.5%	1,005	3,272	1,389

Economic Capacity

First-Tier Markets

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
SC	S_SP1	$ 80	18	0.4%	31	0.6%	5,209	9,657	49	0.9%	5,209	9,657	-
SC	S_SP2	$ 55	18	0.4%	29	0.6%	5,016	9,643	47	0.9%	5,016	9,644	-
SC	S_P	$ 40	19	0.4%	28	0.6%	4,744	9,623	48	1.0%	4,744	9,624	-
SC	S_OP	$ 35	20	0.5%	27	0.7%	4,176	9,573	48	1.1%	4,176	9,573	1
SC	W_SP	$ 80	187	3.2%	342	5.8%	5,904	7,037	530	9.0%	5,904	7,074	37
SC	W_P	$ 40	215	4.0%	301	5.6%	5,385	6,778	520	9.7%	5,385	6,824	46
SC	W_OP	$ 35	188	3.9%	300	6.2%	4,797	6,430	488	10.2%	4,797	6,479	49
SC	SH_SP	$ 55	362	5.9%	607	9.9%	6,148	4,787	973	15.8%	6,148	4,905	118
SC	SH_P	$ 35	454	8.4%	459	8.5%	5,411	4,226	922	17.0%	5,411	4,373	147
SC	SH_OP	$ 33	453	9.1%	466	9.4%	4,960	3,848	919	18.5%	4,960	4,020	171
SCEG	S_SP1	$ 80	11	0.2%	11	0.2%	5,994	8,434	23	0.4%	5,994	8,434	-
SCEG	S_SP2	$ 55	12	0.2%	11	0.2%	5,219	8,223	23	0.4%	5,219	8,223	-
SCEG	S_P	$ 40	12	0.3%	11	0.3%	3,667	8,254	23	0.6%	3,667	8,255	-
SCEG	S_OP	$ 35	12	0.4%	10	0.3%	3,068	7,996	23	0.7%	3,068	7,996	-
SCEG	W_SP	$ 80	172	2.7%	171	2.7%	6,454	6,574	343	5.3%	6,454	6,588	14
SCEG	W_P	$ 40	180	4.1%	161	3.7%	4,353	5,710	343	7.9%	4,353	5,742	31
SCEG	W_OP	$ 35	182	7.2%	161	6.4%	2,523	4,969	346	13.7%	2,523	5,064	95
SCEG	SH_SP	$ 55	396	6.4%	355	5.7%	6,236	4,605	751	12.1%	6,236	4,678	73
SCEG	SH_P	$ 35	454	10.7%	317	7.4%	4,266	3,294	774	18.1%	4,266	3,454	160
SCEG	SH_OP	$ 33	435	13.4%	308	9.5%	3,236	2,684	748	23.1%	3,236	2,947	263
SOCO	S_SP1	$ 80	1,007	1.7%	346	0.6%	57,937	4,184	1,356	2.3%	57,937	4,186	2
SOCO	S_SP2	$ 55	998	1.9%	402	0.8%	53,356	4,248	1,403	2.6%	53,356	4,251	3
SOCO	S_P	$ 40	917	2.2%	431	1.0%	41,344	4,169	1,354	3.3%	41,344	4,173	5
SOCO	S_OP	$ 35	884	2.3%	409	1.1%	39,157	4,242	1,311	3.4%	39,157	4,248	7
SOCO	W_SP	$ 80	960	1.7%	413	0.7%	56,892	4,056	1,377	2.4%	56,892	4,058	2
SOCO	W_P	$ 40	867	2.2%	515	1.3%	39,541	4,038	1,385	3.5%	39,559	4,040	2
SOCO	W_OP	$ 35	829	2.9%	299	1.0%	28,938	4,032	1,184	4.1%	28,947	4,042	11
SOCO	SH_SP	$ 55	986	2.0%	553	1.1%	48,451	3,817	1,546	3.2%	48,452	3,821	4
SOCO	SH_P	$ 35	905	2.5%	300	0.8%	35,752	3,653	1,241	3.5%	35,729	3,662	9
SOCO	SH_OP	$ 33	852	3.1%	280	1.0%	27,482	3,550	1,118	4.1%	27,477	3,570	19

			Pre-Merger						Post-Merger				
			DUKE		PROGRESS				DUKE ENERGY				
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	MW	Mkt Share	Market Size	HHI	HHI Chg
TVA	S_SP1	$ 80	324	0.8%	172	0.4%	42,562	6,865	497	1.2%	42,562	6,866	1
TVA	S_SP2	$ 55	319	0.9%	178	0.5%	37,714	6,506	498	1.3%	37,713	6,507	1
TVA	S_P	$ 40	338	1.1%	100	0.3%	32,014	6,154	435	1.4%	32,011	6,155	2
TVA	S_OP	$ 35	268	1.0%	113	0.4%	27,715	6,048	385	1.4%	27,712	6,050	2
TVA	W_SP	$ 80	434	1.0%	162	0.4%	43,517	6,303	598	1.4%	43,517	6,304	1
TVA	W_P	$ 40	357	1.1%	124	0.4%	32,297	5,405	479	1.5%	32,297	5,406	1
TVA	W_OP	$ 35	346	1.3%	128	0.5%	25,839	4,885	485	1.9%	25,839	4,886	1
TVA	SH_SP	$ 55	382	1.1%	137	0.4%	35,558	5,528	534	1.5%	35,558	5,529	1
TVA	SH_P	$ 35	371	1.4%	124	0.5%	26,441	4,664	504	1.9%	26,441	4,665	2
TVA	SH_OP	$ 33	391	1.7%	128	0.5%	23,503	4,148	534	2.3%	23,503	4,149	1
PJM	S_SP1	$ 80	8,706	5.7%	650	0.4%	154,103	740	9,355	6.1%	154,103	744	5
PJM	S_SP2	$ 55	7,082	5.2%	590	0.4%	135,828	819	7,671	5.7%	135,828	824	5
PJM	S_P	$ 40	7,053	5.9%	564	0.5%	118,989	810	7,616	6.4%	119,011	815	5
PJM	S_OP	$ 35	4,805	4.9%	529	0.5%	98,034	955	5,332	5.4%	98,034	960	5
PJM	W_SP	$ 80	8,593	5.8%	734	0.5%	147,738	717	9,326	6.3%	147,738	722	6
PJM	W_P	$ 40	4,604	4.5%	647	0.6%	103,246	858	5,250	5.1%	103,289	863	5
PJM	W_OP	$ 35	4,606	4.9%	632	0.7%	94,020	908	5,236	5.6%	94,020	915	7
PJM	SH_SP	$ 55	6,084	5.2%	537	0.5%	116,883	825	6,620	5.7%	116,883	829	5
PJM	SH_P	$ 35	4,207	4.9%	483	0.6%	85,670	915	4,687	5.5%	85,682	920	5
PJM	SH_OP	$ 33	4,207	5.1%	460	0.6%	82,589	938	4,667	5.7%	82,608	944	5

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

AFFIDAVIT OF WILLIAM H. HIERONYMUS

AFFIDAVIT

Commonwealth of Massachusetts	§	
	§	

WILLIAM H. HIERONYMUS being duly s worn, deposes and states: that he prepared the Testimony and Exhibits of William H. Hieronymus and that the statements contained therein and the Exhibits attached thereto are true and correct to the best of his knowledge and belief.

William H. Hieronymus

SUBSCRIBED AND SWORN TO BEFORE ME, this the 1st day of April 2011.

Notary Public, Commonwealth of Massachusetts

Printed Name: Gail P. Hickey

My Commission Expires: July 22, 2016

Exhibit K: Maps of Physical Property

Maps of the properties owned by the Applicants are provided in this Exhibit K. Applicants respectfully request that those maps identified below that contain Critical Energy Infrastructure Information ("CEII") be accorded privileged treatment as CEII pursuant to 18 C.F.R. § 388.112.

Exhibit K-1 Map of Service Territories of Duke Energy Corporation and Progress Energy, Inc.

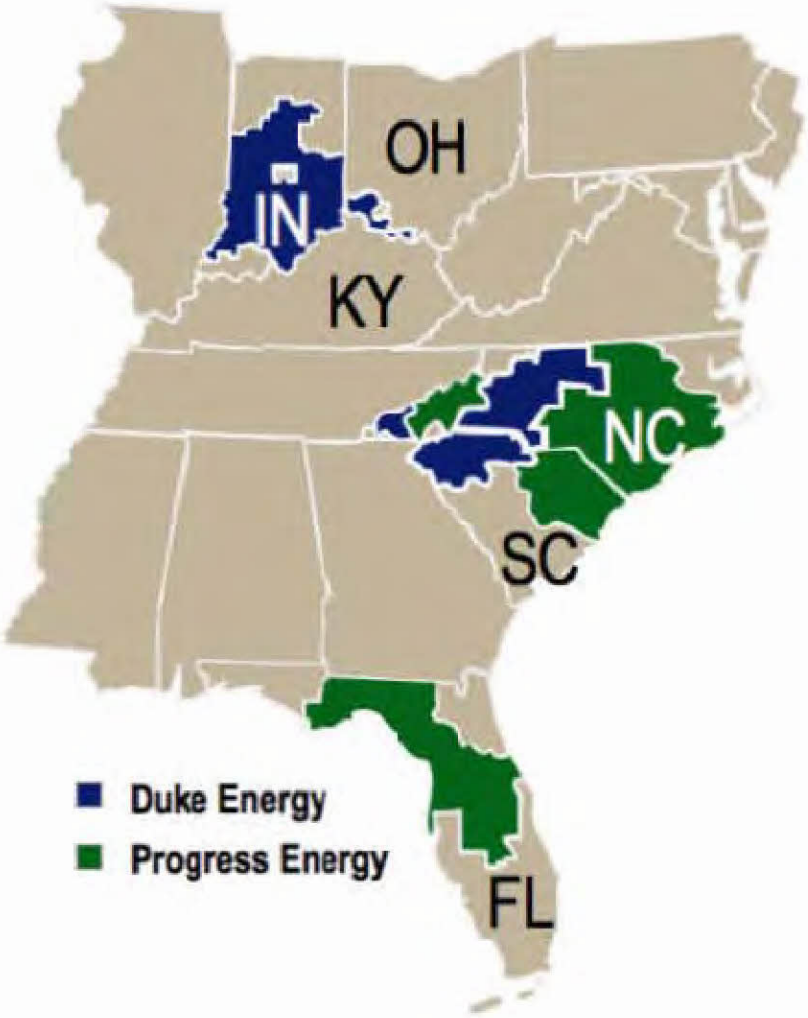
Exhibit K-2 Map of Virginia-Carolinas Subregion; Southeastern Electrical Reliability Council (CEII)

Exhibit K-3 Map of Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc. System (CEII)

Exhibit K-4 Map of Duke Energy Indiana, Inc. System (CEII)

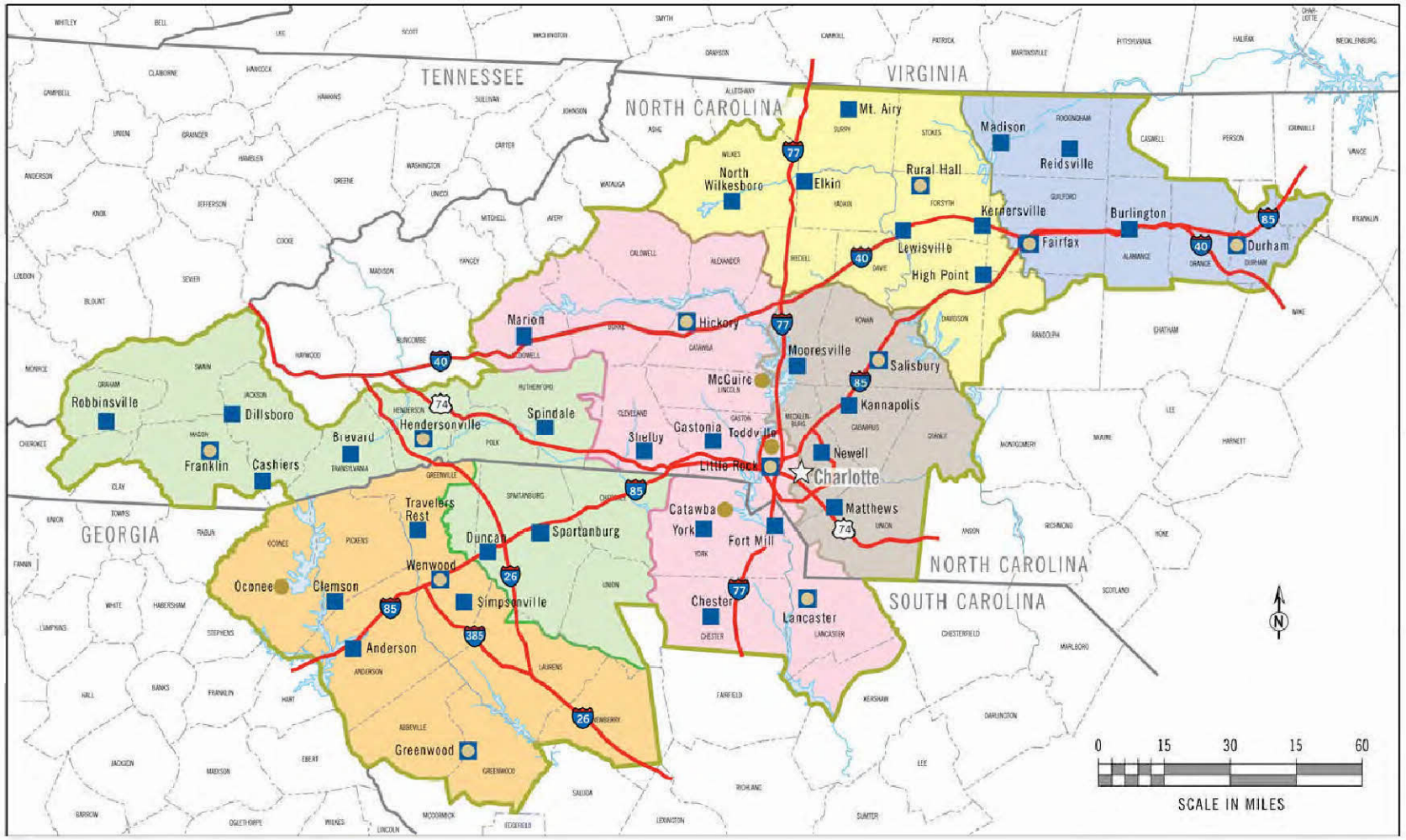
Exhibit K-5 Map of Service Territories of Duke Energy Carolinas, LLC

Exhibit K-6 Florida Reliability Coordinating Council Electric System Map with an approximate PEF boundary superimposed (CEII)


OH
IN
KY
NC
SC
FL
Duke Energy
Progress Energy

Duke Energy – Carolinas Power Delivery Areas

Power Delivery – Transmission & Distribution



0701-14104 Duke Energy – Carolinas Power Delivery Jun-30-2010

Exhibit K-5

Exhibit L: Status of Regulatory Actions and Orders

Review and/or approvals from the following state and federal regulatory bodies are required. As of the date of this Application, no such approvals have been obtained.

State Review/Approvals

1. North Carolina Utilities Commission.
2. Kentucky Public Service Commission.
3. Public Service Commission of South Carolina.
4. The companies will also review integration plans with its other state regulators: the Florida Public Service Commission, the Indiana Utility Regulatory Commission, the and the Public Utilities Commission of Ohio.

Federal Review/Approvals

1. Expiration or termination of any applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976.
2. Nuclear Regulatory Commission.
3. Approval from the Federal Communications Commission for the transfer of certain licenses.

Exhibit M: Cross-Subsidization

The Commission's regulations require that Federal Power Act ("FPA") Section 203 applicants explain that their proposed transaction will not, at the time of the transaction or in the future, result in (1) any transfer of facilities between a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, and an associate company; (2) any new issuance of securities by a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company; (3) any new pledge or encumbrance of assets of a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company; or (4) any new affiliate contract between a non-utility associate company and a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, other than non-power goods and services agreements subject to review under Sections 205 and 206 of the FPA. 18 C.F.R. § 33.2(j)(1)(ii).

As explained in this Exhibit M, the Applicants provide assurance and verify, based on facts and circumstances known to the Applicants or that are reasonably foreseeable, that the proposed Transaction will not result in, at the time of the Transaction or in the future, cross-subsidization of a non-utility associate company or pledge or encumbrance of utility assets for the benefit of an associate company.

Overall Discussion of Cross-Subsidization Implications
Resulting From the Transaction

The Transaction is a straightforward merger that does not present any concerns about the improper subsidization of an associate company by its public utility affiliates. The Transaction combines the traditional electric utility businesses of Duke Energy and Progress Energy. Progress Energy has exited the unregulated wholesale generation market, while Duke Energy owns both regulated electric utilities and wholesale generation companies that make sales at market-based rates.

Duke Energy Carolinas and Progress Energy Carolinas are located in adjacent geographic footprints, thus permitting them to achieve service and operating efficiencies, including achieving significant fuel savings through joint dispatch. In addition, the Transaction permits the Applicants to combine their operations to achieve other savings. A further important aspect of the Transaction is that it will increase the financial strength of the combined company, which will give it greater access to capital at a lower cost. Given the anticipated need of the Applicants' operating utilities for new capacity, the combination of the two companies will act to benefit the operations of the Applicants' public utility operations – and not subsidize unregulated affiliates at the expense of the operating utilities. As a result, the Transaction is not the type of transaction that raises cross-subsidization issues.

Moreover, the Transaction does not present any longer-term concerns about improper cross-subsidization. The Commission has, and will continue to have, the ability to provide ongoing protection against cross-subsidization through its authority over the rates, terms, and conditions of service associated with any and all jurisdictional transmission facilities owned by Duke Energy and its Progress Energy subsidiary, as well as the merged company as a public utility holding company. Similarly, because the

Transaction does not affect any state utility commission's jurisdiction over any subsidiary of Duke Energy or Progress Energy, including any traditional public utility associate companies, the state utility commissions' ability to address cross-subsidizations issues will be unaffected by the Transaction.

Discussion of the Four Factors Identified by the Commission in its Merger Regulations

A. Transfers of Facilities

The Transaction is a stock-for-stock merger that does not call for any transfers of any facilities of the Regulated Companies, either at the time of the Transaction or in the future. The Regulated Companies will continue to operate as regulated utilities under their Commission-approved tariffs. After the Transaction, the Regulated Companies will continue to own and operate the generation facilities that they owned and operated prior to the Transaction.

B. New Issuance of Securities

The Transaction does not provide for the new issuances of securities by the Regulated Companies for the benefit of an associate company, either at the time of the Transaction or in the future. The generation, transmission, and Regulated Companies issue debt in their own name and are rated by Moody's and S&P.

C. New Pledge or Encumbrance

The Transaction does not provide for any new pledges or encumbrances of assets of the Regulated Companies for the benefit of an associate company, either at the time of the Transaction or in the future.

D. New Affiliate Contracts

No new contracts between any of the Regulated Companies and any unregulated affiliate are contemplated to implement the Transaction, other than non-power goods and

services agreements, either at the time of the Transaction or in the future. Unregulated affiliates may in the future submit bids into competitive power solicitations conducted by the Regulated Companies that are conducted in accordance with the Commission's requirements for such solicitations.

In sum, Applicants are providing assurance, based on facts and circumstances known to them or that are reasonably foreseeable, that the proposed Transaction will not result in, at the time of the transaction or in the future, cross-subsidization of a non-utility associate company or pledge or encumbrance of utility assets for the benefit of an associate company, including

(A) Any transfer of facilities between a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, and an associate company;

(B) Any new issuance of securities by a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company;

(C) Any new pledge or encumbrance of assets of a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, for the benefit of an associate company; or

(D) Any new affiliate contract between a non-utility associate company and a traditional public utility associate company that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, other than non-power goods and services agreements subject to review under Sections 205 and 206 of the Federal Power Act.

****

Attached are lists of encumbrances of the utility assets of Duke Energy and Progress Energy.

Exhibit M: Duke Energy Corporation

Property or assets are, and in the ordinary course of business may be, subjected to liens under the following documents:

Duke Energy Carolinas, LLC

1. First and Refunding Mortgage from Duke Energy Carolinas, LLC to The Bank of New York Mellon Trust Company, N.A., successor trustee to Guaranty Trust Company of New York, dated as of December 1, 1927, as amended and supplemented by various supplemental indentures thereto, securing first and refunding mortgage bonds.

2. $300,000,000 Credit Agreement, dated September 5, 2003, among Duke Energy Receivables Finance Company, LLC, as Borrower, CAFCO, LLC, as Initial Lender, the other Lenders listed therein and Citicorp North America, Inc., as Administrative Agent.

Duke Energy Indiana, Inc.

3. Original Indenture dated September 1, 1939, between Duke Energy Indiana, Inc. and Deutsche Bank National Association, as Trustee (Successor Trustee to LaSalle National Bank), as amended and supplemented by various supplemental indentures thereto, securing first mortgage bonds.

Duke Energy Ohio, Inc.

4. Original Indenture between Duke Energy Ohio, Inc. and The Bank of New York Mellon Trust Company, N.A., as successor trustee, as amended and supplemented by various supplemental indentures including the Fortieth Supplemental Indenture, dated as of March 23, 2009, securing first mortgage bonds.

Cinergy Receivables Company LLC

5. Receivables Sale Agreement, dated as of November 5, 2010, among Cinergy Receivables Company LLC, as Seller, Duke Energy Ohio, Inc., as Initial Servicer, The Royal Bank of Scotland plc, as Program Agent for the Purchasers, the Managing Agents from time to time party thereto, The Royal Bank of Scotland plc and JPMorgan Chase Bank, N.A., as Related Purchasers, Windmill Funding Corporation and Chariot Funding LLC, as Conduit Purchasers, and the other Related Purchasers and Conduit Purchasers from time to time party thereto, along with the Second Amended and Restated Purchase and Sale Agreement among Duke Energy Ohio, Inc., Duke Energy Indiana, Inc., and Duke Energy Kentucky, Inc., as originators of accounts receivable, and Cinergy Receivables Company LLC, as the purchaser of accounts receivable, securing accounts receivable of

Duke Energy Ohio, Inc., Duke Energy Indiana, Inc., and Duke Energy Kentucky, Inc.

Duke Energy Generation Services

6. Credit and Guaranty Agreement dated as of May 21, 2010 among Green Frontier Windpower, LLC, Green Frontier Windpower Holdings, LLC, the Project Owners party thereto, the Lenders party thereto, Crédit Agricole Corporate & Investment Bank, BBVA Securities Inc., Banco Santander, S.A., New York Branch, Cobank, ACB, Lloyds TSB Bank plc and The Bank of Tokyo-Mitsubishi UFJ, LTD., New York Branch, as Joint Lead Arrangers, Crédit Agricole Corporate & Investment Bank as Left Lead Bookrunner, Administrative Agent, Collateral Agent and Issuing Bank, and accompanying transaction documents, under which the borrower has pledged and encumbered ownership interests and assets of five wind energy projects:

   Happy Jack Windpower, LLC

   Silver Sage Windpower, LLC

   North Allegheny Wind, LLC

   Three Buttes Windpower, LLC

   Kit Carson Windpower, LLC

7. Credit Agreement, dated as of December 2, 2010, among Top of the World Wind Energy LLC, as borrower, the lenders party thereto, The Bank of Tokyo-Mitsubishi UFJ, Ltd., as Administrative Agent and Issuing Bank, Union Bank, N.A., as Collateral Agent and the other parties thereto, and accompanying transaction documents, under which the borrower has pledged and encumbered ownership interests and assets of its Top of the World wind energy project.

Exhibit M: Progress Energy, Inc.

Property or assets are, and in the ordinary course of business may be, subjected to liens under the following documents:

Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Mortgage and Deed of Trust dated as of May 1, 1940 between Carolina Power & Light Company and The Bank of New York Mellon (formerly, Irving Trust Company) and Frederick G. Herbst (Ming Ryan, Successor), Trustees, as amended and supplemented, securing first mortgage bonds.

Florida Power Corporation d/b/a Progress Energy Florida, Inc.

Indenture dates as of January 1, 1944 between Florida Power Corporation and The Bank of New York Mellon, successor Trustee, as amended and supplemented, securing first mortgage bonds.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation	)	
	)	**Docket No. EC11-___-000**
Progress Energy, Inc.	)	

NOTICE OF FILING
(__, 2011)

Take notice that on April 4, 2011, Duke Energy Corporation ("Duke Energy") and Progress Energy, Inc. ("Progress Energy") (together, "Applicants"), filed an Application pursuant to Section 203 of the Federal Power Act requesting that the Commission issue an order granting approval for a transaction pursuant to which Progress Energy will become a wholly-owned subsidiary of Duke Energy and the former shareholders of Progress Energy will become shareholders of Duke Energy (the "Transaction").

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make the protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kimberly D. Bose
Secretary

Comment Date: [ ]