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ABBREVIATIONS	
CAIR	Clean Air Interstate Rule
CAMR	Clean Air Mercury Rule
CC	Combined Cycle
CCR	Coal Combustion Residuals
CECPCN	Certificate of Environmental Compatibility and Public Convenience and Necessity
CFL	Compact Fluorescent Light bulbs
CO_2	Carbon Dioxide
COD	Commercial Operation Date
COL	Combined Construction and Operating License
COWICS	Carolinas Offshore Wind Integration Case Study
CPCN	Certificate of Public Convenience and Necessity
CSAPR	Cross State Air Pollution Rule
CT	Combustion Turbine
DC	Direct Current
DEC	Duke Energy Carolinas
DEP	Duke Energy Progress
DOE	Department of Energy
DSM	Demand Side Management
EE	Energy Efficiency
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
FERC	Federal Energy Regulatory Commission
FGD	Flue Gas Desulfurization
FLG	Federal Loan Guarantee
GHG	Greenhouse Gas
HVAC	Heating, Ventilation and Air Conditioning
IGCC	Integrated Gasification Combined Cycle
IRP	Integrated Resource Plan
IS	Interruptible Service
JDA	Joint Dispatch Agreement
LCR Table	Load, Capacity, and Reserve Margin Table
LEED	Leadership in Energy and Environmental Design
MACT	Maximum Achievable Control Technology
MATS	Mercury Air Toxics Standard
NAAQS	National Ambient Air Quality Standards
NC	North Carolina
NCDAQ	North Carolina Division of Air Quality
NCEMC	North Carolina Electric Membership Corporation
NCMPA1	North Carolina Municipal Power Agency #1
NCUC	North Carolina Utilities Commission

ABBREVIATIONS CONT.	
NERC	North American Electric Reliability Corp
NO_x	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NSPS	New Source Performance Standard
PD	Power Delivery
PEV	Plug-In Electric Vehicles
PMPA	Piedmont Municipal Power Agency
PPA	Purchase Power Agreement
PPB	Parts Per Billion
PSD	Prevention of Significant Deterioration
PV	Photovoltaic
PVDG	Solar Photovoltaic Distributed Generation Program
PVRR	Present Value Revenue Requirements
QF	Qualifying Facility
RCRA	Resource Conservation Recovery Act
REC	Renewable Energy Certificates
REPS	Renewable Energy and Energy Efficiency Portfolio Standard
RFP	Request for Proposal
RIM	Rate Impact Measure
RPS	Renewable Portfolio Standard
SC	South Carolina
SCPSC	South Carolina Public Service Commission
SCR	Selective Catalytic Reduction
SEPA	Southeastern Power Administration
SERC	SERC Reliability Corporation
SG	Standby Generation
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAG	Technology Assessment Guide
The Company	Duke Energy Carolinas
The Plan	Duke Energy Carolinas Annual Plan
TRC	Total Resource Cost
UCT	Utility Cost Test
VACAR	Virginia/Carolinas
VAR	Volt Ampere Reactive

1. EXECUTIVE SUMMARY

Each year Duke Energy Progress (DEP or the Company) is required by both the North Carolina Utilities Commission (NCUC) and the South Carolina Public Service Commission (SCPSC) to submit a planning document to ensure that it can reliably and affordably meet the energy needs of its customers well into the future.

This year, in addition to providing a traditional standalone Base Case resource plan within the 2013 Integrated Resource Plan (IRP) Update, the Company has also developed an alternative Joint Planning Scenario that examines the benefits of a coordinated energy and capacity expansion plan with Duke Energy Carolinas (DEC).

DEP does not currently have the regulatory approvals required to implement this Joint Planning Scenario, however this scenario simply begins to examine the potential benefits that would accrue to customers once DEP and DEC coordinate new resource additions between the companies. Any benefits that would accrue from new jointly planned resources would be in addition to the current merger savings already being realized through the Joint Dispatch Agreement (JDA) and fuel procurement activities associated with existing generation resources.

Increased Energy Efficiency/Demand Side Management

The Company continues to expand its portfolio of energy efficiency products and services – offering customers more ways to take control of their energy usage and save money.

DEP's Energy Efficiency (EE) programs encourage customers to save electricity by installing high- efficiency measures and/or changing the way they use their electricity.

DEP also offers a variety of Demand Side Management programs (DSM) that signal customers to reduce electricity use during select peak hours as specified by the Company.

- Energy Efficiency programs and Demand Side Management, combined with the use of renewable energy resources are expected to meet approximately 20% of the projected growth in customer demand over the next 15 years. This equates to over 1,000 MW of new energy efficiency, demand side management and renewable resources or the equivalent of a large baseload generation facility.

- Aggressive marketing and increased adoption of energy efficiency programs reduce the annual forecast demand growth from 1.7 to 1.4%.

- DEP will continue to seek Commission approval to implement new DSM and EE programs that are cost effective and consistent with DEP's forecasted resource needs over the planning horizon.

Growth of Renewable Energy and Solar Resources

The Company continues to purchase renewable energy on behalf of its customers and make investments that support the delivery of clean, reliable and affordable electricity.

DEP's strategy to comply with the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (NC REPS) is to develop a diverse portfolio of cost-effective renewable resources including long-term Purchase Power Agreements (PPAs), utility-owned generation, and energy efficiency.

DEP is committed to meeting the requirements established under the NC REPS and to procuring renewable energy in a way that minimizes costs for customers. The Company remains on target to meet these standards within the cost caps established under NC REPS. The Base Case also assumes the addition of future S.C. renewable resources that could be driven by regulatory mandates or market-based forces.

Solar energy is an important part of the energy future for the Carolinas. As the net price of solar technologies including tax incentives continues to decrease, customer use of solar continues to increase.

- The growth of solar energy has been spurred by several factors, including state and federal subsidies that are expected to be in place through 2015 and 2017, respectively.

- Substantial tax subsidies and declining costs make solar energy the Company's primary renewable resource projected within the NC REPS compliance plan.

- The Company's plan currently projects that by the end of the planning horizon, the Company will have met over 200 MW of peak demand through solar resources.

Retiring Older, Less Efficient Coal Units

Duke Energy Progress is investing in a brighter energy future for its more than 1.5 million customers in North and South Carolina. The Company has built some of the cleanest, most innovative natural gas plants to replace aging, less efficient generation facilities in order to provide essential power to the communities that DEP serves. This advanced generation technology helps the Company comply with more stringent air, water and waste rules.

- Since 2010, DEP has retired 9 coal units, totaling more than 1,000 MW, in addition to 160 MW of older oil units.

- In December of this year, the last of DEP's coal units that lack advanced emission controls is scheduled to be retired. Sutton Steam Station Units 1-3, located in Wilmington, N.C., are currently planned for retirement bringing the Company's total to approximately 1,600 MW of coal retirements. Following the retirement of these units, the Sutton Combined Cycle (CC) unit is expected to be operational by the end of 2013.

- In December 2012, the Lee CC unit at the Wayne County Energy Complex became operational. This 625 MW natural gas-fired CC generating station in Goldsboro, N.C. and achieves high operational flexibility and high thermal efficiency while utilizing advanced environmental control technology to minimize plant emissions.

Improved Emissions

The combination of investments in advanced emission controls, retirements of older units and the addition of efficient clean natural gas units has culminated in dramatic reductions in power plant emissions over the last decade.

- Projected SO_2 emission levels in 2014 are expected to be 81% less than they were a decade ago in 2005.

- Projected NO_x emission levels in 2014 are expected to be 86% less than they were in 2005.

This positions Duke Energy Progress as an industry leader in emission reductions. DEP is currently on track to exceed pending federal air emission standards.

Natural Gas: Meeting Future Customer Demand

Modernizing the power plant fleet is an important investment in the Carolinas' environment and its future. Because the Company continues to retire older, less efficient coal plants, new incremental resources must be added to the DEP system. New resources are also required to keep up with increasing customer demand.

After accounting for the previously-discussed impacts of DEP's EE, DSM and renewable resources, the Company projects it will meet its customers' remaining requirements with a combination of natural gas and nuclear resources.

The 2013 IRP identifies the need for new natural gas plants that are economic, highly efficient and reliable. The following natural gas resources are included in the plan for the 2014 through 2028 planning horizon:

- **2014 –** December 2013, 625 MW Sutton Combined Cycle is scheduled to come online
- **2018 –** December 2017, construct 126 MW of fast start combustion turbines (CTs)
- **2019 –** Procure or construct 843 MW of natural gas CC generation
- **2021 –** Procure or construct 843 MW of natural gas CC generation
- **2022 –** Procure or construct 843 MW of natural gas CC generation
- **2027 –** Procure or construct 403 MW of simple cycle CTs

Nuclear Generation

The Company believes nuclear generation is important for the long-term benefits of its customers – today and in the future. The 2013 IRP continues to support new nuclear generation as a carbon-free, cost-effective option within the Company's resource portfolio.

- V.C. Summer Nuclear Plant, Fairfield, S.C. - Discussions continue with Santee Cooper to possibly purchase an interest in two units under construction at the V.C. Summer Nuclear Plant in Fairfield County, S.C. in the 2018 through 2020 timeframe.

- W.S. Lee Nuclear Station, Cherokee, S.C. - While not in the Base Case, the Company shows an ownership interest in DEC's Lee Nuclear Station under the Joint Planning Scenario. Currently a new and updated site-specific seismic analysis is being conducted at the request of the Nuclear Regulatory Commission. Completion of this report delays licensing and pushes the project completion date to 2024.

The table below illustrates the Company's optimal Base Case resource plan that includes the gas and nuclear additions described above. As discussed, in addition to these traditional resources, the Base Case also includes approximately 1,000 MW of EE, DSM and renewable resources.

Table 1-A DEP Base Case

Duke Energy Progress Resource Plan
Base Case

Year	Resource			MW		
2014	Sutton CC *	Nuclear Uprates*		625	9	
2015	Nuclear Uprates			24		
2016	-			-		
2017	-			-		
2018	Fast Start CT	CC Uprates	VC Summer Nuclear	126	137	46
2019	New CC			843		
2020	VC Summer Nuclear			46		
2021	New CC			843		
2022	New CC			843		
2023	-			-		
2024	-			-		
2025	-			-		
2026	-			-		
2027	New CT			403		
2026	-			-		

Note: Table includes both designated and undesignated capacity additions

* Sutton CC and nuclear uprates projected online 2013; Sutton Coal units 1-3 to be retired Dec 2013

One Company: The Benefits of Shared Capacity

DEP also examines a Joint Planning Scenario which shows the impact of capacity sharing between DEP and DEC. This exercise starts by combining the future load obligations of the two companies and combining the existing and projected resources from both DEP's and DEC's independent Base Case plans. However, rather than maintaining utility-specific individual minimum reserve margins, the Joint Planning Scenario simply ensures that the combined system maintains adequate reserves when viewed in the aggregate.

The sharing of capacity between the systems defers the need for new additions of generation. If DEP and DEC receive the appropriate regulatory approvals to allow for the sharing of resources, the Joint Planning Scenario illustrates how benefits would accrue to both companies' customers by delaying investment in new generation.

Federal Regulations & Future Market Conditions

With the information and data currently available, the 2013 IRP is the best projection of what the Company's energy portfolio will look like 15 years from now. This projection can change and will change depending on changing load forecasts, energy prices, new environmental regulations and other outside factors.

Environmental Focus Scenario

What if there is an aggressive new carbon tax in 10 years? Or additional new government mandates are required of electric utilities? The Company has created an Environmental Focus Scenario that factors in significant increases in EE and renewable resources that would influence the plan if regulatory, legislative, or market conditions changed from today's base assumptions to support such increases. This scenario examines how the amount of traditional supply-side resources would change if future market conditions and/or state and federal regulations resulted in higher levels of energy efficiency and renewable resources.

****

The following chapters give an overview of the inputs incorporated in the 2013 IRP. Chapter 8 provides insight into the planning process itself and reviews the results of the Base Case resource plan as well as the two alternative scenarios developed in this planning cycle. Finally, the appendices to this document give even greater detail and specific information regarding the input development and analytic process that produced the resource plans contained in this year's IRP filing.

2. SYSTEM OVERVIEW

DEP's service area covers approximately 34,000 square miles, including a substantial portion of the coastal plain of North Carolina extending from the Piedmont to the Atlantic coast between the Pamlico River and the South Carolina border, the lower Piedmont section of North Carolina, an area in western North Carolina in and around the city of Asheville and an area in the northeastern portion of South Carolina. In addition to retail sales to approximately 1.5 million residential, commercial and industrial customers, the Company also sells wholesale electricity to incorporated municipalities and to public and private utilities.

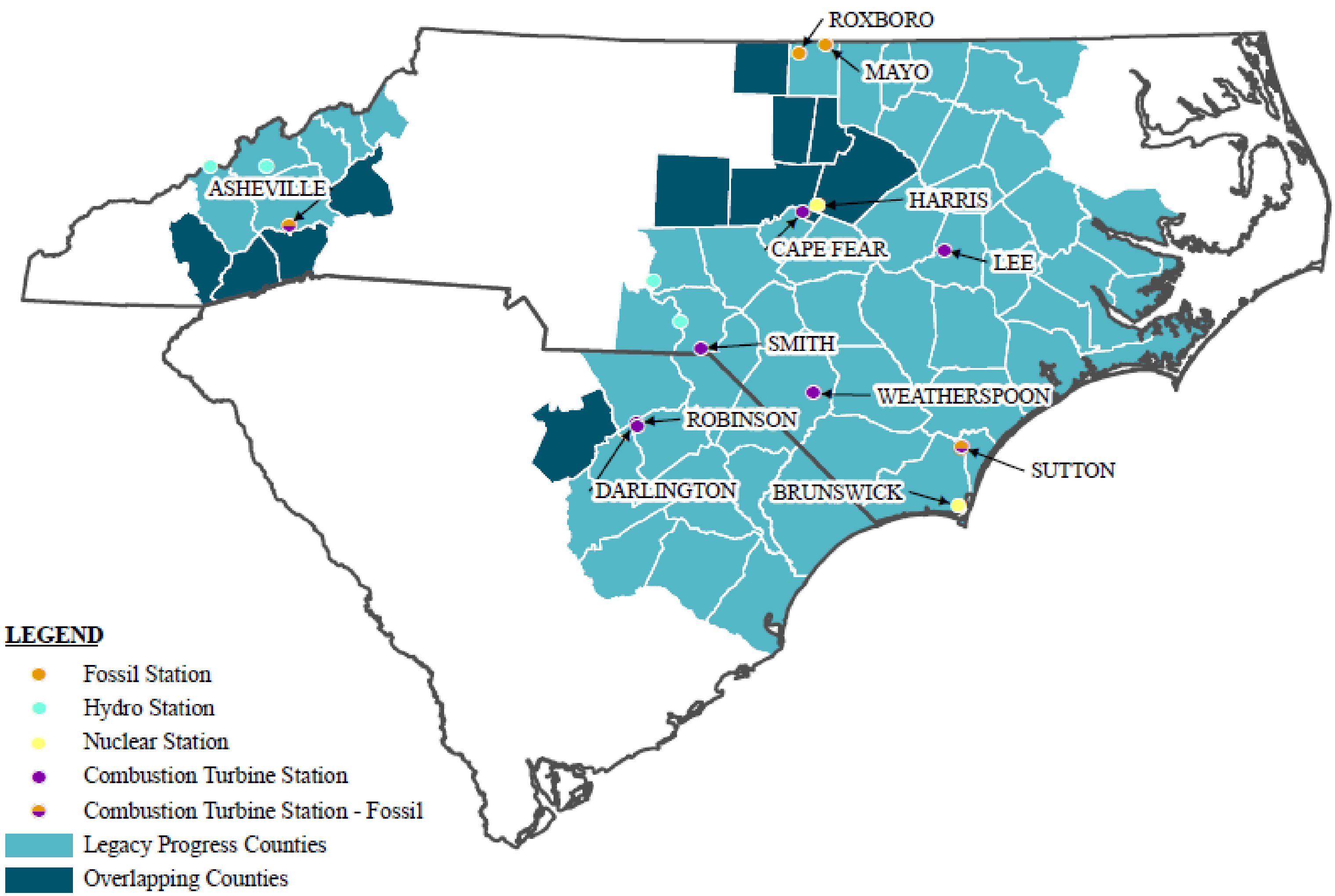
DEP currently meets energy demand, in part, by purchases from the open market, through longer-term purchased power contracts and from the following electric generation assets:

- Three nuclear generating stations with a combined net capacity of 3,539 MW
- Four coal-fired stations with a combined capacity of 4,088 MW
- Four hydroelectric stations with a combined capacity of 222 MW
- Nine combustion turbine stations including three combined cycle units with a combined capacity of 5,083 MW.

DEP's power delivery system consists of approximately 67,011 miles of distribution lines and 6,179 miles of transmission lines. The transmission system is directly connected to all of the Transmission Operators that surround the DEP service area. There are 42 tie-line circuits connecting with six different Transmission Operators: DEC, PJM, Tennessee Valley Authority, Yadkin, South Carolina Electric & Gas (SCE&G), and Santee Cooper. These interconnections allow utilities to work together to provide an additional level of reliability. The strength of the system is also reinforced through coordination with other electric service providers in the Virginia-Carolinas (VACAR) sub-region, SERC Reliability Corporation (SERC), and North American Electric Reliability Corporation (NERC).

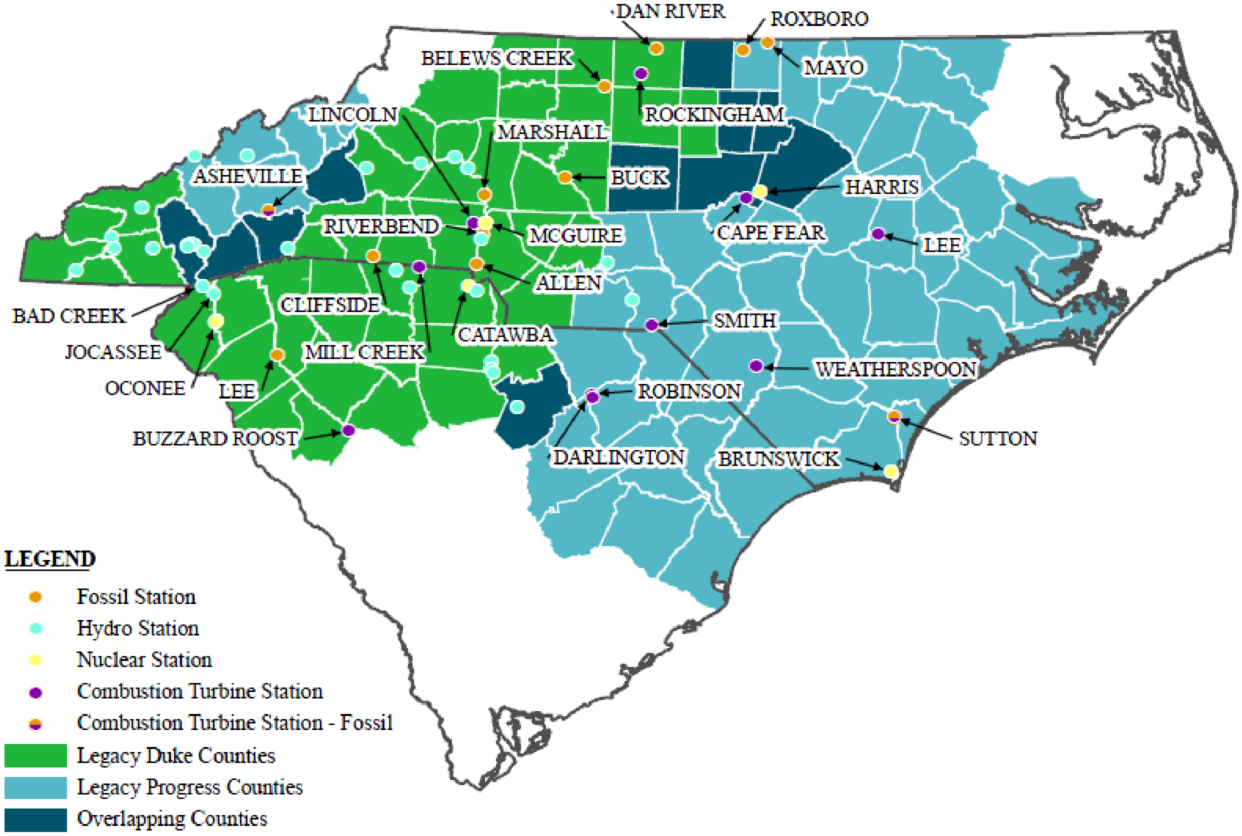
The map on the following page provides a high-level view of the DEP service area.

Chart 2-A Duke Energy Progress Service Area



With the closing of the Duke Energy Corporation and Progress Energy Corporation merger, the service territories for both DEP and DEC lend to future opportunities for collaboration and potential sharing of capacity to create additional savings for North Carolina and South Carolina customers of both utilities. An illustration of the service territory of the Companies is shown in the map below.

Chart 2-B DEP and DEC Service Area



3. ELECTRIC LOAD FORECAST

The Duke Energy Progress spring 2013 forecast provides projections of the energy and peak demand needs for its service area. The forecast covers the time period of 2014 through 2028 and represents the needs of the retail classes and the wholesale buyers with whom DEP has a contractual obligation to serve.

Long term electricity usage is determined by economic and demographic trends. The 2013 spring forecast was developed using industry-standard linear regression techniques, which relate electricity usage to such variables as income, electricity prices, industrial production index along with weather and population. This technique has yielded consistently reasonable results over the years.

The economic projections used in the spring 2013 forecast are obtained from Moody's Analytics, a nationally recognized economic forecasting firm, and include economic forecasts for the states of North Carolina and South Carolina

The retail forecast consists of the three major classes: residential, commercial and industrial.

The residential class sales forecast is comprised of two projections. The first is the number of residential customers, which is driven by population. The second is energy usage per customer, which is driven by weather, regional economic and demographic trends, electricity prices and appliance efficiencies. The usage per customer forecast is essentially flat through much of the forecast horizon, so most growth is primarily due to customer increases. The projected growth rate of residential sales in the spring 2013 forecast from 2014-2028 is 1.5%.

Commercial electricity usage changes with the level of regional economic activity, such as personal income or commercial employment, electricity prices and the impact of weather. The three largest sectors in the commercial class are offices, education and retail. Commercial is expected to be the fastest growing class, with a projected sales growth rate of 1.9%.

The industrial class forecast is impacted by the level of manufacturing output, exchange rates, electricity prices and weather. Overall, industrial sales are expected to grow 0.5% over the forecast horizon.

Including the impacts of DEP's EE programs, the projected average annual growth rate from 2014 through 2028 is 1.4% for summer peak, 1.5% for winter peak and 1.4% for energy. These growth rates represent a 2,865 MW increase in summer load growth and 13,865 MWh increase in energy by 2028.

The load forecast projection for energy and capacity including the impacts of EE that was utilized in the 2013 IRP is shown in Table 3-A.

Table 3-A Load Forecast with Energy Efficiency Programs

YEAR	SUMMER (MW)	ENERGY (GWh)
2014	13,016	65,333
2015	13,232	66,338
2016	13,430	67,335
2017	13,629	68,182
2018	13,827	69,126
2019	14,030	70,146
2020	14,234	71,045
2021	14,433	71,983
2022	14,636	72,987
2023	14,839	73,974
2024	15,044	75,032
2025	15,246	76,004
2026	15,451	77,057
2027	15,662	78,122
2028	15,881	79,198

Note: Table 8-C differs from these values due to a 150 MW firm sale to North Carolina Electric Membership Corporation (NCEMC) through 2024 and a 325 MW Federal Energy Regulatory Commission (FERC) market mitigation sale in the summer of 2014.

For the 2013 IRP, DEP adopted the DEC peak load and energy forecasting methodology. A detailed discussion of the electric load forecast is provided in Appendix C.

4. ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT

DEP is committed to making sure electricity remains available, reliable and affordable and that it is produced in an environmentally sound manner and, therefore, advocates a balanced solution to meeting future energy needs in the Carolinas. That balance includes a strong commitment to demand side management and energy efficiency.

Since 2008, DEP has been actively developing and implementing new DSM and EE programs throughout its North Carolina and South Carolina service areas to help customers reduce their electricity demands. DEP's DSM and EE plan was designed to be flexible, with programs being evaluated on an ongoing basis so that program refinements and budget adjustments can be made in a timely fashion to maximize benefits and cost-effectiveness. Initiatives are aimed at helping all customer classes and market segments use energy more wisely. The potential for new technologies and new delivery options is also reviewed on an ongoing basis in order to provide customers with access to a comprehensive and current portfolio of programs.

DEP's EE programs encourage customers to save electricity by installing high efficiency measures and/or changing the way they use their existing electrical equipment. DEP evaluates the cost-effectiveness of DSM/EE programs from the perspective of program participants, non-participants, all customers as a whole and total utility spending using the four California Standard Practice tests (i.e., the Participant Test, Rate Impact Measure (RIM) Test, Total Resource Cost (TRC) Test and Utility Cost Test (UCT), respectively) to ensure the programs can be provided at a lower cost than building supply-side alternatives. The use of multiple tests can ensure the development of a reasonable set of programs and indicate the likelihood that customers will participate. DEP will continue to seek Commission approval to implement DSM and EE programs that are cost-effective and consistent with DEP's forecasted resource needs over the planning horizon. DEP currently has approval from the NCUC and SCPSC to offer a large variety of EE and DSM programs and measures to help reduce electricity consumption across all types of customers and end-uses.

For IRP purposes, these EE-based demand and energy savings are treated as a reduction to the load forecast, which also serves to reduce the associated need to build new supply-side generation, transmission and distribution facilities. DEP also offers a variety of DSM (or demand response) programs that signal customers to reduce electricity use during select peak hours as specified by the Company. The IRP treats these "dispatchable" types of programs as a resource option that can be dispatched to meet system capacity needs during periods of peak demand.

To better understand the long-term EE savings potential, DEP commissioned a market potential study by Forefront Economics, Inc. in 2012 that estimated the achievable potential for EE on an annual basis over a 20-year forecast period. The results of that market potential study are suitable for integrated resource planning purposes and use in long-range system planning models, however, the study did not attempt to closely forecast short-term EE achievements in the short-term or from year to year. Therefore, the base case EE/DSM savings contained in this IRP were projected by blending near-term program planning forecasts into the long-term achievable potential projections from the market potential study.

DEP also prepared a high EE savings projection designed to meet the five year Energy Efficiency Performance Targets set forth in the December 8, 2011 Settlement Agreement. The savings in this high EE projection are well beyond the levels historically attained by DEP and forecasted in the market potential study. As a result, there is too much uncertainty regarding the possibility of actually realizing that level of EE savings to risk using the high projection in the base assumptions for developing the 2013 integrated resource plan. However, it is being treated as an aspirational target for the development of future EE plans and programs. This level of EE is included as a resource planning sensitivity in the Environmental Focus Scenario.

All of these investments are essential to building customer awareness about EE and, ultimately, reducing energy resource needs by driving large-scale, long-term participation in efficiency programs. Significant and sustained customer participation is critical to the success of DEP's EE and DSM programs. To support this effort, DEP has focused on planning and implementing programs that work well with customer lifestyles, expectations and business needs.

Finally, DEP is setting a conservation example by converting its own buildings and plants, as well as distribution and transmission systems, to new technologies that increase operational efficiency. One example of Duke Energy's dedication to conservation is that the Duke Energy corporate headquarters in Charlotte, N.C. is located in a Leadership in Energy and Environmental Design (LEED) platinum building, the highest LEED rating. LEED is a suite of rating systems for the design, construction, operation and maintenance of green buildings, homes and neighborhoods. Buildings that have attained the LEED platinum certification are among the greenest in the world. See Appendix D for further detail on DEP's DSM, EE and consumer education programs.

5. RENEWABLE ENERGY REQUIREMENTS

DEP's plans regarding renewable energy resources within this IRP are based primarily upon the presence of existing renewable energy requirements and the potential introduction of additional renewable energy requirements in the future.

Regarding existing renewable requirements, the Company is committed to meeting the requirements of the NC REPS. This is a statutory requirement enacted in 2007 mandating that Duke Energy Progress supply the equivalent of 12.5% of retail electricity sales in North Carolina from eligible renewable energy resources and/or EE savings by 2021. NC REPS allows for compliance utilizing not only renewable energy resources supplying bundled energy and renewable energy certificates (RECs) and EE, but also the purchase of unbundled RECs (both in-state and out-of-state) and thermal RECs. Therefore, the actual renewable energy delivered to the DEP system is impacted by the amount of EE, unbundled RECs and thermal RECs utilized for compliance.

With respect to potential new renewable energy portfolio standard requirements, the Company's plans in this IRP account for the possibility of future requirements that will result in additional renewable resource development beyond the NC REPS requirements. Renewable requirements have been adopted in many states across the nation, and have also been contemplated as a federal mandate. As such, the Company believes it is reasonable to plan for additional renewable requirements within the IRP beyond what presently exists with the NC REPS requirements.

Although many reasonable assumptions could be made regarding such future renewable requirements, the Company has assumed for purposes of the 2013 IRP that a new legislative requirement would be implemented in the future that would result in additional renewable resource development in South Carolina. For planning purposes, DEP has assumed that the requirement would be similar in many respects to the NC REPS requirement, but with a different implementation schedule. Specifically, the Company has assumed that this requirement would have an initial 3% milestone in 2018 and would gradually increase to a 12.5% level by 2026. Similar to NC REPS, this assumed legislative requirement would incorporate renewable energy and EE, as well as a limited capability to utilize out of state unbundled purchases of RECs. Further, this assumed requirement would not contain additional technology-specific set-asides or a cost-cap feature.

The Company has assessed the current and potential future costs of renewable and traditional technologies. Based on this analysis, the IRP modeling process shows that, for the most part, the amount of renewable energy resources that will be developed over the planning horizon will be defined by the existing and anticipated statutory renewable energy requirements described above. In other words, under Base Case assumptions, the IRP modeling does not indicate any material quantity of renewable resource development over and above the required levels.

Summary of Expected Renewable Resource Capacity Additions

Based on the planning assumptions noted above regarding current and potential future renewable energy requirements, the Company projects that a total of approximately 476 MW of rated renewable energy resources will be interconnected to the DEP system by 2021, with that figure growing to approximately 802 MW (nameplate) by the end of the planning horizon in 2028. Actual results could vary substantially, depending on future legislative requirements, supportive tax policies, technology cost trends and other market forces.

It should be noted that many renewable technologies are intermittent in nature and that such resources may not be contributing full rated capacity (nameplate or installed capacity) at the time of peak load. In the 2013 IRP, the contribution to peak values that were utilized were 42% of nameplate for solar and 15% of nameplate for wind resources. The details of the forecasted capacity additions, including both nameplate and contribution to peak are summarized in Table 5-A below.

Table 5-A DEP Base Case Renewables

DEP Renewables									
	MW Contribution to Summer Peak					MW Nameplate			
	Wind	Solar	Biomass/ Hydro	Total		Wind	Solar	Biomass/ Hydro	Total
2014	-	50	146	196		-	120	146	266
2015	-	50	154	204		-	120	154	274
2016	-	50	158	208		-	120	158	278
2017	-	50	158	208		-	120	158	278
2018	-	60	155	215		-	142	155	297
2019	15	66	185	266		100	156	185	441
2020	15	85	180	280		100	203	180	483
2021	15	104	128	247		100	248	128	476
2022	15	123	173	311		100	293	173	566
2023	15	143	215	373		100	340	215	655
2024	15	162	225	402		100	385	225	710
2025	15	181	225	421		100	430	225	755
2026	15	200	225	440		100	476	225	801
2027	15	220	225	460		100	524	225	849
2028	15	204	217	436		100	485	217	802

Summary of Renewable Energy Planning Assumptions

As compared to last year's IRP, the Company has assumed the development and interconnection of more solar resources over the planning horizon. The installed cost of solar resources has fallen dramatically over the past few years, driven by increased industry scale, standardization, and technological innovation. Many industry participants expect the cost of solar to continue a steady decline through the end of the decade, albeit at a slower pace than in recent years. Solar resources benefit from generous supportive federal and state policies that are expected to be in place through 2015. In combination with declining costs, such supportive policies have made solar resources increasingly competitive with other renewable resources, including wind and biomass, at least in the near-term. While uncertainty remains around possible alterations or extensions of policy support, as well as the pace of future cost declines, the Company fully expects solar resources to contribute to our REPS compliance efforts beyond the solar set-aside minimum threshold for NC REPS, and correspondingly in SC.

DEP recognizes that some land-based wind developers are presently pursuing projects of significant size in North Carolina. The Company believes it is reasonable to expect that land-based wind will ultimately be developed in both North and South Carolina, however, land-based wind in the U.S. has benefitted from supportive federal tax policies set to decline in the near future. The Company is a contributor to the DOE-sponsored Carolinas Offshore Wind Integration Case Study (COWICS). Although the Company expects to rely upon wind resources for DEP's REPS compliance, the extent and timing of that reliance will likely vary commensurately with changes to supporting policies and prevailing market prices. The Company also has observed that opportunities currently exist, and may continue to exist, to transmit land-based wind energy resources into the Carolinas from other regions, which could supplement the amount of wind that could be developed within the Carolinas.

The Company expects biomass resources to continue to play an important and vital role in the Company's compliance efforts. However, biomass potential ultimately depends upon how key uncertainties, such as permitting and fuel supply risks, are resolved, as well as the projected availability of other forms of renewable resources to offset the needs for biomass.

Hydro generation remains a valuable and significant part of the generating fleet for the Carolinas. The potential for additional hydro generation on a commercially viable scale is limited and the cost and feasibility are highly site-specific. Given these constraints, hydro is not included in the more detailed evaluations but may be considered when site opportunities are evidenced and the potential is identified. DEP will continue to evaluate hydro opportunities on a case-by-case basis and will include it as a resource option if appropriate.

In general, the Company expects a mix of resources will ultimately be used for meeting renewable targets, with the specifics of that mix determined in large part by policy developments over the coming five to ten years. Costs for all the resources discussed above are highly dependent upon future subsidies, or lack thereof, and the Company's procurement efforts will vary accordingly. Furthermore, the Company values portfolio diversification from a resource perspective, particularly in light of the varying production profiles of the resources in question.

Further Details on Compliance with NC REPS

A more detailed discussion of the Company's plans to comply with the NC REPS requirements can be found in the Company's NC REPS Compliance Plan (Compliance Plan) which is provided as an Attachment to this document.

Details of that Compliance Plan are not duplicated here, although it is important to note that various details of the NC REPS law have impacts on the amount of energy and capacity that the Company projects to obtain from renewable resources to help meet the Company's long-term resource needs. For instance, NC REPS contains several detailed parameters, including technology-specific set-aside requirements for solar, swine waste and poultry waste resources, capabilities to utilize EE savings and unbundled REC purchases from in-state or out-of-state resources and RECs derived from thermal (non-electrical) energy, and a statutory spending limit to protect customers from cost increases stemming from renewable energy procurement or development. Each of these features of NC REPS has implications on the amount of renewable energy and capacity the Company forecasts to obtain over the planning horizon of this IRP. Additional details on NC REPS compliance can be found in the Company's Compliance Plan.

The Company continues to see an increasing amount of alternative energy resources in the transmission and distribution queues. These resources are mostly solar resources, due to the combination of federal and state subsidies to encourage solar development. This combination of incentives has led solar to be the primary renewable resource projected in the Company's NC REPS Compliance Plan. With state incentives scheduled to end in 2015 and federal incentives scheduled to be reduced in the same time period, the exact amount of solar that will ultimately be developed is highly uncertain. If tax incentives were to be extended or significant additional cost reductions in the technology realized, incremental solar contribution above NC REPS requirements could be achieved.

The Environmental Focus Scenario evaluates a resource plan under market conditions supportive of higher penetrations of renewable resources and energy efficiency as compared to the Base Case. The Environmental Focus Scenario does not envision a specific market condition, but rather merely considers the potential combined effect of a number of factors including, but not limited to, high carbon prices, low fuel costs, continuation of renewable subsidies, and/or stronger renewable energy mandates. Specifically, the Environmental Focus Scenario assumes a requirement for DEP to serve approximately 8% of its total combined retail load with new renewable resources by 2028. This represents about twice the amount of renewable energy as compared to the Base Case. Additionally, EE is incorporated at an aspirational target as established in the merger settlement. As presented in the table below, the Environmental Focus Scenario includes additional renewables of approximately 1,230 MW nameplate (490 MW contribution to peak) in DEP as compared to the Base Case. Table 5-B below provides the renewable energy resources assumed in the Environmental Focus Scenario.

Table 5-B DEP Environmental Focus Scenario Renewables

DEP Renewables								
Year	MW Contribution to Summer Peak				MW Nameplate			
	Wind	Solar	Biomass/ Hydro	Total	Wind	Solar	Biomass/ Hydro	Total
2014	-	50	146	196	-	120	146	266
2015	-	50	154	204	-	120	154	274
2016	-	50	158	208	-	120	158	278
2017	-	50	158	208	-	120	158	278
2018	6	87	168	261	38	207	168	413
2019	26	120	211	358	176	286	211	673
2020	32	167	219	418	214	398	219	831
2021	38	213	180	431	252	508	180	940
2022	44	260	238	541	290	618	238	1,146
2023	49	307	293	649	328	730	293	1,351
2024	55	353	316	724	366	840	316	1,522
2025	61	399	329	789	404	950	329	1,683
2026	66	446	342	854	442	1,061	342	1,845
2027	72	493	355	920	480	1,174	355	2,009
2028	76	495	355	926	505	1,179	355	2,039

6. SCREENING OF GENERATION ALTERNATIVES

As previously discussed, the Company develops the load forecast and adjusts for the impacts of EE that have been pre-screened for cost-effectiveness. The growth in this adjusted load forecast and associated reserve requirements, along with existing unit retirements or purchased power contract expirations, creates a need for future generation. This need is partially met with DSM resources and the renewable resources required for compliance with NC REPS. The remainder of the future generation needs can be met with a variety of potential supply side technologies.

For purposes of the 2013 IRP, the Company considered a diverse range of technology choices utilizing a variety of different fuels, including supercritical pulverized coal (SCPC) units with carbon capture and sequestration (CCS), integrated gasification combined cycle (IGCC) with carbon capture and sequestration, CTs, CC with duct firing, and nuclear units. In addition, Duke Energy Progress considered renewable technologies such as wind and solar in this year's screening analysis.

For the 2013 IRP screening analyses, the Company screened technology types within their own respective general categories of baseload, peaking/intermediate and renewable, with the ultimate goal of screening to pass the best alternatives from each of these three categories to the integration process. As in past years, the reason for the initial screening analysis is to determine the most viable and cost-effective resources for further evaluation. This initial screening evaluation is necessary to narrow down options to be further evaluated in the quantitative analysis process as discussed in Appendix A.

The results of these screening processes determine a smaller, more manageable subset of technologies for detailed analysis in the expansion planning model. The following list details the technologies that were passed on to the detailed analysis phase of the IRP process. The technical and economic screening is discussed in detail in Appendix F.

- Baseload – 2 x 1,117 MW Nuclear units (AP1000)
- Baseload – 680 MW – 2 x 1 Combined Cycle (Inlet Chiller and Fired)
- Baseload – 843 MW – 2 x 1 Advanced Combined Cycle (Inlet Chiller and Fired)
- Peaking/Intermediate – 403 MW - 2 x 7FA.05 CTs
- Peaking/Intermediate – 805 MW - 4 x 7FA.05 CTs
- Renewable – 150 MW Wind - On-Shore
- Renewable – 25 MW Solar Photovoltaic (PV)

7. RESERVE CRITERIA

Background

The reliability of energy service is a primary input in the development of the resource plan. Utilities require a margin of generating capacity reserve in order to provide reliable service. Periodic scheduled outages are required to perform maintenance, inspections of generating plant equipment, and to refuel nuclear plants. Unanticipated mechanical failures may occur at any given time, which may require shutdown of equipment to repair failed components. Adequate reserve capacity must be available to accommodate these unplanned outages and to compensate for higher than projected peak demand due to forecast uncertainty and weather extremes. In addition, some capacity must also be available as operating reserve to maintain the balance between supply and demand on a real-time basis.

The amount of generating reserves needed to maintain a reliable power supply is a function of the unique characteristics of a utility system including load shape, unit sizes, capacity mix, fuel supply, maintenance scheduling, unit availabilities and the strength of the transmission interconnections with other utilities. There is no one standard measure of reserve capacity that is appropriate for all systems since these characteristics are particular to each individual utility.

In 2012, DEC and DEP hired Astrape Consulting to conduct a reserve margin study for each utility. Astrape conducted a detailed resource adequacy assessment that incorporated the uncertainty of weather, economic load growth, unit availability and transmission availability for emergency tie assistance. Astrape analyzed the optimal planning reserve margin based on providing an acceptable level of physical reliability and minimizing economic costs to customers. The most common physical metric used in the industry is to target a system reserve margin that satisfies the one day in 10 year Loss of Load Expectation (LOLE) standard. This standard is interpreted as one firm load shed event every 10 years due to a lack of generating capacity. From an economic perspective, as planning reserve margin increases, the total cost of reserves increases while the costs related to reliability events decline. Similarly, as planning reserve margin decreases, the cost of reserves decreases while the costs related to reliability events increases, including the costs to customers of loss of power. Thus, there is an economic optimum point where the cost of additional reserves plus the cost of reliability events to customers is minimized.

Based on past reliability assessments, results of the Astrape analysis, and to enhance consistency and communication regarding reserve targets, both DEC and DEP have adopted a 14.5% minimum planning reserve margin for scheduling new resource additions. Since capacity is generally added in large blocks to take advantage of economies of scale, it should be noted that planning reserve margins will often be somewhat higher than the minimum target.

Adequacy of Projected Reserves

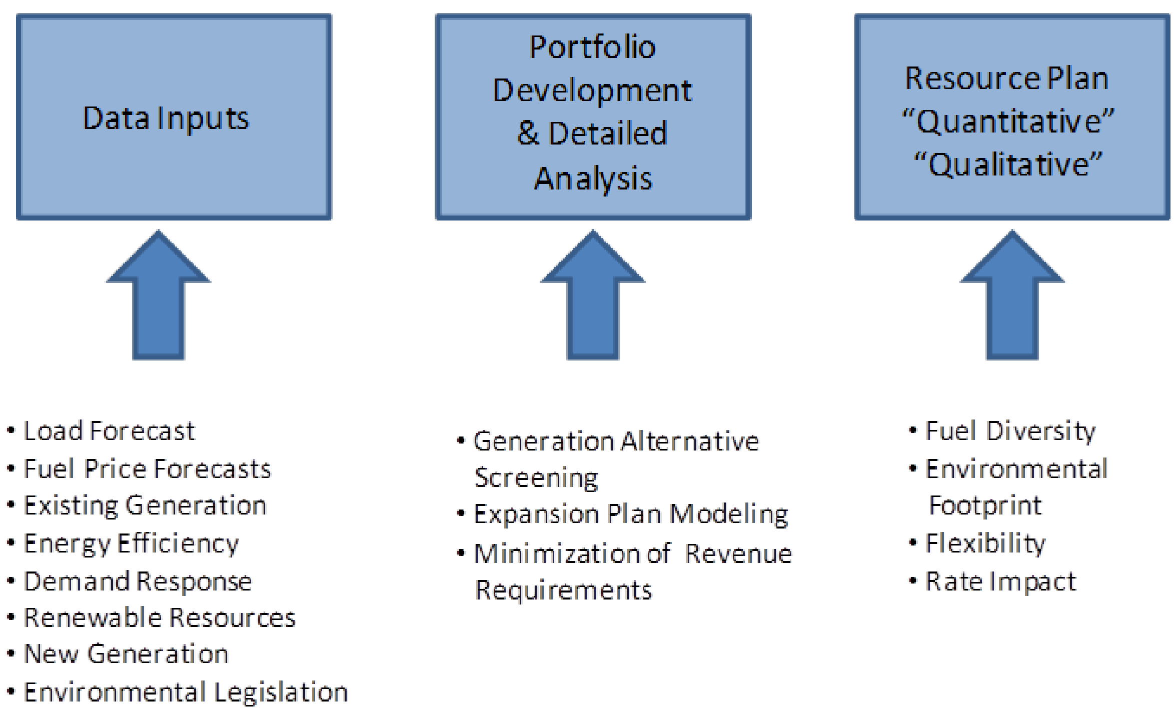
DEP's resource plan reflects reserve margins ranging from 15 to 20%. Reserves projected in DEP's IRP meet the minimum planning reserve margin target and thus satisfy the one day in 10 year LOLE criterion. Projected reserve margins exceed the minimum 14.5% target by 3% or more in 2014-2016 primarily due to a decrease in the load forecast. Reserves also exceed the minimum target by 3% or more in 2019, 2022, and 2023 as a result of the economic addition of large combined-cycle facilities in years 2019 and 2022. Large resource additions are deemed economic only if they have a lower Present Value Revenue Requirement (PVRR) over the life of the asset as compared to smaller resources that better fit the short-term reserve margin need. Reserves projected in DEP's IRP are appropriate for providing an economic and reliable power supply.

8. EVALUATION AND DEVELOPMENT OF THE RESOURCE PLAN

To meet the future needs of DEP's customers, it is necessary for the Company to adequately understand the load and resource balance. For each year of the planning horizon, DEP develops a load forecast of energy sales and peak demand. To determine total resources needed, the Company considers the load obligation plus a 14.5% minimum planning reserve margin. The projected capability of existing resources, including generating units, EE and DSM, renewable resources and purchased power contracts, is measured against the total resource need. Any deficit in future years will be met by a mix of additional resources that reliably and cost-effectively meet the load obligation while complying with all environmental and regulatory obligations. It should be noted that DEP considers the non-firm energy purchases and sales associated with the JDA with DEC in the development of its independent Base Case resource plan and two alternative scenarios to be discussed later in this chapter and in Appendix A.

Figure 8-A represents a simplified overview of the resource planning process. Appendix A of the Company's 2013 IRP provides a detailed discussion of the development of the resource plan.

Figure 8-A Simplified IRP Process



DEP performed its expansion plan modeling under Base Case assumptions that were updated as compared to its 2012 IRP. In addition to an updated Base Case expansion plan, DEP also considered an Environmental Focus Scenario that includes a greater amount of renewable resources and EE, as well as changes to other assumptions, such as fuel and CO_2 prices. Finally, DEP and DEC examined the potential benefits of sharing capacity as represented in a common Joint Planning Scenario.

Data Inputs

DEP utilizes updated data to develop its resource plan. For the 2013 IRP, data inputs such as load forecast, EE and DSM, fuel prices, projected CO_2 prices, individual plant operating and cost information, and future resource information were updated. These data inputs were developed and provided by company subject matter experts and/or based upon vendor studies, where available. Furthermore, DEC and DEP benefitted from the combined experience of both utilities' subject matter experts by utilizing best practices from each utility in the development of their respective IRP inputs. Where appropriate, common data inputs were applied.

As expected, certain data elements and issues have a larger impact on the plan than others. Any changes in these elements may result in a noticeable impact to the plan, and as such, these elements are closely monitored. Some of the most consequential data elements are listed below. A detailed discussion of each of these data elements has been presented throughout this document and is examined in more detail in the appendices to this document.

- Load Forecast
- EE/DSM
- Renewable Resource Projections
- Fuel Costs
- Technology Costs and Operating Characteristics
- Environmental Legislation
- Nuclear Issues

Generation Alternative Screening

DEP reviews generation resource alternatives on a technical and economic basis. Resources also must be demonstrated to be commercially available for utility scale operations. The resources that are found both technically and economically viable are then passed to the detailed analysis process for further analysis.

Portfolio Development and Detailed Analysis

The portfolio development and detailed analysis phase utilizes the information compiled in the data input step to derive resource portfolios or resource plans. This step in the IRP process utilizes expansion planning models and detailed production costing models. The goal of the modeling is to determine the best mix of capacity additions for the Company's short- and long- term resource plans with an objective of selecting a robust plan that minimizes the Present Value of Revenue Requirements and is environmentally sound complying with all state and federal regulations.

In the 2013 IRP, a Base Case along with an Environmental Focus Scenario and a Joint Planning Scenario were analyzed.

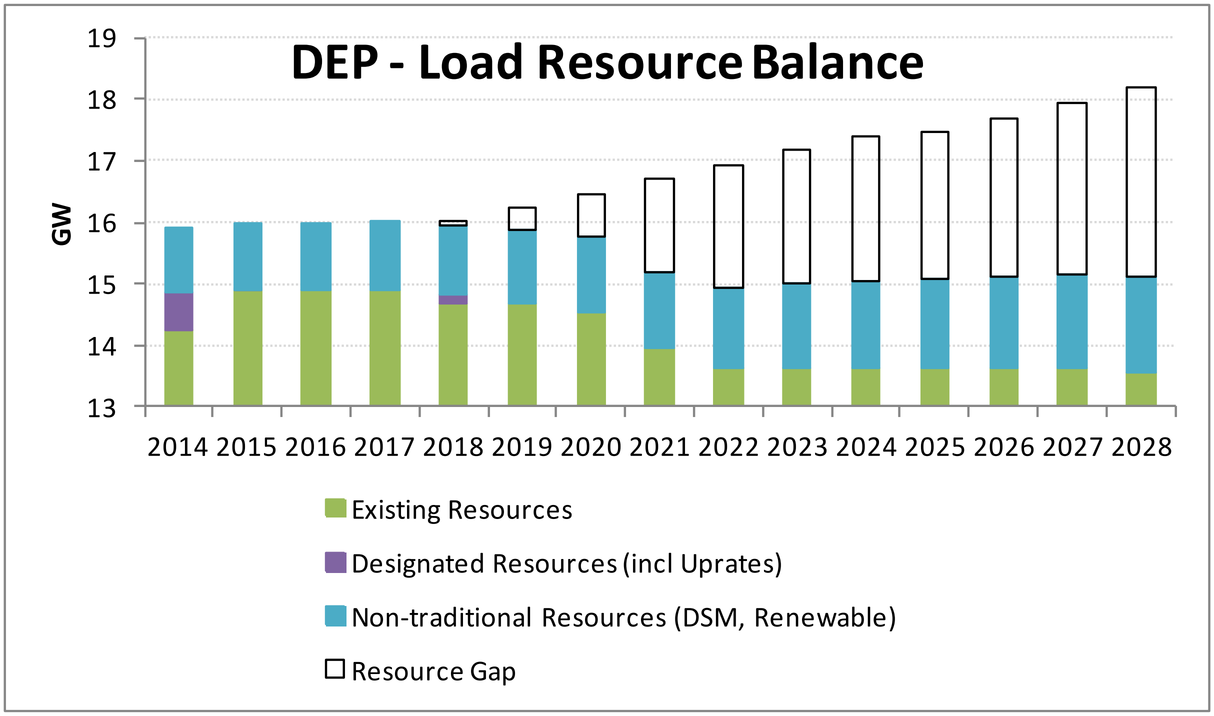
Resource Plans

Base Case

DEP produced an updated Base Case resource plan utilizing consistent assumptions and analytic methods between DEP and DEC where appropriate. This plan represents an update to the Company's 2012 IRP filing and does not take into account the sharing of capacity between DEP and DEC. However, the Base Case incorporates the JDA between DEP and DEC which represents a non-firm energy only commitment between the companies.

The Load and Resource Balance Chart shown in Chart 8-B illustrates the resource need that is required for DEP to meet its load obligation plus required reserves. The existing generating resources, designated resource additions and EE resources do not meet the required load and reserves and thus, the resource plan analysis will determine the most robust plan to meet this resource gap.

Chart 8-B DEP Load Resource Balance – Base Case



Cumulative Resource Additions to Meet Load Obligation and Reserve Margin (MW)

Year	2014	2015	2016	2017	2018	2019	2020	2021
Resource Need	-	-	-	-	49	373	713	1,521
Year	2022	2023	2024	2025	2026	2027	2028	
Resource Need	2,000	2,159	2,341	2,365	2,562	2,772	3,080	

Tables 8-C and 8-D present the Load, Capacity and Reserves tables for the Base Case analysis that was completed for the DEP's 2013 IRP.

Table 8-C Load, Capacity and Reserves Table - Summer

Summer Projections of Load, Capacity, and Reserves
for Duke Energy Progress 2013 Annual Plan

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load Forecast															
1 DEP System Peak	13,078	13,338	13,582	13,823	14,054	14,299	14,548	14,797	15,049	15,274	15,522	15,764	16,003	16,243	16,484
2 Firm Sale	475	150	150	150	150	150	150	150	150	150	150	0	0	0	0
3 New EE Programs	(62)	(106)	(152)	(194)	(227)	(269)	(314)	(364)	(413)	(435)	(478)	(518)	(551)	(580)	(604)
4 Adjusted Duke System Peak	**13,491**	**13,382**	**13,580**	**13,779**	**13,977**	**14,180**	**14,384**	**14,583**	**14,786**	**14,989**	**15,194**	**15,246**	**15,451**	**15,662**	**15,881**
Existing and Designated Resources															
5 Generating Capacity	12,932	13,013	13,037	13,037	13,037	13,174	13,174	13,174	13,174	13,174	13,174	13,174	13,174	13,174	13,174
6 Designated Additions / Uprates	634	24			137										
7 Retirements / Derates	(553)														
8 Cumulative Generating Capacity	**13,013**	**13,037**	**13,037**	**13,037**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**	**13,174**
Purchase Contracts															
9 Cumulative Purchase Contracts	1,861	1,878	1,877	1,877	1,657	1,489	1,344	776	445	445	443	443	443	438	389
Undesignated Future Resources															
10 Nuclear	0	0	0	0	46	0	46	0	0	0	0	0	0	0	0
11 Fossil	0	0	0	0	126	843	0	843	843	0	0	0	0	403	0
Renewables															
12 Cumulative Renewables Capacity	196	205	208	208	214	265	281	248	312	373	402	421	440	460	436
13 Cumulative Production Capacity	**15,070**	**15,120**	**15,122**	**15,122**	**15,217**	**15,943**	**15,860**	**16,102**	**16,677**	**16,739**	**16,766**	**16,785**	**16,804**	**17,223**	**17,148**
Demand Side Management (DSM)															
14 Cumulative DSM Capacity	**827**	**849**	**869**	**885**	**910**	**935**	**958**	**979**	**1,000**	**1,020**	**1,037**	**1,054**	**1,073**	**1,089**	**1,105**
15 Cumulative Capacity w/ DSM	**15,897**	**15,969**	**15,991**	**16,007**	**16,127**	**16,878**	**16,818**	**17,081**	**17,677**	**17,759**	**17,803**	**17,839**	**17,877**	**18,312**	**18,253**
Reserves w/ DSM															
16 Generating Reserves	2,407	2,587	2,411	2,228	2,150	2,698	2,433	2,497	2,891	2,770	2,609	2,593	2,425	2,649	2,373
17 % Reserve Margin	**17.8%**	**19.3%**	**17.8%**	**16.2%**	**15.4%**	**19.0%**	**16.9%**	**17.1%**	**19.6%**	**18.5%**	**17.2%**	**17.0%**	**15.7%**	**16.9%**	**14.9%**

Table 8-D Load, Capacity and Reserves Table - Winter

Winter Projections of Load, Capacity, and Reserves
for Duke Energy Progress 2013 Annual Plan

	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Load Forecast															
1 DEP System Peak	12,376	12,627	12,859	13,090	13,312	13,547	13,787	14,026	14,269	14,510	14,749	14,983	15,217	15,450	15,684
2 Firm Sale	150	150	150	150	150	150	150	150	150	150	150	0	0	0	0
3 New EE Programs	(34)	(67)	(102)	(135)	(179)	(213)	(249)	(289)	(328)	(366)	(402)	(436)	(463)	(488)	(507)
4 Adjusted Duke System Peak	**12,492**	**12,710**	**12,908**	**13,106**	**13,282**	**13,484**	**13,688**	**13,888**	**14,091**	**14,293**	**14,497**	**14,547**	**14,753**	**14,962**	**15,177**
Existing and Designated Resources															
5 Generating Capacity	14,107	14,107	14,107	14,135	14,135	14,135	14,135	14,135	14,135	14,135	14,135	14,135	14,135	14,135	14,135
6 Designated Additions / Uprates			28												
7 Retirements / Derates															
8 Cumulative Generating Capacity	**14,107**	**14,107**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**	**14,135**
Purchase Contracts															
9 Cumulative Purchase Contracts	1,925	1,925	1,942	1,941	1,681	1,681	1,368	1,368	778	396	396	396	396	396	396
Undesignated Future Resources															
10 Nuclear	0	0	0	0	0	46	0	46	0	0	0	0	0	0	0
11 Fossil	0	0	0	0	147	0	875	0	875	875	0	0	0	443	0
Renewables															
12 **Cumulative Renewables Capacity**	146	146	154	158	158	155	200	195	143	188	230	240	240	240	240
13 Cumulative Production Capacity	**16,178**	**16,177**	**16,231**	**16,233**	**16,120**	**16,163**	**16,770**	**16,812**	**17,045**	**17,583**	**17,625**	**17,635**	**17,635**	**18,078**	**18,078**
Demand Side Management (DSM)															
14 Cumulative DSM Capacity	**506**	**506**	**506**	**505**	**512**	**518**	**525**	**530**	**537**	**543**	**549**	**554**	**561**	**567**	**574**
15 Cumulative Capacity w/ DSM	**16,684**	**16,684**	**16,737**	**16,738**	**16,632**	**16,681**	**17,295**	**17,342**	**17,583**	**18,127**	**18,174**	**18,189**	**18,196**	**18,645**	**18,652**
Reserves w/ DSM															
16 Generating Reserves	4,192	3,973	3,830	3,633	3,350	3,197	3,607	3,454	3,492	3,833	3,677	3,642	3,443	3,683	3,475
17 % Reserve Margin	**33.6%**	**31.3%**	**29.7%**	**27.7%**	**25.2%**	**23.7%**	**26.4%**	**24.9%**	**24.8%**	**26.8%**	**25.4%**	**25.0%**	**23.3%**	**24.6%**	**22.9%**

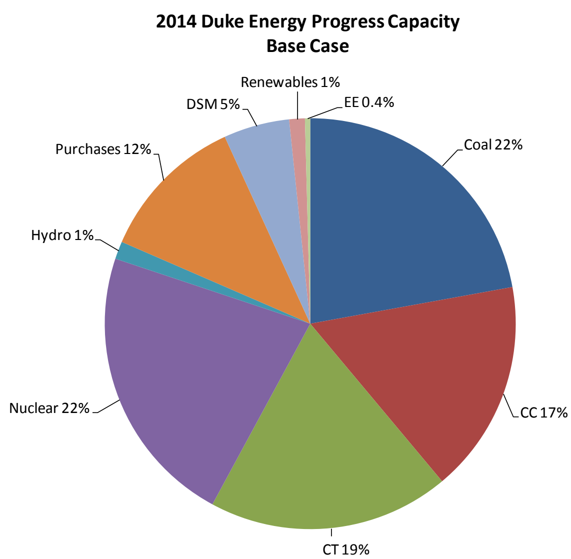
DEP - Assumptions of Load, Capacity, and Reserves Table

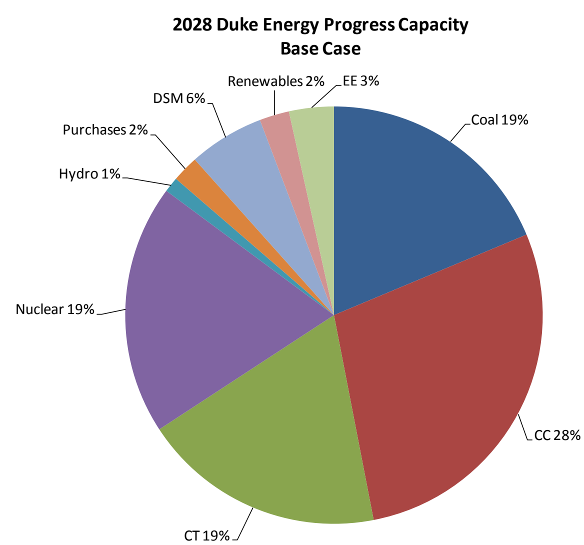
The following notes are numbered to match the line numbers on the Summer Projections of Load, Capacity, and Reserves table. All values are MW except where shown as a Percent.

1. Planning is done for the peak demand for the Duke Energy Progress System
2. FERC 325 MW Mitigation Sale for summer of 2014
   Firm sale of 150 MW through 2024
3. Cumulative energy efficiency and conservation programs (does not include demand response programs)
4. Peak load adjusted for FERC mitigation sale, firm sale, and cumulative energy efficiency
5. Existing generating capacity reflecting designated additions, planned uprates, retirements and derates
   Includes total unit capacity of jointly owned units
6. Capacity Additions include Duke Energy Progress projects that have been approved by the NCUC (625 MW Sutton Combined Cycle unit in December 2013)
   Planned nuclear uprates totalling 9 MW in Q4 2013
   Planned nuclear uprates totalling 24 MW in 2015
   Planned combined cycle uprates totalling 137 MW in 2018
7. Capacity Retirement of 553 MW of Sutton Coal units in December 2013
8. Sum of lines 5 through 7
9. Cumulative Purchase Contracts have several components:
   Purchased capacity from PURPA Qualifying Facilities, Anson and Hamlet CT tolling, Butler Warner purchase, Southern CC purchase, and Broad River CT purchase
10. New nuclear resources economically selected to meet load and minimum planning reserve margin
    Capacity must be on-line by June 1 to be included in available capacity for the summer peak of that year and by December 1 to be included in available capacity for the winter peak of that year.
    10% share (allocated by load ratio basis with DEC) V.C. Summer Nuclear facility in 2018 and 2020 (46 MW in each year)
11. New fossil fuel resources economically selected to meet load and minimum planning reserve margin
    Capacity must be on-line by June 1 to be included in available capacity for the summer peak of that year and by December 1 to be included in available capacity for the winter peak of that year.
    Addition of 126 MW Fast-Start Combustion Turbine capacity in December 2017
    Addition of 843 MW Advanced Combined Cycle units in 2019, 2021 and 2022
    Addition of 403 MW of Combustion Turbine capacity in 2027
12. Cumulative solar, biomass, hydro and wind resources to meet NC REPS compliance
    Also includes a compliance plan for South Carolina as a placeholder to reflect a possible state or federal renewable standard beginning in 2018
13. Sum of lines 8 through 12
14. Cumulative Demand Side Management programs including load control and DSDR
15. Sum of lines 13 and 14
16. The difference between lines 4 and 15
17. Reserve Margin = (Cumulative Capacity-System Peak Demand)/System Peak Demand
    Minimum target planning reserve margin is 14.5%

The following charts illustrate both the current and forecasted capacity by fuel type for the DEP system, as projected by the Base Case expansion plan. As demonstrated in Chart 8-E, the capacity mix for the DEP system changes with the passage of time. In 2028, the Base Case projects that DEP will have a smaller reliance on coal, nuclear and purchases and a higher reliance on gas-fired resources, renewable resources and EE as compared to the current state. Gas price projections continue to make natural gas an attractive resource for future capacity needs.

Chart 8-E Duke Energy Progress Capacity by Fuel Type – Base Case [1]





A detailed discussion of the assumptions, inputs and analytics used in the development of the Base Case is contained within Appendix A.

Environmental Focus Scenario

DEP also developed an Environmental Focus Scenario that includes both aspirational EE targets, as well as contributions from renewable resources at levels approximately twice the level considered in the Base Case resource plan. This scenario illustrates the amount of traditional supply-side resources that would be eliminated or deferred if future market conditions and/or state and federal regulations resulted in higher levels of efficiency and renewable resources.

The supply-side resources were analyzed in light of the higher EE contributions and accounting for additional renewable resources. The Environmental Focus Scenario also assumed higher carbon prices

[1] In 2021, the REPS compliance plan of 12.5% is comprised of approximately 25% Energy Efficiency, 25% purchases of out-of-state RECs, 5-10% from RECs not associated with electrical energy (including animal waste resources), and the balance from purchases of renewable electricity.

and slightly lower fuel prices due to declining demand for fossil fuels. Table 8-F below represents the annual incremental additions reflected in the Environmental Focus Scenario expansion plan contrasted with the Base Case expansion plan.

Table 8-F DEP Environmental Focus Scenario

Duke Energy Progress Resource Plan Base Case						Duke Energy Progress Resource Plan Environmental Focus Scenario				
Year	Resource		MW			Year	Resource		MW	
2018	Fast Start CT	VC Summer Nuclear	126	46		2018	Fast Start CT	VC Summer Nuclear	126	46
2019	New CC		843			2019	-		-	
2020	VC Summer Nuclear		46			2020	VC Summer Nuclear	New CC	46	843
2021	New CC		843			2021	-		-	
2022	New CC		843			2022	New CC		843	
2023	-		-			2023	-		-	
2024	-		-			2024	-		-	
2025	-		-			2025	-		-	
2026	-		-			2026	New CC		843	
2027	New CT		403			2027	-		-	
2028	-		-			2028	-		-	

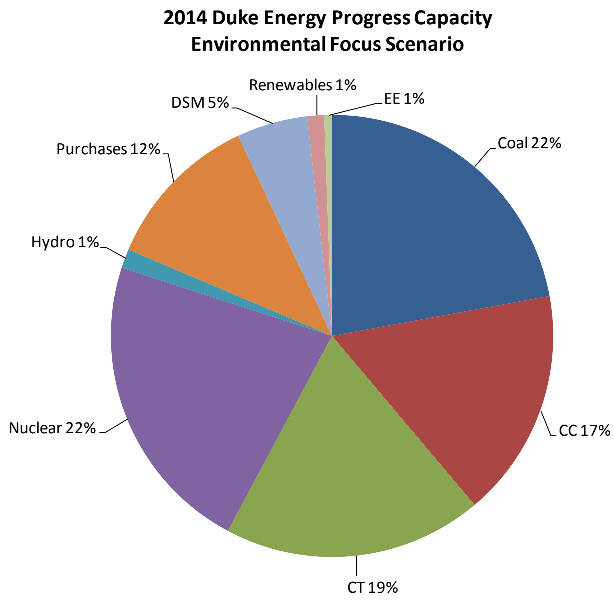
Note: Tables represent only undesignated resources from 2018 through 2028; no changes to the Base Case build plan occurred in prior years

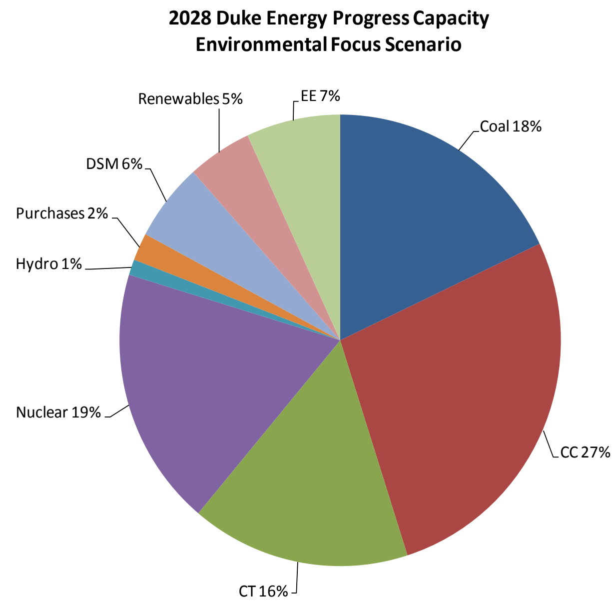
The Environmental Focus Scenario results in the following changes as compared to the Base Case resource plan:

- Incremental increase in renewable energy resources of 1,237 MW nameplate (490 MW contribution to peak) by 2028
- Increase in EE of 716 MW by 2028
- Delay in the need for the first new CC resource from 2019 to 2020
- CT resource moves from 2027 to 2026 and the need becomes a CC

The following charts illustrate both the current and forecasted capacity by fuel type for the DEP system, as projected by the Environmental Focus Scenario expansion plan. Chart 8-G demonstrates the impacts of doubling the renewable resources as compared to the Base Case and including aspirational EE goals. The increase in EE and renewable resources reduce the Company's reliance on coal and CT resources. Natural gas CC capacity is still economically selected in the Environmental Focus Scenario, thus increasing the impact that that baseload resource has on the system capacity mix.

Chart 8-G Duke Energy Progress Capacity by Fuel Type – Environmental Focus Scenario





Joint Planning Scenario

A Joint Planning Scenario that begins to explore the potential for DEP and DEC to share firm capacity between the companies was also developed. The focus of this scenario is to illustrate the potential for the utilities to collectively defer generation investment by utilizing each other's capacity when available and by jointly owning new capacity. This plan does not address the specific implementation methods or issues required to implement shared capacity. Rather, this scenario illustrates the benefits of joint planning between DEP and DEC with the understanding that the actual execution of capacity sharing would require separate regulatory proceedings and approvals.

Table 8-H below represents the annual non-renewable incremental additions reflected in the Joint Case system expansion plan for the combined DEP and DEC Base Cases as compared to the Joint Planning Scenario. The plan contains the undesignated additions for DEP and DEC over the planning horizon.

Table 8-H Joint Planning Scenario

Duke Energy Carolinas and Duke Energy Progress Base Case Combined Resource Plans				
Year	Resource		MW	
2014	-		-	
2015	-		-	
2016	-		-	
2017	New CC		680	
2018	Fast Start CT	VC Summer Nuclear	126	66 / 46
2019	New CC	New CC	843	843
2020	VC Summer Nuclear		66 / 46	
2021	New CC		843	
2022	New CC	New CT	843	403
2023	-		-	
2024	New Nuclear		1117	
2025	-		-	
2026	New Nuclear		1117	
2027	New CT		403	
2028	-		-	

Delays 1 year

Delays 2 years & Need changes to CT

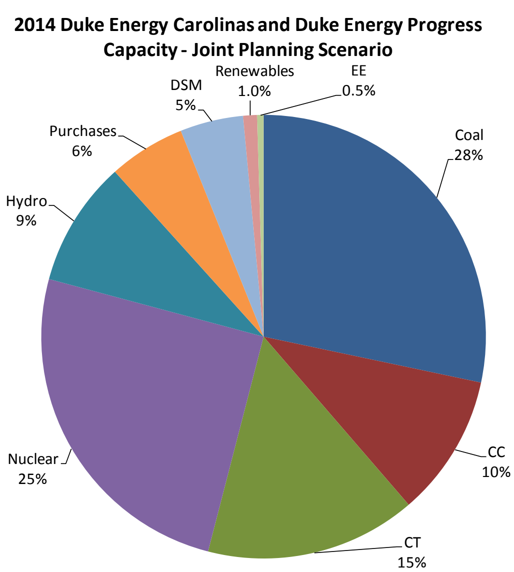
Delays 1 year

Duke Energy Carolinas and Duke Energy Progress Joint Planning Scenario Resource Plan						
Year	Resource			MW		
2014	-			-		
2015	-			-		
2016	-			-		
2017	-			-		
2018	Fast Start CT	New CC	VC Summer Nuclear	126	680	66 / 46
2019	New CC			843		
2020	VC Summer Nuclear			66 / 46		
2021	New CC	New CT		843	403	
2022	New CC			843		
2023	New CT			403		
2024	New Nuclear			659 / 458		
2025	-			-		
2026	New Nuclear			659 / 458		
2027	-			-		
2028	-			-		

Outside Study Period

The following charts illustrate both the current and forecasted energy and capacity by fuel type for the DEP system, as projected by the Joint Planning Scenario. In this Joint Planning Scenario, the Companies continue to rely upon nuclear, CT and coal resources, but the reliance on natural gas CC resources increases due to the favorable natural gas prices. The Companies' renewable energy and EE impacts continue to grow over time, as also reflected in the Base Cases.

Chart 8-I DEC and DEP Capacity by Fuel Type – Joint Planning Scenario



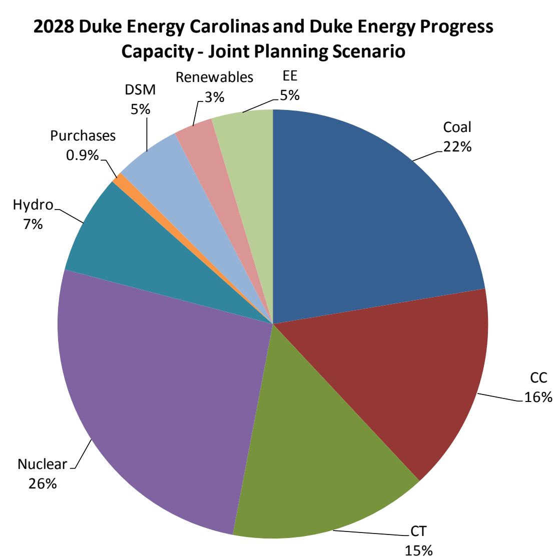
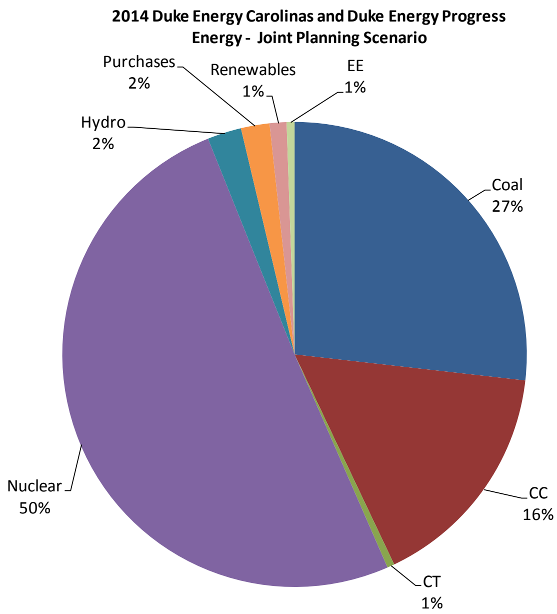
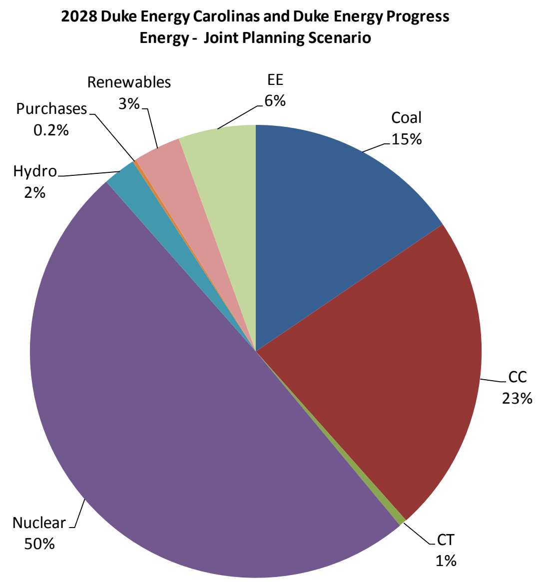


Chart 8-J DEC and DEP Energy by Fuel Type – Joint Planning Scenario





9. SHORT-TERM ACTION PLAN

The Company's Short-Term Action Plan, which identifies accomplishments in the past year and actions to be taken over the next five years, is summarized below:

- Take actions to ensure capacity needs beginning in 2018 are met. In addition to seeking to meet the Company's DSM and EE goals and meeting the Company's NC REPS requirements, actions to secure additional capacity may include purchased power or Company-owned generation.

- Retire older coal generation. Cape Fear coal Units 5 and 6 and Robinson coal Unit 1 were retired in October 2012. Sutton coal Units 1-3 will retire in December 2013.

- Continue to execute the Company's EE and DSM plan, which includes a diverse portfolio of EE and DSM programs, and continue on-going work to develop and implement additional cost-effective EE and DSM products and services. Over the past year, DEP has implemented the following new program offerings: Residential New Construction Program, Energy Efficient Lighting Program and Small Business Energy Saver Program.

- Continue to seek enhancements to the Company's DSM/EE portfolio by: (1) adding new or expanding existing programs to include additional measures, (2) program modifications to account for changing market conditions and new measurement and verification (M&V) results and (3) other EE research & development pilots.

- Complete construction of the new Sutton Combined Cycle unit. The 625 MW natural gas-fired CC generating station is projected to be online in December 2013.

- Continue to explore the potential for a joint ownership share of the South Carolina Electric and Gas V.C. Summer nuclear station. The plan shows a 4.1% share of the two 1,100 units available for the summer peaks of 2018 and 2020. The acquisition is still subject to successful completion of discussions and multiple regulatory approvals.

- Continue to evaluate market options for renewable generation and procure capacity, as appropriate. PPAs have been signed with developers of solar PV, landfill gas and wind resources. Additionally, REC purchase agreements have been executed for purchases of unbundled RECs from wind, solar PV, solar thermal and hydroelectric facilities.

- Continue to investigate the future environmental control requirements and resulting operational impacts associated with existing and potential environmental regulations such as Mercury Air Toxics Standard (MATS), the Coal Combustion Residuals rule, the Cross

State Air Pollution Rule (CSAPR) and the new Ozone National Ambient Air Quality Standard (NAAQS).

- Continue to pursue existing and potential opportunities for wholesale power sales agreements within the Duke Energy balancing authority area.

- Continue to monitor energy-related statutory and regulatory activities.

- Continue to examine the benefits of joint capacity planning and pursue appropriate regulatory actions.

A summarization of the capacity resource changes for the reference plan in the 2013 IRP is shown in Table 9.A below. Capacity retirements and additions are presented as incremental values in the year in which the change is projected to occur. The values shown for renewable resources, DSM and EE represent cumulative totals.

Table 9-A DEP Short-Term Action Plan

Duke Energy Progress Short-Term Action Plan							
			Renewable Resources (Cumulative Nameplate MW)				
Year	Retirements (1)	Additions [(2)]	Wind [(3)]	Solar [(3)]	Biomass/Hydro	EE	DSM [(4)]
2014	553 MW Sutton 1-3 Coal	625 MW Sutton CC 9 MW Nuc	0	120	146	62	829
2015		10 MW Nuc 14 MW Nuc	0	120	154	106	849
2016			0	120	158	152	869
2017			0	120	158	194	885
2018		46 MW VC Summer 126 MW CT 137 MW CC Upr	0	142	155	227	910

Notes:

(1) Sutton Units 1-3 coal retirements in December 2013.

(2) Includes 33 MW of nuclear uprates and 137 MW of CC uprates.

(3) Capacity is shown in nameplate ratings. For planning purposes, wind presents a 15% contribution to peak and solar has a 42% contribution to peak.

(4) Includes impacts of grid modernization.

DEP Request for Proposal (RFP) Activity

Supply-Side

No supply-side RFPs have been issued since the filing of DEP's 2012 IRP.

Renewable Energy

No renewable energy RFPs have been issued since the filing of DEP's 2012 IRP.

APPENDIX A: QUANTITATIVE ANALYSIS

This appendix provides an overview of the Company's quantitative analysis of resource options available to meet customers' future energy needs in the Base Case and for an Environmental Focus Scenario that reflects increased CO_2 cost, EE and renewables. The future resource needs were optimized based on DEP and DEC independently, however the benefits of jointly planning on a system basis for the Base Case and Environmental Focus Scenario were also presented.

A. Overview of Analytical Process

The analytical process consists of four steps:

1. Assess resource needs
2. Identify and screen resource options for further consideration
3. Develop portfolio configurations
4. Perform portfolio analysis

1. Assess Resource Needs

The required load and generation resource balance needed to meet future customer demands was accessed as outlined below:

- Customer load peak and energy forecast – identified future customer aggregate demands to determine system peak demands and developed the corresponding energy load shape
- Existing supply-side resources – summarized each existing generation resource's operating characteristics including unit capability, potential operational constraints and life expectancy
- Operating parameters – determining operational requirements including target planning reserve margins and other regulatory considerations

Customer load growth, the expiration of purchased power contracts and additional asset retirements result in significant resource needs to meet energy and peak demands. The following assumptions impacted the 2013 resource plan:

- In the Base Case, summer peak demand and energy growth after the impact of energy efficiency averaged 1.4% from 2014 through 2028. In the Environmental Focus Scenario after the impact of EE, summer peak demand growth averaged 1.1% and energy growth averaged 1.0% over the next 15 years.

- Retirement of approximately 46 MW of old fleet combustion turbines and 553 MW of older coal units by the end of 2013.

- Continued operational reliability of existing generation portfolio
- A 14.5% minimum planning reserve margin for the planning horizon

2. Identify and Screen Resource Options for Further Consideration

The IRP process evaluated EE, DSM and supply-side options to meet customer energy and capacity needs. The Company developed EE and DSM options for consideration within the IRP based on existing EE/DSM program experience, the most recent market potential study and cost-effectiveness screening. Supply-side options reflect a diverse mix of technologies and fuel sources including gas, coal, nuclear and renewable. Supply-side options are initially screened based on the following attributes:

- Technical feasibility and commercial availability in the marketplace
- Compliance with all federal and state requirements
- Long-run reliability
- Reasonableness of cost parameters

The Company compared capacity options within their respective fuel types and operational capabilities, with the most cost-effective options being selected for inclusion in the portfolio analysis phase. An overview of resources screened on technical basis and a levelized economic basis is shown in Appendix F.

Resource Options

<u>Supply-Side</u>

Based on the results of the screening analysis, the following technologies were included in the quantitative analysis as potential supply-side resource options to meet future capacity needs:

- Baseload – 2 x 1,117 MW Nuclear units (AP1000)
- Baseload – 92 MW Purchase of V. C. Summer Nuclear (AP1000)
- Baseload – 680 MW – 2 x 1 Combined Cycle (Inlet Chiller and Fired)
- Baseload – 843 MW – 2 x 1 Advanced Combined Cycle (Inlet Chiller and Fired)
- Peaking/Intermediate – 403 MW – 2 x 7FA.05 CTs
- Peaking/Intermediate – 805 MW – 4 x 7FA.05 CTs
- Renewable – 150 MW – On-Shore Wind
- Renewable – 25 MW – Solar PV

Energy Efficiency and Demand-Side Management

EE and DSM programs continue to be an important part of Duke Energy Progress' system mix. The Company considered both DSM and EE programs in the IRP analysis. As described in Appendix D, EE and DSM measures are compared to generation alternatives to identify cost-effective EE and DSM programs.

In the Base Case, the Company modeled the program costs associated with EE and DSM based on a combination of both internal company expectations and projections based on information from the Company's 2012 market potential study. In the DEP and DEC merger settlement agreement, the company agreed to aspire to a more aggressive implementation of EE throughout the planning horizon, and the impacts of this goal were incorporated in the Environmental Focus Scenario. The program costs used for this analysis also leveraged the Company's internal projections with market potential study data incorporating the impacts of customer participation rates over the range of potential programs.

3. Develop Portfolio Configurations

The Company conducted a screening analysis using a simulation model to identify the most attractive capacity options under the expected load profile for both the Base Case and Environmental Focus Scenario. The set of basic inputs included:

- CO_2 prices starting in 2020 increasing throughout the planning horizon
  - Base Case - 17 $/ton in 2020 increasing to 33 $/ton by 2028
  - Environmental Focus Scenario - 20 $/ton in 2020 increasing to 45 $/ton by 2028;
- Coal, natural gas and fuel oil
  - Short-term: Based on the market observations
  - Long-term: Based on the Company's fundamental fuel price projections
  - For the Environmental Focus Scenario, the Company's fundamental fuel price projection incorporated the impact of different CO_2, EE and Renewable requirements consistent with that scenario
- Availability and operating and maintenance costs for both new and existing generation
- Compliance with current and potential environmental regulations
- Financial updates including cost of capital, escalation and discount rates
- System operational needs for load ramping and spinning reserves

- The projected load and generation resource need incorporating the impacts of EE and DSM.
  - The Base Case reflects EE savings projections based on the market potential study
  - The Environmental Focus Scenario assumes full compliance with the Duke Energy-Progress Energy merger settlement agreement with the cumulative EE achievements since 2009 counted toward the cumulative settlement agreement impacts
- Compliance with NC REPS requirements and a placeholder renewable requirement for SC that could represent a Federal or State program starting in 2018
  - The Environmental Focus Scenario reflects a doubling of the amount of renewables included in the Base Case by 2028

4. Perform Portfolio Analysis

For the Base Case and Environmental Focus Scenario, the optimal portfolios were developed for DEP without the benefit of sharing capacity with DEC. To demonstrate the value of sharing capacity with DEC, a Joint Planning Scenario was developed that examined how the combined plans of DEP and DEC would change if a 14.5% minimum planning reserve margin was applied at the combined system level rather than the individual company level.

An overview of the specific details of the optimal portfolios for both the Base and Environmental Focus Cases without the benefit of sharing capacity with DEC is shown in Table A-1 below.

Table A-1 DEP Optimal Portfolios

	Optimal Portfolios	
	Base	Environmental Focus
2014		
2015		
2016		
2017		
2018	126 MW (CT) 46 MW (V.C. Summer N)	46 MW (V.C. Summer N)
2019	843 MW (Adv CC)	
2020	46 MW (V.C. Summer N)	46 MW (V.C. Summer N) 843 MW (Adv CC)
2021	843 MW (Adv CC)	
2022	843 MW (Adv CC)	843 MW (Adv CC)
2023		
2024		
2025		
2026		843 MW (Adv CC)
2027	403 MW (CT)	
2028		
Total CTs	403 MW	
Total CCs	2,529 MW	2,529 MW
Total Nuclear	88 MW	88 MW

Note: This table includes only new, undesignated resources.

The 2018 resource need is met with fast start CT capacity, V.C. Summer capacity and CC uprates. The first resource need was determined to be in 2019 for the Base Case and in 2020 in the Environmental Focus Scenario. Combined cycle generation was selected as the most economical resource to meet the 2019 resource need. In both the Base Case and the Environmental Focus Scenario, the optimized portfolios included the 4.1% ownership in the V. C. Summer Nuclear Station in 2018 and 2020. This nuclear resource was selected economically utilizing the capacity expansion model. Even though shared V.C. Summer Nuclear was selected and incorporated in the Base Case and two additional scenarios of this IRP, the procurement of any portion of V.C. Summer is dependent on meeting commercial terms with Santee Cooper.

The Environmental Focus Scenario incorporates a more aggressive EE portfolio and doubles the amount of renewable resources by 2028. The impact of these additions allowed for a deferral of the first Advanced CC need in 2019 to 2020. The second Advanced CC is deferred from 2021 to 2022 and the third Advanced CC from 2022 to 2026. In addition, the 2027 CT need was delayed beyond the 15-year planning horizon. However, because of the higher CO_2 price projection, increased revenue requirements associated with higher EE and increased costs associated with doubling the amount of renewables, the Environmental Focus Scenario present value of revenue requirements (PVRR) through 2028 is $0.5 billion more than the Base Case even with deferral of the advanced CC and CT resources.

An evaluation was performed comparing the DEP and DEC optimally selected Base Case portfolios to a combined Joint Planning Scenario portfolio where existing and future capacity resources could be shared between DEP and DEC to meet a minimum 14.5% planning reserve margin. In this Joint Planning Scenario, sharing the W.S. Lee nuclear station on a load ratio basis with DEC was the best economic selection. Table A-2 shows the total incremental natural gas and nuclear capacity needed to meet the projected minimum planning reserve margin between 2014 and 2028 for DEP and DEC if separately planned. The total of these two combined resource requirements is then compared to the amount of resources needed if DEP and DEC are allowed to jointly plan.

Table A-2 Comparison of Base Case Portfolio to Joint Planning Scenario

DEC Base Case (MW)	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gas Units				680		843			403						
Nuclear					66		66				1117		1117		
DEP Base Case (MW)	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gas Units						843		843	843					403	
Nuclear					46		46								
DEC & DEP Combined Base Case (MW)				680	112	1686	112	843	1246		1117		1117	403	
Combined Base Case Reserve Margin	17.7%	17.7%	16.0%	16.6%	15.7%	18.6%	17.2%	16.6%	18.0%	16.8%	18.6%	17.8%	19.4%	19.1%	17.4%
Joint Planning Case (MW)					792	843	112	1246	843	403	1117		1117		
Joint Planning Case Reserve Margin	17.7%	17.7%	16.0%	14.6%	15.7%	16.1%	14.8%	15.3%	15.6%	15.6%	17.4%	16.6%	18.3%	16.8%	15.2%

A comparison of the DEP and DEC Combined Base Case resource requirements to the Joint Planning Scenario requirements illustrates the ability to defer CC and CT resources over the 2014 through 2028 planning horizon. Consequently, the Joint Planning Scenario also results in a lower overall reserve margin. This is confirmed by a review of the reserve margins for the Combined Base Case as compared to the Joint Planning Scenario, which averaged 17.6% and 16.0%, respectively, from the first resource need in 2017 through 2028. The lower reserve margin in the Joint Planning Scenario indicates that DEP and DEC are more efficiently and economically meeting capacity needs. This is reflected in a total PVRR savings of $0.4 billion for the Joint Planning Scenario as compared to the Base Case through 2028.

B. Quantitative Analysis Summary

The quantitative analysis resulted in several key takeaways that impact near-term decision making as well as planning for the longer term.

1. The 2018 capacity need is projected to be met through a combination of fast start CT capacity, purchase of V.C. Summer nuclear unit, and combined cycle uprates.
2. The Base Case shows the next need for new generation in 2019 to meet the minimum reserve margin requirement. The results of this analysis show that this need is best met with CC generation.
3. The Environmental Focus Scenario shows the next need for new generation to be delayed to 2020, but the need is still best met with a CC resource.
4. The ability to jointly plan with DEC provides customer savings by allowing for the deferral of new generation resources over the 2014 through 2028 planning horizon.
5. New nuclear generation is selected as an economic resource for the Base Case and the Environmental Focus Scenario.

The Base Case and Environmental Focus Scenario analyses support 100% ownership of Lee Nuclear by DEC. However the Company continues to consider the benefits of regional nuclear generation. The idea of sharing new baseload generation resources between multiple parties allows for resource additions to be better matched with load growth and for new construction risk to be shared among the parties. This results in positive benefits for the Company's customers. Duke Energy Corporation is in discussions with Santee Cooper concerning the potential acquisition of a 10% ownership interest in the new nuclear units at V.C. Summer, Units 2 and 3. The parties are discussing the commercial terms and currently have not reconciled differences and no contract has yet been signed. Any participation in the V.C. Summer project is premised on the successful resolution of outstanding commercial items and continued demonstration of customer benefits. If Duke Energy were to procure an ownership interest in V.C. Summer Units 2 and 3, the ownership is expected to be shared between DEP and DEC on a load ratio basis. The benefits of co-ownership of the Lee Nuclear facility with DEC were also illustrated with the ability to jointly plan as represented in the Joint Planning Scenario described above.

The PVRR results presented in the IRP analysis were based on a 15-year planning horizon, but the economics supporting new nuclear were extended to 2052 to capture the long-term benefits of the low production cost and carbon-free generation. It is important to note that while V.C. Summer and Lee Nuclear facilities were selected economically, they would also serve as replacement carbon-free baseload generation if existing nuclear generation is retired in the future. In 2030, the current operating license for Robinson Nuclear Station expires. At this time, the Company has not made a decision concerning seeking a second license extension for this plant. Robinson Nuclear Station is a significant part of DEP's generation portfolio, representing over 700 MW of capacity and annual energy output of approximately 6,000 GWh. As such, it is important to start to examine the impacts of any potential retirement of Robinson Nuclear Station as compared to new nuclear generation to assist the Company as it considers seeking a second license extension.

One of the major benefits of having additional nuclear generation is the lower system CO_2 footprint. Assuming regional nuclear planning with DEC, DEP procures its load ratio share of both the 10% interest in V.C. Summer and Lee Nuclear Stations, the resulting reduction in CO_2 emissions is approximately 6 million tons of CO_2 for DEP and DEC by 2028 (from a 2013 baseline). This illustrates that for the Company to achieve material system reductions in CO_2 emissions, it must add new nuclear generation to the future resource portfolio.

The Company's planning process must be dynamic and adaptable to changing conditions. This resource plan is the most appropriate resource plan at this point in time, however, good business practice requires DEP to continue to study the options, and make adjustments as necessary and practical to reflect improved information and changing circumstances. Consequently, a strong business planning framework is truly an evolving process that can never be considered complete.

APPENDIX B: DUKE ENERGY PROGRESS OWNED GENERATION

Duke Energy Progress' generation portfolio includes a balanced mix of resources with different operating and fuel characteristics. This mix is designed to provide energy at the lowest reasonable cost to meet the Company's obligation to serve its customers. Duke Energy Progress-owned generation, as well as purchased power, is evaluated on a real-time basis in order to select and dispatch the lowest-cost resources to meet system load requirements. In 2012, Duke Energy Progress' nuclear and coal-fired generating units met the vast majority of customer needs by providing 45% and 37%, respectively, of Duke Energy Progress' energy from generation. Hydroelectric generation, Combustion Turbine generation, Combined Cycle generation, solar generation, long term PPAs, and economical purchases from the wholesale market supplied the remainder.

The tables below list the Duke Energy Progress' plants in service in North Carolina (NC) and South Carolina (SC) with plant statistics, and the system's total generating capability.

Existing Generating Units and Ratings [1, 3]
All Generating Unit Ratings are as of December 31, 2012 unless otherwise noted.

Coal						
	Unit	Winter (MW)	Summer (MW)	Location	Fuel Type	Resource Type
Asheville	1	196	191	Arden, NC	Coal	Base
Asheville	2	187	185	Arden, NC	Coal	Base
Mayo [2]	1	746	727	Roxboro, NC	Coal	Base
Roxboro	1	366	379	Semora, NC	Coal	Base
Roxboro	2	662	659	Semora, NC	Coal	Base
Roxboro	3	705	696	Semora, NC	Coal	Base
Roxboro [2]	4	711	698	Semora, NC	Coal	Base
Sutton	1	98	97	Wilmington, NC	Coal	Intermediate
Sutton	2	95	90	Wilmington, NC	Coal	Intermediate
Sutton	3	389	366	Wilmington, NC	Coal	Intermediate
Total Coal		4,155	4,088			

Combustion Turbines						
	Unit	Winter (MW)	Summer (MW)	Location	Fuel Type	Resource Type
Asheville	3	185	164	Arden, NC	Natural Gas/Oil	Peaking
Asheville	4	185	160	Arden, NC	Natural Gas/Oil	Peaking
Blewett	1	17	13	Lilesville, NC	Oil	Peaking
Blewett	2	17	13	Lilesville, NC	Oil	Peaking
Blewett	3	17	13	Lilesville, NC	Oil	Peaking
Blewett	4	17	13	Lilesville, NC	Oil	Peaking
Darlington	1	65	52	Hartsville, SC	Natural Gas/Oil	Peaking
Darlington	2	67	48	Hartsville, SC	Oil	Peaking
Darlington	3	67	52	Hartsville, SC	Natural Gas/Oil	Peaking
Darlington	4	66	52	Hartsville, SC	Oil	Peaking
Darlington	5	66	52	Hartsville, SC	Natural Gas/Oil	Peaking
Darlington	6	62	45	Hartsville, SC	Oil	Peaking
Darlington	7	67	51	Hartsville, SC	Natural Gas/Oil	Peaking
Darlington	8	66	48	Hartsville, SC	Oil	Peaking
Darlington	9	67	52	Hartsville, SC	Oil	Peaking
Darlington	10	67	51	Hartsville, SC	Oil	Peaking
Darlington	11	67	52	Hartsville, SC	Oil	Peaking
Darlington	12	133	118	Hartsville, SC	Natural Gas/Oil	Peaking
Darlington	13	133	116	Hartsville, SC	Natural Gas/Oil	Peaking
Smith [4]	1	183	162	Hamlet, NC	Natural Gas/Oil	Peaking
Smith [4]	2	183	167	Hamlet, NC	Natural Gas/Oil	Peaking
Smith [4]	3	185	162	Hamlet, NC	Natural Gas/Oil	Peaking
Smith [4]	4	186	163	Hamlet, NC	Natural Gas/Oil	Peaking
Smith [4]	6	187	159	Hamlet, NC	Natural Gas/Oil	Peaking
Sutton	1	14	11	Wilmington, NC	Oil/Natural Gas	Peaking
Sutton	2A	31	24	Wilmington, NC	Oil/Natural Gas	Peaking
Sutton	2B	31	26	Wilmington, NC	Oil/Natural Gas	Peaking
Wayne	1/10	192	177	Goldsboro, NC	Oil/Natural Gas	Peaking
Wayne	2/11	192	174	Goldsboro, NC	Oil/Natural Gas	Peaking
Wayne	3/12	193	173	Goldsboro, NC	Oil/Natural Gas	Peaking
Wayne	4/13	191	170	Goldsboro, NC	Oil/Natural Gas	Peaking
Wayne	5/14	197	169	Goldsboro, NC	Oil/Natural Gas	Peaking
Weatherspoon	1	41	33	Lumberton, NC	Natural Gas/Oil	Peaking
Weatherspoon	2	41	32	Lumberton, NC	Natural Gas/Oil	Peaking
Weatherspoon	3	41	33	Lumberton, NC	Natural Gas/Oil	Peaking
Weatherspoon	4	41	31	Lumberton, NC	Natural Gas/Oil	Peaking
Total NC		2,567	2,242			
Total SC		993	789			
Total CT		3,560	3,031			

Combined Cycle						
	Unit	Winter (MW)	Summer (MW)	Location	Fuel Type	Resource Type
Lee	CT1A	223	181	Goldsboro, NC	Natural Gas/Oil	Base
Lee	CT1B	223	181	Goldsboro, NC	Natural Gas/Oil	Base
Lee	CT1C	223	181	Goldsboro, NC	Natural Gas/Oil	Base
Lee	ST1	380	377	Goldsboro, NC	Natural Gas/Oil	Base
Smith [4]	CT7	185	156	Hamlet, NC	Natural Gas/Oil	Base
Smith [4]	CT8	185	156	Hamlet, NC	Natural Gas/Oil	Base
Smith [4]	ST4	190	176	Hamlet, NC	Natural Gas/Oil	Base
Smith [4]	CT9	214	182	Hamlet, NC	Natural Gas/Oil	Base
Smith [4]	CT10	214	182	Hamlet, NC	Natural Gas/Oil	Base
Smith [4]	ST5	246	250	Hamlet, NC	Natural Gas/Oil	Base
Total CC		2,283	2,022			

Hydro						
	Unit	Winter (MW)	Summer (MW)	Location	Fuel Type	Resource Type
Blewett	1	4	3	Lilesville, NC	Water	Intermediate
Blewett	2	4	3	Lilesville, NC	Water	Intermediate
Blewett	3	4	4	Lilesville, NC	Water	Intermediate
Blewett	4	5	4	Lilesville, NC	Water	Intermediate
Blewett	5	5	4	Lilesville, NC	Water	Intermediate
Blewett	6	5	4	Lilesville, NC	Water	Intermediate
Marshall	1	2	2	Marshall, NC	Water	Intermediate
Marshall	2	2	2	Marshall, NC	Water	Intermediate
Tillery	1	21	21	Mt. Gilead, NC	Water	Intermediate
Tillery	2	18	18	Mt. Gilead, NC	Water	Intermediate
Tillery	3	21	21	Mt. Gilead, NC	Water	Intermediate
Tillery	4	24	24	Mt. Gilead, NC	Water	Intermediate
Walters	1	36	36	Waterville, NC	Water	Intermediate
Walters	2	40	40	Waterville, NC	Water	Intermediate
Walters	3	36	36	Waterville, NC	Water	Intermediate
Total Hydro		227	222			

Nuclear						
	Unit	Winter (MW)	Summer (MW)	Location	Fuel Type	Resource Type
Brunswick [2]	1	975	938	Southport, NC	Uranium	Base
Brunswick[2]	2	953	932	Southport, NC	Uranium	Base
Harris [2]	1	973	928	New Hill, NC	Uranium	Base
Robinson	2	797	741	Hartsville, SC	Uranium	Base
Total NC		2,901	2,798			
Total SC		797	741			
Total Nuclear		3,698	3,539			

Total Generation Capability		
	Winter Capacity (MW)	Summer Capacity (MW)
TOTAL DEP SYSTEM - N.C.	12,133	11,372
TOTAL DEP SYSTEM - S.C.	1,790	1,530
TOTAL DEP SYSTEM	13,923	12,902

Note 1: Ratings reflect compliance with NERC reliability standards and are gross of co-ownership interest as of 12/31/12.

Note 2: Jointly-owned by NCEMPA: Roxboro 4 - 12.94%; Mayo 1 - 16.17%; Brunswick 1 - 18.33%; Brunswick 2 - 18.33%; and Harris 1 - 16.17%.

Note 3: Resource type based on NERC capacity factor classifications which may alternate over the forecast period.

Note 4: Richmond County Plant renamed to Sherwood H. Smith Jr. Energy Complex.

Planned Designated Generation [1]					
Plant Name	Location	Summer Capacity (MW)	Plant Type	Fuel Type	Expected In-Service Date
Sutton	Wilmington, NC	625	CC	Natural Gas/Oil	12/2013

Note 1: On May 2, 2013, Duke Energy Progress requested the Nuclear Regulatory Commission (NRC) to suspend review of the Harris combined Construction and Operating License (COL) application for two proposed new nuclear units at the Harris Nuclear Plant site. The COL was submitted in February 2008. The request to suspend review of the COL was based on anticipated slower customer growth and the fact that our most recent forecast indicates two additional nuclear units at Harris will not be needed in the next 15 years.

Planned Uprates			
Unit	Date	Winter MW	Summer MW
Robinson 2 [1]	2013	5	5
Harris [1]	2013	4	4
Smith CT9 [1]	2013	20	15
Smith CT10 [1]	2013	20	15
Brunswick 2	2015	10	10
Harris 1	2015	18	14

Note 1: Unit uprate implemented in 2013; capacity not reflected in Existing Generating Units and Ratings section.

Retirements				
Unit & Plant Name	Location	Capacity (MW) Winter / Summer	Fuel Type	Expected Retirement Date
Cape Fear 5	Moncure, NC	148 / 144	Coal	RETIRED
Cape Fear 6	Moncure, NC	175 / 172	Coal	RETIRED
Cape Fear 1A	Moncure, NC	14 / 11	Combustion Turbine	RETIRED
Cape Fear 1B	Moncure, NC	14 / 12	Combustion Turbine	RETIRED
Cape Fear 2A	Moncure, NC	15 / 12	Combustion Turbine	RETIRED
Cape Fear 2B	Moncure, NC	14 / 11	Combustion Turbine	RETIRED
Cape Fear 1	Moncure, NC	12 / 11	Steam Turbine	RETIRED
Cape Fear 2	Moncure, NC	12 / 7	Steam Turbine	RETIRED
Lee 1	Goldsboro, NC	80 / 74	Coal	RETIRED
Lee 2	Goldsboro, NC	80 / 68	Coal	RETIRED
Lee 3	Goldsboro, NC	252 / 240	Coal	RETIRED
Lee 1	Goldsboro, NC	15 / 12	Combustion Turbine	RETIRED
Lee 2	Goldsboro, NC	27 / 21	Combustion Turbine	RETIRED
Lee 3	Goldsboro, NC	27 / 21	Combustion Turbine	RETIRED
Lee 4	Goldsboro, NC	27 / 21	Combustion Turbine	RETIRED
Morehead 1	Morehead City, NC	15 / 12	Combustion Turbine	RETIRED
Robinson 1	Hartsville, NC	179 / 177	Coal	RETIRED
Robinson 1	Hartsville, NC	15 / 11	Combustion Turbine	RETIRED
Weatherspoon 1	Lumberton, NC	49 / 48	Coal	RETIRED
Weatherspoon 2	Lumberton, NC	49 / 48	Coal	RETIRED
Weatherspoon 3	Lumberton, NC	79 / 74	Coal	RETIRED
Sutton 1	Wilmington, NC	98 / 97	Coal	12/2013
Sutton 2	Wilmington, NC	95 / 90	Coal	12/2013
Sutton 3	Wilmington, NC	389 / 366	Coal	12/2013
Total		1,880 MW / 1,760 MW		

Operating License Renewal

Planned Operating License Renewal				
Unit & Plant Name	Location	Original Operating License Expiration	Date of Approval	Extended Operating License Expiration
Blewett #1-6 [1]	Lilesville, NC	04/30/08	*Pending*	2058[2]
Tillery #1-4 [1]	Mr. Gilead, NC	04/30/08	*Pending*	2058[2]
Robinson #2	Hartsville, SC	07/31/10	04/19/2004	07/31/2030
Brunswick #2	Southport , NC	12/27/14	06/26/2006	12/27/2034
Brunswick #1	Southport, NC	09/08/16	06/26/2006	09/08/2036
Harris #1	New Hill, NC	10/24/26	12/12/2008	10/24/2046

Note 1: The license renewal application for the Blewett and Tillery Plants was filed with the FERC on 04/26/06; the Company is awaiting issuance of the new license from FERC. Pending receipt of a new license, these plants are currently operating under a renewable one-year license extension which has been in effect since May 2008. Although Progress Energy has requested a 50-year license, FERC may not grant this term.

Note 2: Estimated - New license expiration date will be determined by FERC license issuance date and term of granted license.

APPENDIX C: ELECTRIC LOAD FORECAST

Methodology

The Duke Energy Progress spring 2013 forecast provides projections of the energy and peak demand needs for its service area. The forecast covers the time period of 2014 through 2028 and represents the needs of the following customer classes:

- Residential
- Commercial
- Industrial
- Other Retail
- Wholesale

Long-term electricity usage is determined by economic and demographic trends. The 2013 spring forecast was developed using industry-standard linear regression techniques, which relate electricity usage to such variables as income, electricity prices and the industrial production index along with weather and population. This technique has yielded consistently reasonable results over the years.

The economic projections used in the spring 2013 forecast are obtained from Moody's Analytics, a nationally recognized economic forecasting firm, and include economic forecasts for the states of North Carolina and South Carolina.

The retail forecast consists of the three major classes: residential, commercial and industrial.

The residential class sales forecast is comprised of two projections. The first is the number of residential customers, which is driven by population. The second is energy usage per customer, which is driven by weather, regional economic and demographic trends, electricity price and appliance efficiencies. The usage per customer forecast is essentially flat through much of the forecast horizon, so most growth is primarily due to customer increases. The projected growth rate of residential sales in the spring 2013 forecast from 2014 through 2028 is 1.5%.

Commercial electricity usage changes with the level of regional economic activity, such as personal income or commercial employment, and the impact of weather. The three largest sectors in the Commercial class are Offices, Education and Retail. Commercial is expected to be the fastest growing Class, with a projected sales growth rate of 1.9%.

The industrial class forecast is impacted by the level of manufacturing output, exchange rates, electric prices and weather. Overall, Industrial sales are expected to grow 0.5% over the forecast horizon.

County population projections are obtained from the North Carolina Office of State Budget and Management as well as the South Carolina Budget and Control Board. These are then used to derive the total population forecast for counties that comprise the DEP service area.

Weather impacts are incorporated into the models by using Heating Degree Days and Cooling Degree Days with a base temperature of 65 degrees. The forecast of degree days is based on a 10-year average, which is updated every year.

Peak demands are forecasted by an econometric model where the key variables are:

- Degree Hours from 1pm - 5pm on Day of Peak
- Minimum Morning Degree Hours on Day of Peak
- Annual Weather Adjusted Sales

Assumptions

The primary long-term drivers of electricity growth are economic and demographic factors. The table below includes the historical and projected average annual growth rates of several key drivers from DEP's spring 2013 forecast.

	1992-2012	2012-2032
Real GDP	2.9%	3.0%
Real Income	3.1%	2.8%
Population	1.8%	1.0%

In addition to economic and demographic trends, the forecast also incorporates the expected impacts of utility sponsored energy efficient programs, as well as projected effects of electric vehicles and solar technology.

The residential forecast also uses the Energy Information Administration (EIA) appliance efficiency and saturation projections by Census regions, in an effort to more fully reflect the ongoing naturally occurring energy efficiency trends as well as government mandates. The utility sponsored energy efficiency programs are over and above the naturally occurring trend.

Wholesale

Table C-1 below contains information concerning DEP's wholesale contracts. The description 'full' indicates that the Company provides all of the needs of the wholesale customer. 'Partial' refers to those customers where DEP only provides some of the customer's needs. 'Fixed' refers to a constant load shape.

For resource planning purposes, the contracts below are assumed to be renewed through the end of the planning horizon unless there is definitive knowledge the contract will not be renewed. The values in the table are net MW, i.e. they reflect projected loads after the buyer's own generation has been subtracted.

Table C-1 Wholesale Contracts

			Wholesale Contracts Commitment (MWs)									
Customer	**Product**	**Term**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Camden	Full Requirements	2014-2023	50	51	51	52	52	53	53	54	54	54
Fayetteville	Full Requirements	2012-2032	458	464	470	476	483	489	495	501	507	513
French Broad EMC	Full Requirements	2013-2027	90	90	91	92	93	94	95	95	96	97
Haywood EMC	Partial Requirements	2009-2021	19	19	17	18	18	19	20	24	27	28
NCEMC	Partial Requirements	2005-2022	225	225	225	225	225	225	225	225	225	225
NCEMC	Partial Requirements	2005-2019	420	420	420	420	420	420	420	0	0	0
NCEMC	Partial Requirements	2005-2021	275	325	325	325	325	325	325	325	150	0
NCEMC	Partial Requirements	2005-2024	1,195	1,176	1,205	1,237	1,273	1,310	1,349	1,808	2,023	2,212
NCEMPA	Partial Requirements	2010-2017	709	715	720	725	729	734	739	744	749	753
Piedmont EMC	Full Requirements	2006-2021	22	22	23	23	24	25	26	26	27	28
Tritowns	Full Requirements	2008-2017	21	21	22	22	22	22	22	22	23	23
Waynesville	Full Requirements	2010-2015	17	17	17	17	17	18	18	18	18	18
Winterville	Full Requirements	2008-2017	13	14	14	14	14	14	14	14	14	14

Historical Values

Two major events occurred in the past decade that significantly impacted DEP sales. One was the recession of 2008-2009, which was the most severe since the Great Depression. The second is the ongoing re-structuring of the Textile industry, which began in the late 1990's. The average growth rate in Retail sales from 2003-2007, excluding Textiles, was 2.1%. From 2007-2012 the average growth has been -0.7%, primarily due to the effects of the recession. In tables C-2 & C-3 below the history of DEP customers and sales are shown. The values in Table C-3 are not weather adjusted.

Table C-2
Retail Customers (Thousands, Annual Average)

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Residential	1,112	1,134	1,159	1,184	1,208	1,229	1,241	1,250	1,255	1,260
Commercial	197	203	209	213	217	218	217	218	219	219
Industrial	4	4	4	4	4	4	5	5	5	4
Total	1,314	1,341	1,372	1,402	1,429	1,452	1,463	1,473	1,479	1,483

Table C-3
Electricity Sales (GWh Sold - Years Ended December 31)

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Residential	15,283	16,003	16,664	16,259	17,200	17,000	17,117	19,108	17,764	16,663
Commercial	12,557	13,019	13,314	13,358	14,033	13,940	13,639	14,184	13,709	13,581
Industrial	12,749	13,036	12,741	12,416	11,883	11,216	10,375	10,677	10,573	10,508
Military &Other	1,408	1,431	1,410	1,419	1,438	1,467	1,497	1,574	1,591	1,602
Total Retail	41,996	43,490	44,129	43,451	44,553	43,622	42,628	45,544	43,637	42,355
Wholesale	12,897	12,439	12,210	12,231	12,656	12,868	12,772	12,772	12,267	12,676
Total System	54,893	55,928	56,340	55,682	57,209	56,489	55,400	58,316	55,903	55,031

Results

A tabulation of the utility's forecasts for a 15 year period, including peak loads for summer and winter seasons of each year and annual energy forecasts, both with and without the impact of utility-sponsored energy efficiency programs are shown below in Tables C-4 and C-6.

Load duration curves, with and without utility-sponsored energy efficiency programs, follow Tables C-4 and C-6, and are shown as Charts C-5 and C-7.

The values in these tables reflect the loads that Duke Energy Progress is contractually obligated to provide and cover the period from 2014 to 2028.

The forecast of the needs of the retail and wholesale customer classes 2014 through 2028, not including the impact of DEP EE programs, projects a compound annual growth rate of 1.7% in the summer peak demand, and winter peaks are also forecasted to grow at 1.7%. The forecasted compound annual growth rate for energy is 1.7% before energy efficiency program impacts are subtracted.

If the impacts of DEP EE programs are included, the projected compound annual growth rate for the summer peak demand is 1.4%, while winter peaks are forecasted to grow at a rate of 1.5%. The forecasted compound annual growth rate for energy is 1.4 % after the impacts of EE are subtracted.

As a note, all of the loads and energy in the tables and charts below are at the generator.

Table C-4

Load Forecast without Energy Efficiency Programs

YEAR	SUMMER (MW)	WINTER (MW)	ENERGY (GWh)
2014	13,078	12,376	65,656
2015	13,338	12,627	66,895
2016	13,582	12,859	68,141
2017	13,823	13,090	69,211
2018	14,054	13,312	70,361
2019	14,299	13,547	71,613
2020	14,548	13,787	72,767
2021	14,797	14,026	73,975
2022	15,049	14,269	75,249
2023	15,274	14,510	76,498
2024	15,522	14,749	77,811
2025	15,764	14,983	79,009
2026	16,003	15,217	80,252
2027	16,243	15,450	81,484
2028	16,484	15,684	82,704

Note: Table 8-C differs from these values due to a 150 MW firm sale to NCEMC through 2024 and a 325 MW FERC market mitigation sale in the summer of 2014.

Chart C-5 Load Duration Curve without Energy Efficiency Programs

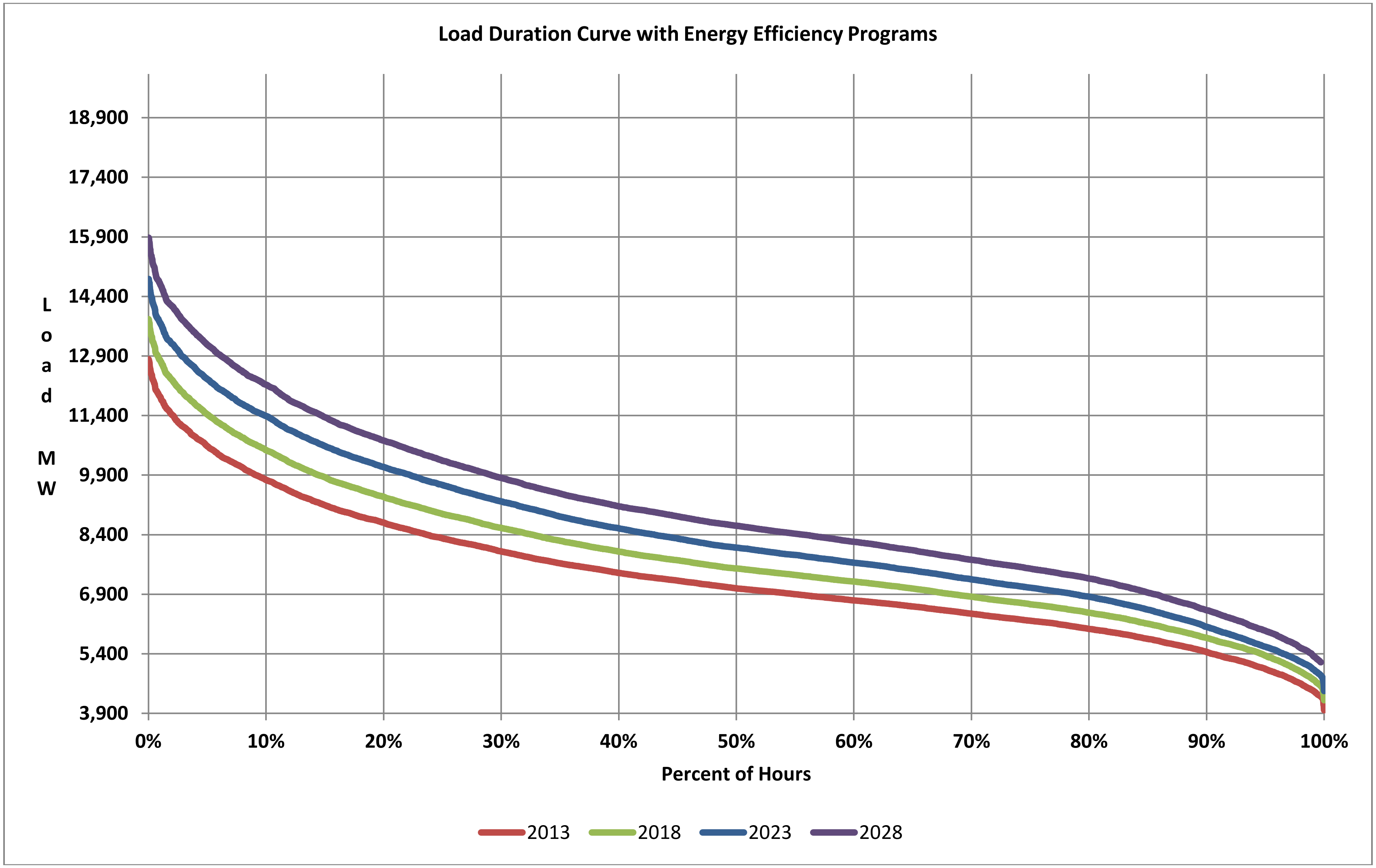
Table C-6

Load Forecast with Energy Efficiency Programs

YEAR	SUMMER (MW)	WINTER (MW)	ENERGY (GWh)
2014	13,016	12,342	65,333
2015	13,232	12,560	66,338
2016	13,430	12,758	67,335
2017	13,629	12,956	68,182
2018	13,827	13,132	69,126
2019	14,030	13,334	70,146
2020	14,234	13,538	71,045
2021	14,433	13,738	71,983
2022	14,636	13,941	72,987
2023	14,839	14,143	73,974
2024	15,044	14,347	75,032
2025	15,246	14,547	76,004
2026	15,451	14,753	77,057
2027	15,662	14,962	78,122
2028	15,881	15,177	79,198

Note: Table 8-C differs from these values due to a 150 MW firm sale to NCEMC through 2024 and a 325 MW FERC market mitigation sale in the summer of 2014.

Chart C-7 Load Duration Curve with Energy Efficiency Programs



APPENDIX D: ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT

Demand Side Management and Energy Efficiency Programs

DEP continues to pursue a long-term, balanced capacity and energy strategy to meet the future electricity needs of its customers. This balanced strategy includes a strong commitment to demand side management and EE programs, investments in renewable and emerging energy technologies, and state-of-the art power plants and delivery systems.

DEP uses EE and DSM programs to help manage customer demand in an efficient, cost-effective manner. These programs can vary greatly in their dispatch characteristics, size and duration of load response, certainty of load response, and level and frequency of customer participation. In general, programs are offered in two primary categories: EE programs that reduce energy consumption and DSM programs that reduce peak demand (demand-side management or demand response programs and certain rate structure programs).

DEP's DSM/EE portfolio currently consists of the following programs, as approved by the North Carolina Utilities Commission (NCUC) and/or the Public Service Commission of South Carolina (PSCSC).

- Residential Home Energy Improvement
- Residential New Construction
- Residential Neighborhood Energy Saver (Low-Income)
- Residential Appliance Recycling Program
- Residential Energy Efficient Benchmarking Program
- Energy Efficient Lighting Program
- Commercial, Industrial, and Governmental (CIG) Energy Efficiency
- Small Business Energy Saver
- Distribution System Demand Response (DSDR) Program
- Residential Prepay Pilot Program *(Approved in South Carolina only)*
- Residential EnergyWise Home^{SM}
- CIG Demand Response Automation Program

<u>DSM/EE Program Descriptions</u>

Residential Home Energy Improvement Program

Program Type: Energy Efficiency

The Residential Home Energy Improvement Program offers DEP customers a variety of energy conservation measures designed to increase energy efficiency for existing residential dwellings that can no longer be considered new construction. The prescriptive menu of energy efficiency measures provided by the program allows customers the opportunity to participate based on the needs and characteristics of their individual homes. Financial incentives are provided to participants for each of the conservation measures promoted within this program. The program utilizes a network of pre-qualified contractors to install each of the following energy efficiency measures:

- High-Efficiency Heat Pumps and Central A/C
- Duct Repair
- Level-2 HVAC Tune-up
- Insulation Upgrades/Attic Sealing
- High Efficiency Room Air Conditioners
- Heat Pump Water Heater

Residential Home Energy Improvement Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	79,065	23,917	20,268

Residential New Construction Program

Program Type: Energy Efficiency

The Residential New Construction program serves as a replacement for the Residential Home Advantage program which ended on March 1, 2013. The Residential New Construction Program offers single family builders and multi-family developers equipment incentives for installing high efficiency HVAC and/or heat pump water heating equipment in new residential construction; or whole house incentives for meeting or exceeding the 2012 North Carolina Energy Conservation Code High Efficiency Residential Option ("HERO").

The primary objectives of this program are to reduce system peak demands and energy consumption within new homes. New construction represents a unique opportunity for capturing cost effective EE savings by encouraging the investment in energy efficiency features that would otherwise be impractical or more costly to install at a later time. These are often referred to as lost opportunities.

Residential New Construction Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	7,536	9,165	2,947

Note: The participants and impacts include both the Residential Home Advantage and New Construction programs.

Residential Neighborhood Energy Saver (Low-Income) Program

Program Type: Energy Efficiency

DEP's Neighborhood Energy Saver Program assists low-income residential customers with energy conservation efforts which will in turn lessen their household energy costs. The program provides assistance to low-income families by installing a comprehensive package of energy conservation measures that lower energy consumption at no cost to the customer. Prior to installing measures, an energy assessment is conducted on each residence to identify the appropriate measures to install. In addition to the installation of energy efficiency measures, an important component of the Neighborhood Energy Saver program is the provision for one-on-one energy education. Each household receives information on energy efficiency techniques and is encouraged to make behavioral changes to help reduce and control their energy usage. The Neighborhood Energy Saver program is being implemented utilizing a whole neighborhood, door-to-door delivery strategy.

Residential Neighborhood Energy Saver Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	14,786	12,039	1,770

Energy Efficient Lighting Program

Program Type: Energy Efficiency

The Energy Efficient Lighting Program is designed to reduce energy consumption by providing incentives and marketing support through retailers to encourage greater customer adoption of high efficiency lighting products. DEP partners with various manufacturers and retailers across its entire service territory to offer in-store discounts on a wide selection of CFLs, LEDs, and energy-efficient fixtures. The program also targets the purchase of these products through in-store and on-line promotions, while promoting greater awareness through special retail and community events. The program was expanded in 2013 to include new lighting technologies such as LED's, high efficiency incandescent bulbs and energy efficient fixtures.

Residential Energy Efficient Lighting Program			
As of:	Bulbs Sold	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	9,674,781	293,796	39,387

Residential Appliance Recycling Program

Program Type: Energy Efficiency

The Appliance Recycling Program is designed to reduce energy consumption and provide environmental benefits through the proper removal and recycling of older, less efficient refrigerators and freezers that are operating within residences across the DEP service territory. The program includes scheduling and free appliance pick-up at the customer's location, transportation to a recycling facility, and recovery and recycling of appliance materials. On an annual basis, customers receive free removal and recycling of up to two appliances, as well as an incentive for participation.

Residential Appliance Recycling Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	21,809	15,929	1,838

Residential Energy Efficient Benchmarking Program

Program Type: Energy Efficiency

The Residential Energy Efficient Benchmarking Program is designed to reduce residential electrical consumption by applying behavioral science principals in which a sample of eligible customers receive reports comparing their energy use with neighbors in similar homes. Participants will be periodically mailed the individualized reports and can elect to switch to on-line reports at any time during the duration of the program. In addition to the household comparative analysis, the reports will provide specific recommendations to motivate participants to reduce their energy consumption. DEP will also deploy an interactive web portal that gives customers greater insight into their energy consumption and actions they can take to become more energy efficient. The web portal will include monthly customer billing data, goal setting and tracking, as well as personalized and community recommended energy efficiency tips.

Residential Energy Efficient Benchmarking Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	44,673	12,866	2,310

Commercial, Industrial, and Governmental (CIG) Energy Efficiency Program

Program Type: Energy Efficiency

The CIG Energy Efficiency Program is available to all CIG customers interested in improving the energy efficiency of their new construction projects or within their existing facilities. New construction incentives provide an opportunity to capture cost effective energy efficiency savings that would otherwise be impractical or more costly to install at a later time. The retrofit market offers a potentially significant opportunity for savings as CIG type customers with older, energy inefficient electrical equipment are often under-funded and need assistance in identifying and retrofitting existing facilities with new high efficiency electrical equipment. The program includes prescriptive incentives for measures that address the following major end-use categories:

- HVAC
- Lighting
- Refrigeration

In addition, the program offers incentives for custom measures to specifically address the individual needs of customers in the new construction or retrofit markets, such as those with more complex applications or in need of energy efficiency opportunities not covered by the prescriptive measures. The program also seeks to meet the following overall goals:

- Educate and train trade allies, design firms and customers to influence selection of energy efficient products and design practices.
- Educate CIG customers regarding the benefits of energy efficient products and design elements and provide them with tools and resources to cost-effectively implement energy-saving projects.
- Obtain energy and demand impacts that are significant, reliable, sustainable and measureable.
- Influence market transformation by offering incentives for cost effective measures.

CIG Energy Efficiency Program			
As of:	Participants	Net Energy Savings (MWh)	Net Peak Demand (kW)
December 31, 2012	2,845	154,999	34,466

Small Business Energy Saver Program
Program Type: Energy Efficiency

The Small Business Energy Saver Program is a new direct-install type of program designed to encourage the installation of energy efficiency measures in small, "hard to reach" commercial facilities with an annual demand of 100 kW or less. The program provides a complete energy assessment and installation of measures on a turn-key basis. In addition, the program was designed to minimize financial barriers by incorporating aggressive incentives as well as providing payment options for the remainder of participant costs.

As of the end of 2012 the Small Business Energy Saver Program had not yet been implemented.

Distribution System Demand Response Program (DSDR)
Program Type: Energy Efficiency in North Carolina; Demand Response in South Carolina

DEP and other utilities have historically utilized conservation voltage reduction to reduce peak demand for short periods of time by lowering system voltage. This practice has been used in a limited fashion due to concerns that some customers could experience voltages below the lowest allowable level. The DSDR program is an application of Smart Grid technology that provides the capability to reduce peak demand for four to six hours at a time, which is the duration consistent with typical peak load periods, while also maintaining customer delivery voltage above the minimum requirement when the program is in use. The increased peak load reduction capability and flexibility associated with DSDR will result in the displacement of the need for additional peaking generation capacity. This capability is accomplished by investing in a robust system of advanced technology, telecommunications, equipment, and operating controls. This increased peak load reduction is accomplished while maintaining customer delivery voltage above the minimum requirements. The DSDR Program will help DEP implement a least cost mix of demand reduction and generation measures that meet the electricity needs of its customers.

Distribution System Demand Response Program			
As of:	Participants	Energy Savings (MWh)	Summer Capability (MW)
December 31, 2012	NA	31,587	106

Residential Prepay Pilot Program (South Carolina only)

Program Type: Energy Efficiency

The primary objectives of the Prepay Pilot are to measure and validate the achieved energy and capacity savings resulting from offering customers a prepaid payment option, and to better understand the drivers and persistence behind the associated energy savings. Similar programs report energy savings from 10% - 15%. The Prepay Pilot will also help DEP to determine the market for Prepay, examine customer behavior while on Prepay, determine customer motives, and evaluate customer preferences regarding payment channels and communication methods.

Through the end of 2012, there were 23 customers enrolled in this pilot program.

Residential EnergyWise Home^SM Program

Program Type: Demand Response

The Residential EnergyWise Home^SM Program is a direct load control program that allows DEP, through the installation of load control switches at the customer's premise, to remotely control the following residential appliances.

- Central air conditioning or electric heat pumps
- Auxiliary strip heat on central electric heat pumps (Western Region only)
- Electric water heaters (Western Region only)

For each of the control options above, an initial one-time bill credit is provided to program participants in exchange for allowing DEP to control the listed appliances. The program provides DEP with the ability to reduce and shift peak loads, thereby enabling a corresponding deferral of new supply-side peaking generation and enhancing system reliability. Participating customers are impacted by (1) the installation of load control equipment at their residence, (2) load control events which curtail the operation of their air conditioning, heat pump strip heating or water heating unit for a period of time each hour, and (3) the receipt of an annual bill credit from DEP in exchange for allowing DEP to control their electric equipment.

Residential EnergyWise Home Statistics			
As of:	Participants	Summer Capability (MW)	Winter Capability (MW)
December 31, 2012	88,534	177	7.0

The following table shows Residential EnergyWise Home[SM] Program activations that were not for testing purposes from June 1, 2011 through June 30, 2013.

Residential EnergyWise Home[SM]			
Start Time	**End Time**	**Duration (Minutes)**	**MW Load Reduction***
6/1/2011 16:00	6/1/2011 18:00	120	58.9
7/12/2011 15:00	7/12/2011 18:00	180	76.0
7/22/2011 15:00	7/22/2011 17:30	150	82.0
7/29/2011 15:00	7/29/2011 17:30	150	82.9
8/4/2011 15:00	8/4/2011 18:00	180	69.9
8/8/2011 15:00	8/8/2011 18:00	180	72.9
1/4/2012 6:30	1/4/2012 9:30	180	5.0
2/13/2012 6:00	2/13/2012 8:30	150	5.2
5/2/2012 15:30	5/2/2012 17:30	120	72.3
7/6/2012 15:00	7/6/2012 17:00	120	97.1
7/26/2012 15:00	7/26/2012 18:00	180	101.0
3/22/2013 6:45	3/22/2013 7:30	45	6.3

*MW Load Reduction is the average load reduction "at the generator" over the event period.

Commercial, Industrial, and Governmental (CIG) Demand Response Automation Program

Program Type: Demand Response

The CIG Demand Response Automation Program allows DEP to install load control and data acquisition devices to remotely control and monitor a wide variety of electrical equipment capable of serving as a demand response resource. The goal of this program is to utilize customer education, enabling two-way communication technologies, and an event-based incentive structure to maximize load reduction capabilities and resource reliability. The primary objective of this program is to reduce DEP's need for additional peaking generation. This will be accomplished by reducing DEP's seasonal peak load demands, primarily during the summer months, through deployment of load control and data acquisition technologies.

CIG Demand Response Automation Statistics			
		Peak Capability (MW)	
As of:	Premises	Summer	Winter
December 31, 2012	38	15.9	10.0

The table below shows information for each CIG Demand Response Automation Program non-test control event from June 1, 2011 through June 30, 2013.

CIG Demand Response Automation			
Start Time	End Time	Duration (Minutes)	MW Load Reduction
7/12/2011 13:00	7/12/2011 19:00	360	13.5
7/22/2011 13:00	7/22/2011 19:00	360	15.3
8/8/2011 13:00	8/8/2011 19:00	360	14.9
1/4/2012 6:00	1/4/2012 9:00	180	1.3
7/6/2012 13:00	7/6/2012 18:00	300	14.1
7/26/2012 13:00	7/26/2012 19:00	360	15.5
8/16/2012 13:00	8/16/2012 18:00	300	15.4

*MW Load Reduction is the average load reduction "at the generator" over the event period.

Previously Existing Demand Side Management and Energy Efficiency Programs

Prior to the passage of North Carolina Senate Bill 3 in 2007, DEP had a number of DSM/EE programs in place. These programs are available in both North and South Carolina and include the following:

Energy Efficient Home Program

Program Type: Energy Efficiency

In the early 1980s, DEP introduced an Energy Efficient Home program that provides residential customers with a 5% discount of the energy and demand portions of their electricity bills when their homes met certain thermal efficiency standards that were significantly above the existing building codes and standards. Homes that pass an ENERGY STAR® test receive a certificate as well as a 5% discount on the energy and demand portions of their electricity bills. Through December 2012, there were 281,705 dwellings system-wide that qualified for the discount.

Voltage Control

Program Type: Demand Response

This procedure involves reducing distribution voltage, at a level that does not adversely impact customer equipment or operations, during periods of capacity constraints in order to reduce system peak demand.

Curtailable Rates
Program Type: Demand Response

DEP began offering its curtailable rate options in the late 1970s, whereby industrial and commercial customers receive credits for DEP's ability to curtail system load during times of high energy costs and/or capacity constrained periods.

Curtailable Rate Activations			
Start Time	End Time	Duration (Minutes)	MW Load Reduction*
01/04/2012	6:30-8:30	120	2

*MW Load Reduction is the average load reduction "at the generator" over the event period.

Time-of-Use Rates
Program Type: Demand Response

DEP has offered voluntary Time-of-Use (TOU) rates to all customers since 1981. These rates provide incentives to customers to shift consumption of electricity to lower-cost off-peak periods and lower their electric bill.

Thermal Energy Storage Rates
Program Type: Demand Response

DEP began offering thermal energy storage rates in 1979. The present General Service (Thermal Energy Storage) rate schedule uses two-period pricing with seasonal demand and energy rates applicable to thermal storage space conditioning equipment. Summer on-peak hours are noon to 8 p.m. and non-summer hours of 6 a.m. to 1 p.m. weekdays.

Real-Time Pricing
Program Type: Demand Response

DEP's Large General Service (Experimental) Real Time Pricing tariff was implemented in 1998. This tariff uses a two-part real time pricing rate design with baseline load representative of historic usage. Hourly rates are provided on the prior business day. A minimum of 1 MW load is required. This rate schedule is presently fully subscribed.

Projected summer peak demand savings for all DEP existing and new DSM/EE programs not embedded in the load forecast are presented in the table below.

Summary of Available Existing Demand-Side and Energy Efficiency Programs

The following table provides current information available at the time of this report on DEP's existing DSM/EE programs (i.e., those programs that were in effect prior to January 1, 2008). This information, where applicable, includes program type, capacity, energy, and number of customers enrolled in the program as of the end of 2012, as well as load control activations since those enumerated in DEP's last biennial resource plan. The energy savings impacts of these existing programs are embedded within DEP's load and energy forecasts.

Program Description	Type	Capacity (MW)	Annual Energy (MWH)	Participants	Activations Since Last Biennial Report
Energy Efficiency Programs[2]	EE	481	NA	NA	NA
Real Time Pricing (RTP)[2]	DSM	55	NA	105	NA
Commercial & Industrial TOU[2]	DSM	6	NA	29,073	NA
Residential TOU[2]	DSM	11	NA	28,181	NA
Curtailable Rates	DSM	270	NA	86	1
Voltage Control	DSM	75	NA	NA	35

Since DEP's last biennial resource plan was filed on September 4, 2012, there have been 35 voltage control activations through July 31, 2013. The following table shows the date, starting and ending time, and duration for all voltage control activations over the past two years.

Voltage Control		
Start Time	**End Time**	**Duration (Minutes)**
8/1/2011 13:00	8/1/2011 18:59	359
8/2/2011 12:59	8/2/2011 19:00	361
8/5/2011 14:34	8/5/2011 14:55	21
8/10/2011 13:00	8/10/2011 19:00	360
8/10/2011 20:19	8/10/2011 20:29	10
8/11/2011 13:01	8/11/2011 19:00	359
8/16/2011 13:00	8/16/2011 19:14	374
8/17/2011 13:00	8/17/2011 18:59	359
8/18/2011 13:00	8/18/2011 18:59	359
8/20/2011 9:48	8/20/2011 9:56	8
8/23/2011 13:55	8/23/2011 14:04	9

[2] Impacts from these existing programs are embedded within the load and energy forecast.

Voltage Control		
Start Time	End Time	Duration (Minutes)
8/24/2011 12:59	8/24/2011 18:59	360
8/25/2011 13:00	8/25/2011 18:59	359
9/26/2011 11:47	9/26/2011 11:54	7
10/24/2011 18:46	10/24/2011 19:09	23
1/2/2012 7:45	1/2/2012 8:15	30
2/16/2012 17:36	2/16/2012 18:04	28
2/22/2012 23:19	2/22/2012 23:27	8
2/23/2012 10:24	2/23/2012 10:54	30
3/13/2012 17:38	3/13/2012 17:39	1
3/28/2012 15:04	3/28/2012 15:19	15
4/3/2012 8:51	4/3/2012 9:01	10
5/4/2012 20:42	5/4/2012 20:55	13
5/5/2012 17:00	5/5/2012 17:12	12
5/5/2012 19:45	5/5/2012 19:55	10
5/6/2012 20:39	5/6/2012 20:45	6
5/10/2012 11:01	5/10/2012 11:08	7
5/10/2012 18:21	5/10/2012 18:28	7
5/10/2012 18:21	5/10/2012 18:28	7
6/14/2012 13:35	6/14/2012 13:39	4
7/24/2012 14:26	7/24/2012 14:40	14
9/4/2012 11:03	9/4/2012 11:52	48
9/7/2012 13:31	9/7/2012 14:30	59
9/13/2012 21:52	9/13/2012 22:43	50
9/16/2012 15:09	9/16/2012 16:03	54
9/17/2012 21:51	9/17/2012 22:34	42
10/8/2012 14:00	10/8/2012 15:00	60
10/19/2012 10:02	10/19/2012 10:49	47
10/26/2012 10:32	10/26/2012 11:35	63
10/31/2012 15:00	10/31/2012 15:17	17
11/1/2012 14:06	11/1/2012 14:21	15
11/2/2012 7:00	11/2/2012 7:34	34
11/2/2012 15:01	11/2/2012 15:20	19
11/8/2012 16:41	11/8/2012 16:55	14
11/9/2012 10:15	11/9/2012 10:46	31
12/23/2012 7:45	12/23/2012 8:08	23
12/31/2012 7:34	12/31/2012 11:00	206
12/31/2012 16:25	12/31/2012 16:56	31
1/3/2013 14:28	1/3/2013 14:58	30
1/4/2013 9:37	1/4/2013 9:59	21
1/21/2013 13:23	1/21/2013 13:45	22

Voltage Control		
Start Time	**End Time**	**Duration (Minutes)**
1/23/2013 10:18	1/23/2013 10:34	16
1/23/2013 15:34	1/23/2013 16:27	53
1/24/2013 14:03	1/24/2013 15:12	69
2/12/2013 15:01	2/12/2013 15:08	7
3/7/2013 13:15	3/7/2013 13:45	29
3/20/2013 8:34	3/20/2013 9:02	27
3/21/2013 7:02	3/21/2013 7:30	27
3/22/2013 6:45	3/22/2013 7:30	44
6/12/2013 10:59	6/12/2013 11:31	31
7/11/2013 15:00	7/11/2013 18:00	180
7/17/2013 15:01	7/17/2013 18:04	183
7/18/2013 14:01	7/18/2013 17:00	179
7/23/2013 14:03	7/23/2013 17:02	179
7/25/2013 11:00	7/25/2013 11:15	15
7/31/2013 15:02	7/31/2013 16:57	114

Summary of Prospective Program Opportunities

DEP is continually seeking to enhance its DSM/EE portfolio by: (1) adding new or expanding existing programs to include additional measures, (2) program modifications to account for changing market conditions and new measurement and verification (M&V) results, and (3) other EE pilots. The following projects represent program enhancements that are being considered for possible implementation within the biennium for which this IRP is filed.

- CIG Demand Response – Program enhancements are being evaluated to address barriers to customer acquisition and recent EPA regulations.
- Small Business Demand Response – Investigating the potential for a new demand response type of program targeted toward the small business market segment.
- Neighborhood Energy Saver Program -- DEP is reviewing various options for expanding its existing low-income energy efficiency program including but not limited to consideration for additional measures, broader reaching efforts, and additional delivery/implementation channels.

EE and DSM Program Screening

The Company evaluates the costs and benefits of DSM and EE programs and measures by using the same data for both generation planning and DSM/EE program planning to ensure that demand-side resources are compared to supply side resources on a level playing field.

The analysis of energy efficiency and demand side management cost-effectiveness has traditionally focused primarily on the calculation of specific metrics, often referred to as the California Standard tests: Utility Cost Test (UCT), Rate Impact Measure (RIM) Test, Total Resource Cost (TRC) Test, and Participant Test (PCT).

- The UCT compares utility benefits (avoided costs) to the costs incurred by the utility to implement the program, and does not consider other benefits such as participant savings or societal impacts. This test compares the cost (to the utility) to implement the measures with the savings or avoided costs (to the utility) resulting from the change in magnitude and/or the pattern of electricity consumption caused by implementation of the program. Avoided costs are considered in the evaluation of cost-effectiveness based on the projected cost of power, including the projected cost of the utility's environmental compliance for known regulatory requirements. The cost-effectiveness analyses also incorporate avoided transmission and distribution costs, and load (line) losses.

- The RIM Test, or non-participants test, indicates if rates increase or decrease over the long-run as a result of implementing the program.

- The TRC Test compares the total benefits to the utility and to participants relative to the costs to the utility to implement the program along with the costs to the participant. The benefits to the utility are the same as those computed under the UCT. The benefits to the participant are the same as those computed under the Participant Test, however, customer incentives are considered to be a pass-through benefit to customers. As such, customer incentives or rebates are not included in the TRC.

- The Participant Test evaluates programs from the perspective of the program's participants. The benefits include reductions in utility bills, incentives paid by the utility and any state, federal or local tax benefits received.

The use of multiple tests can ensure the development of a reasonable set of cost-effective DSM and EE programs and indicate the likelihood that customers will participate.

Energy Efficiency and Demand-Side Management Program Forecasts

In early 2012, DEP commissioned a new energy efficiency market potential study to obtain new estimates of the technical, economic and achievable potential for EE savings within the DEP service area. The final report, "Progress Energy Carolinas: Electric Energy Efficiency Potential Assessment," was prepared by Forefront Economics Inc. and H. Gil Peach and Associates, LLC and was completed on June 5, 2012. Achievable potential was derived using energy efficiency measure bundles and conceptual program designs to estimate participation, savings and program spending over a 20 year forecast period under a specific set of assumptions, which includes the significant effect of certain large commercial and industrial customers "opting-out" of the programs.

The study results are suitable for integrated resource planning purposes and use in long-range system planning models. This study is also expected to help inform utility program planners regarding the extent of EE opportunities and to provide broadly defined approaches for acquiring savings. It did not, however, attempt to closely forecast EE achievements in the short-term or from year to year. Such an annual accounting is highly sensitive to the nature of programs adopted, the timing of the introduction of those programs, and other factors. As a result, it was not designed to provide detailed specifications and work plans required for program implementation. This study provides part of the picture for planning EE programs. Fully implementable EE program plans are best developed considering this study along with the experience gained from currently running programs, input from DEP program managers and EE planners, and with the possible assistance of implementation contractors.

DEP's forecasts of EE program savings for integrated resource planning purposes are based on the results of the market potential study. They were also calculated on a gross of free-riders basis in 2013 to align with the DEC forecast methodology. The first two tables below show the projected composite demand and energy savings of all DEP DSM, EE and DSDR programs implemented since the adoption of North Carolina Senate Bill 3 (SB-3) in 2007. These projections include the expected savings potential from program growth, program enhancements and future new programs. This table does not include historical EE program savings since the inception of the EE programs in 2008 through the end of 2012, which accounts for an additional 766,090 MWh of energy savings and 148 MW of summer peak demand savings.

Peak MW Demand Savings for Post SB-3 DSM/EE (at generator)

Year	Summer Peak MW Savings				Winter Peak MW Savings			
	DSM	EE	DSDR	Total	DSM	EE	DSDR	Total
2013	224	23	206	453	8	2	206	216
2014	251	62	241	554	9	34	241	284
2015	277	106	247	630	10	67	247	324
2016	301	152	253	706	11	102	253	366
2017	322	194	258	774	12	135	258	405
2018	341	227	264	832	13	179	264	456
2019	361	269	269	899	14	213	269	496
2020	378	314	275	967	15	249	275	539
2021	395	364	279	1,038	16	289	279	584
2022	410	413	285	1,108	17	328	285	630
2023	425	435	290	1,150	18	366	290	674
2024	437	478	295	1,210	19	402	295	716
2025	450	518	299	1,267	20	436	299	755
2026	463	551	305	1,319	21	463	305	789
2027	474	580	310	1,364	22	488	310	820
2028	484	604	316	1,404	23	507	316	846

Annual MWh Energy Savings for Post SB-3 DSM/EE (at generator)

Year	DSM	EE	DSDR	Total Savings
2013	2,819	210,013	47,690	260,522
2014	3,174	435,226	50,950	489,350
2015	3,506	677,669	51,797	732,972
2016	3,806	934,208	52,862	990,876
2017	4,083	1,125,176	53,834	1,183,093
2018	4,336	1,345,365	54,760	1,404,461
2019	4,589	1,591,354	55,708	1,651,651
2020	4,811	1,854,737	56,629	1,916,177
2021	5,033	2,128,368	57,478	2,190,879
2022	5,231	2,395,196	58,366	2,458,793
2023	5,429	2,654,447	59,237	2,719,113
2024	5,596	2,905,156	60,109	2,970,861
2025	5,763	3,104,895	60,937	3,171,595
2026	5,930	3,284,245	61,891	3,352,066
2027	6,079	3,440,889	62,852	3,509,820
2028	6,215	3,572,182	63,822	3,642,219

Projected summer peak demand savings for all DEP DSM/EE programs not embedded in the load forecast, including the large load Curtailment Rates and Voltage Control programs that existed prior to SB-3, are presented in the table below.

Peak MW Demand Savings for All (Pre and Post SB-3) DSM/EE (at generator)

	Peak MW Demand Savings			
	Pre SB-3 Programs		Post SB-3 Programs	
Year	Curtailable Rates	Voltage Control	DSM/EE/DSDR	All Programs
2013	262	75	453	790
2014	260	75	554	889
2015	250	75	630	955
2016	240	75	706	1,021
2017	230	75	774	1,079
2018	230	75	832	1,137
2019	230	75	899	1,204
2020	230	75	967	1,272
2021	230	75	1,038	1,343
2022	230	75	1,108	1,413
2023	230	75	1,150	1,455
2024	230	75	1,210	1,515
2025	230	75	1,267	1,572
2026	230	75	1,319	1,624
2027	230	75	1,364	1,669
2028	230	75	1,404	1,709

Pursuing EE and DSM initiatives is not expected to meet the growing demand for electricity. DEP still envisions the need to secure additional generation, as well as cost-effective renewable generation, but the EE and DSM programs offered by DEP will address a significant portion of this need if such programs perform as expected.

EE Savings Variance

As previously noted, the EE savings forecast contained in this IRP is reported on a gross of free-riders basis, rather than net values reported last year, to align with the DEC forecast methodology.

High EE Savings Projection

DEP also prepared a high EE savings projection designed to meet the following Energy Efficiency Performance Targets for five years, as set forth in the December 8, 2011 Settlement Agreement between Environmental Defense Fund, the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy, and Duke Energy Corporation, Progress

Energy, Inc., and their public utility subsidiaries Duke Energy Carolinas LLC and Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc.

- An annual savings target of 1% of the previous year's retail electricity sales beginning in 2015; and
- A cumulative savings target of 7% of retail electricity sales over the five-year time period of 2014-2018.

For the purposes of this IRP the high EE savings projection is being treated as a resource planning sensitivity that will also serve as an aspirational target for future EE plans and programs. The high EE savings projections are well beyond the level of savings attained by DEP in the past and much higher than the forecasted savings contained in the market potential study. The effort to meet them will require a substantial expansion of DEP's current Commission-approved EE portfolio. New programs and measures must be developed, approved by regulators, and implemented within the next few years. More importantly, significantly higher levels of customer participation must be generated. Additionally, flexibility will be required in operating existing programs in order to quickly adapt to changing market conditions, code and standard changes, consumer demands, and emerging technologies.

At this time there is too much uncertainty in the development of new technologies that will impact future programs and/or enhancements to existing programs, as well as in the ability to secure high levels of customer participation, to risk using the high EE savings projection in the base assumptions for developing the 2013 integrated resource plan. However, the high EE savings forecast was included in the Environmental Focus Scenario. DEP expects that as steps are made over time toward actually achieving higher levels of program participation and savings, then the EE savings forecast used for integrated resource planning purposes will continue to be revised in future IRP's to reflect the most realistic projection of EE savings.

Smart Grid Impacts

Duke Energy is pursuing implementation of grid modernization throughout the enterprise with a vision of creating a sustainable energy future for our customers and our business by being a leader of innovative approaches that will modernize the grid.

Duke Energy Progress' Distribution System Demand Response (DSDR) program is an Integrated Volt-Var Control (IVVC) program that will better manage the application and operation of voltage regulators (the Volt) and capacitors (the VAR) on the Duke Energy Progress distribution system. In general, the project tends to optimize the operation of these devices, resulting in a "flattening" of the voltage profile across an entire circuit, starting at the substation and continuing out to the farthest endpoint on that circuit. This flattening of the voltage profile is accomplished by automating the substation level voltage regulation and capacitors, line capacitors and line voltage regulators while integrating them into a single control system. This control system continuously monitors and operates the voltage regulators and capacitors to maintain the desired "flat" voltage profile. Once the system is operating with a relatively flat voltage profile across an entire circuit, the resulting circuit voltage at the substation can then be operated at a lower overall level. Lowering the circuit voltage at the substation, results in an immediate reduction of system loading. Through application of DSDR and reduced system voltage, Duke Energy Progress is thereby reducing load and system demand while providing better quality of service for our customers.

The projected capability of DSDR for the summer of 2013 is 206 MW. This projected incremental 206 MW of peak demand reduction will be validated through system level testing performed by the Distribution Management System ("DMS") during the 2013 summer peak season with the results provided as part of the 2013 DSDR status report filing in November 2013. The total incremental peak reduction capability of DSDR for the summer of 2014 is estimated to be 241 MW.

Further detail regarding the total projected smart grid impacts associated with the DSDR program is provided in the following table, which presents a breakout of total DSDR peak demand and annual energy savings by source.

Program Savings by Source (at generator)

	Peak MW Demand Savings			**MWh Energy Savings**		
Year	**Voltage Reduction**	**Reduced Line Losses**	**All Sources**	**Voltage Reduction**	**Reduced Line Losses**	**All Sources**
2013	200	6	206	16,000	31,690	47,690
2014	235	6	241	18,800	32,150	50,950
2015	240	6	247	19,221	32,576	51,797
2016	246	6	253	19,703	33,159	52,862
2017	252	7	258	20,144	33,690	53,834
2018	257	7	264	20,566	34,195	54,760
2019	262	7	269	20,995	34,713	55,708
2020	268	7	275	21,412	35,217	56,629
2021	272	7	279	21,794	35,683	57,478
2022	277	7	285	22,195	36,172	58,366
2023	282	7	290	22,587	36,650	59,237
2024	287	7	295	22,982	37,127	60,109
2025	292	7	299	23,356	37,581	60,937
2026	297	8	305	23,787	38,104	61,891
2027	303	8	310	24,222	38,630	62,852
2028	308	8	316	24,659	39,162	63,822

Discontinued Demand Side Management and Energy Efficiency Programs

Since the last biennial Resource Plan filing, DEP discontinued the following DSM/EE programs or measures.

- The Residential Home Advantage program – DEP received NCUC approval to close the program to new applications effective March 1, 2012 and cancel the program effective March 1, 2013 since it was determined that the program was no longer cost effective due to improved building energy codes as well as more stringent Energy Star® program requirements.

Rejected Demand Side Management and Energy Efficiency Programs

Since the last biennial Resource Plan filing, DEP has not rejected any cost-effective DSM/EE programs or measures.

Current and Anticipated Consumer Education Programs

In addition to the DSM/EE programs previously listed, DEP also has the following informational and educational programs.

- Customized Home Energy Report
- On Line Account Access
- "Lower My Bill" Toolkit
- Online Energy Saving Tips
- Energy Resource Center
- CIG Account Management
- eSMART Kids Website
- Community Events

Customized Home Energy Report

During 2009, DEP launched a new educational tool available to all residential customers called the Customized Home Energy Report. This free tool educates customers about their household energy usage and how to save money by saving energy. The customer answers a questionnaire either online via www.progresscher.com or through the mail, and then receives a report that details their energy usage and educates them on specific ways to reduce their energy consumption. Additionally, the report provides specific information about energy efficiency programs and rebates offered by Progress Energy that are uniquely applicable to the customer based on data obtained within the questionnaire.

On Line Account Access

On Line Account Access provides energy analysis tools to assist customers in gaining a better understanding of their energy usage patterns and identifying opportunities to reduce energy consumption. The service allows customers to view their past 24 months of electric usage including the date the bill was mailed; number of days in the billing cycle; and daily temperature information. This program was initiated in 1999.

"Lower My Bill" Toolkit

This tool, implemented in 2004, provides on-line tips and specific steps to help customers reduce energy consumption and lower their utility bills. These range from relatively simple no-cost steps to more extensive actions involving insulation and heating and cooling equipment.

Online Energy Saving Tips

DEP has been providing tips on how to reduce home energy costs since approximately 1981. DEP's web site includes information on household energy wasters and how a few simple actions can increase efficiency. Topics include: Energy Efficient Heat Pumps, Mold, Insulation R-Values, Air Conditioning, Appliances and Pools, Attics and Roofing, Building/Additions, Ceiling Fans, Ducts, Fireplaces, Heating, Hot Water, Humidistats, Landscaping, Seasonal Tips, Solar Film, and Thermostats.

Energy Resource Center

In 2000, DEP began offering its large commercial, industrial, and governmental customers a wide array of tools and resources to use in managing their energy usage and reducing their electrical demand and overall energy costs. Through its Energy Resource Center, located on the DEP web site, DEP provides newsletters, online tools and information which cover a variety of energy efficiency topics such as electric chiller operation, lighting system efficiency, compressed air systems, motor management, variable speed drives and conduct an energy audit.

CIG Account Management

All DEP commercial, industrial, and governmental customers with an electrical demand greater than 200 kW are assigned to a DEP Account Executive (AE). The AEs are available to personally assist customers in evaluating energy improvement opportunities and can bring in other internal resources to provide detailed analyses of energy system upgrades. The AEs provide their customers with a monthly electronic newsletter which includes energy efficiency topics and tips. They also offer numerous educational opportunities in group settings to provide information about DEP's new DSM and EE program offerings and to help ensure the customers are aware of the latest energy improvement and system operational techniques.

e-SMART Kids Website

DEP is offering an educational online resource for teachers and students in our service area called e-SMART Kids. The web site educates students on energy efficiency, conservation, and renewable energy and offers interactive activities in the classroom. It is available on the web at http://progressenergy.e-smartonline.net/index.php.

SunSense Schools Program

The SunSense Schools program was a one-time program available to schools in the DEP service territory during the 2009-2010 school-year. This solar education program was the first of its kind in the Carolinas, and was designed to give middle and high school students and faculty a unique, hands-on opportunity to learn more about solar energy. Five winning schools received a two-kilowatt solar photovoltaic system installed on their campus along with internet-based tracking equipment that shows the real-time energy output. Progress Energy was proud to bring this exciting opportunity to local schools.

Community Events

DEP representatives participated in community events across the service territory to educate customers about DEP's energy efficiency programs and rebates and to share practical energy saving tips. DEP energy experts attended events and forums to host informational tables and displays, and distributed handout materials directly encouraging customers to learn more about and sign up for approved DSM/EE energy saving programs.

Discontinued Consumer Education Programs

DEP discontinued the following educational programs since the last biennial Resource Plan filing.

- Save the Watts – Save the Watts was a branded name for DEP's effort to educate customers about energy efficiency and conservation. While the term "Save the Watts" is no longer used, DEP continues to promote all of the same efficiency and conservation information through the brand "Save Energy and Money."
- Wind for Schools – Wind for Schools was a one-time project implemented in collaboration with Mountain Valleys Resource Conservation and Development, Appalachian State University and Madison County Schools. The constructed turbine continues to produce electricity for Hot Springs Elementary School, and the school continues to use the turbine for renewable energy education purposes. However, since this one-time project was completed in 2008, DEP chose not to list it as "current" program in this year's IRP.
- SunSense Schools – The SunSense Schools program was a one-time program available to schools in the DEP service territory during the 2009-2010 school year. This solar

education program was the first of its kind in the Carolinas and was designed to give middle and high school students and faculty a unique, hands-on opportunity to learn more about solar energy. Five winning schools received a two-kilowatt solar photovoltaic system installed on their campus along with internet-based tracking equipment that shows the real-time energy output. Progress Energy was proud to bring this exciting opportunity to local schools. Details on the winning schools and their solar arrays are available at www.progress-energy.com/sunsense.

- Newspapers in Education – Newspapers in Education is an opportunity to present energy education material as an insert in newspapers across the service territory. DEP was not approached by the media partner to offer this program in 2012.

APPENDIX E: FUEL SUPPLY

Duke Energy Progress' current fuel usage consists primarily of coal and uranium. Oil and gas have traditionally been used for peaking generation, but natural gas has begun to play a more important role in the fuel mix due to lower pricing and the addition of a significant amount of combined cycle generation. These additions will further increase the importance of gas to the Company's generation portfolio. A brief overview and issues pertaining to each fuel type are discussed below.

Natural Gas

Following a tumultuous year (2012) for North American gas producers, 2013 is signaling a return to market stability. Near term prices have recovered from their sub $2/MMBtu lows to settle into the $3.50 - $4.00 range. Inventories are back in neutral territory, gas directed rig counts remain at 18 year lows and yet, the size of the low cost resource base continues to expand. Looking forward, the gas market is expected to remain relatively stable and the improving economic picture will allow the supply / demand balance to tighten and prices to continue to firm at sustainable levels. New gas demand from the power sector is likely to get a small boost between now and 2015 from coal retirements which are tied to the implementation of the EPA's MATS rule covering mercury and acid gasses. This increase is expected to be followed by new demand in the industrial and LNG export sectors which both ramp up in the 2016 – 2020 timeframe.

The long term fundamental gas price outlook is little changed from the 2012 forecast even though it includes higher overall demand. The North American gas resource picture is a story of unconventional gas production dominating the gas industry. Shale gas now accounts for about 38% of natural gas production today, rising to over half by 2019.

The US power sector still represents the largest area of potential new demand, but growth is expected to be uneven. After absorbing about 8.8 bcfd of new gas demand tied to coal displacements in the power dispatch in 2012, higher gas prices have reversed the trend. Looking forward, direct price competition is expected between gas and coal on the margin. A 2015 bump in gas demand is expected when EPA's MATS rule goes into effect and utilities retire a significant amount of coal (~38 GW's in this outlook).

Coal

On average, the 2013 Duke fundamental outlook for coal prices is lower than the 2012 outlook, with the exception of Central Appalachian (CAPP) sourced coal which is higher in the near-term primarily as a result of deterioration in mine productivity. Since 2008, Central Appalachian underground mine productivity (tons per man-hour) has declined by 28%, surface mine productivity by 23%; this combination equates to roughly a $5 per ton increase in labor costs alone.

Coal burned in power generation accounts for roughly 80% of all domestic coal production, export steam coal 10%, metallurgical coal for both domestic consumption and export 8%, with the balance consumed in industrial and commercial applications. The coal forecast assumes a long-term decline in power generation from coal following the introduction of the assumed carbon tax in 2020. Exports of metallurgical coals from the East (CAPP and NAPP) are projected to remain constant while export steam coal grows steadily. This growth assumption is driven by superior productivity in Illinois Basin (ILB) and Powder River Basin (PRB) with delivery of ILB to Atlantic markets via the Gulf of Mexico and delivery of PRB to the Pacific markets via terminals planned for Washington state and British Columbia.

Nuclear Fuel

To provide fuel for Duke Energy Progress' nuclear fleet, the Company maintains a diversified portfolio of natural uranium and downstream services supply contracts from around the world.

Requirements for uranium concentrates, conversion services and enrichment services are primarily met through a portfolio of long-term supply contracts. The contracts are diversified by supplier, country of origin and pricing. In addition, DEP staggers its contracting so that its portfolio of long-term contracts covers the majority of fleet fuel requirements in the near-term and decreasing portions of the fuel requirements over time thereafter. By staggering long-term contracts over time, the Company's purchase price for deliveries within a given year consists of a blend of contract prices negotiated at many different periods in the markets, which has the effect of smoothing out the Company's exposure to price volatility. Diversifying fuel suppliers reduces the Company's exposure to possible disruptions from any single source of supply. Near-term requirements not met by long-term supply contracts have been and are expected to be fulfilled with spot market purchases.

Due to the technical complexities of changing suppliers of fuel fabrication services, DEP generally sources these services to a single domestic supplier on a plant-by-plant basis using multi-year contracts.

As fuel with a low cost basis is used and lower-priced legacy contracts are replaced with contracts at higher market prices, nuclear fuel expense is expected to increase in the future. Although the costs of certain components of nuclear fuel are expected to increase in future years, nuclear fuel costs on a kWh basis will likely continue to be a fraction of the kWh cost of fossil fuel. Therefore, customers will continue to benefit from the Company's diverse generation mix and the strong performance of its nuclear fleet through lower fuel costs than would otherwise result absent the significant contribution of nuclear generation to meeting customers' demands.

APPENDIX F: SCREENING OF GENERATION ALTERNATIVES

The Company screens generation technologies prior to performing detailed analysis in order to develop a manageable set of possible generation alternatives. Generating technologies are screened from both a technical perspective, as well as an economic perspective. In the technical screening, technology options are reviewed to determine technical limitations, commercial availability issues and feasibility in the Duke Energy Progress service territory.

Economic screening is performed using a relative dollar per kilowatt-year ($/kW-yr) versus capacity factor screening curves. The technologies must be viable from both technically and economically in order to be passed on to the detailed analysis phase of the IRP process.

Technical Screening

The first step in the Company's supply-side screening process for the IRP is a technical screening of the technologies to eliminate those that have technical limitations, commercial availability issues, or are not feasible in the Duke Energy Progress service territory. A brief explanation of the technologies excluded at this point and the basis for their exclusion follows:

- Geothermal was eliminated because there are no suitable geothermal resources in the region to develop into a power generation project.

- Advanced energy storage technologies (Lead acid, Li-ion, Sodium Ion, Zinc Bromide, Fly wheels, pumped storage, etc) remain relatively expensive, as compared to conventional generation sources, but the benefits to a utility such as the ability to shift load and firm renewable generation are obvious. Research, development, and demonstration continue within Duke Energy. Duke Energy Generation Services has installed a 36 MW advanced acid lead battery at the Notrees wind farm in Texas that began commercial operation in December 2012. Duke Energy has installed a 75 kW battery in Indiana which is integrated with solar generation and electric vehicle charging stations. Duke Energy also has other storage system tests within its Envision Energy demonstration in Charlotte, which includes two Community Energy Storage (CES) systems of 24 kW, and three substation demonstrations less than 1 MW each.

- Compressed Air Energy Storage (CAES), although demonstrated on a utility scale and generally commercially available, is not a widely applied technology and remains relatively expensive. The high capital requirements for these resources arise from the fact that suitable sites that possess the proper geological formations and conditions necessary for the compressed air storage reservoir are relatively scarce.

- Small modular nuclear reactors (SMR) are generally defined as having capabilities of less than 300 MW. In 2012, U.S. Department of Energy (DOE) solicited bids for companies to participate in a small modular reactor grant program with the intent to "promote the accelerated commercialization of SMR technologies to help meet the nation's economic energy security and climate change objectives." The focus of the grant is the first-of-a-kind engineering associated with NRC design certification and licensing efforts in order to demonstrate the ability to achieve NRC design certification and licensing to support SMR plant deployment on a domestic site by 2022. The grant was awarded to Babcock & Wilcox (B&W) who will lead the effort in partnership with TVA and Bechtel. It is estimated that this project may lead to the development of "plug and play" type nuclear reactor applications that are about one-third the size of current reactors. These are expected to become commercially available around 2022. Duke will be monitoring the progress of the SMR project for potential consideration and evaluation for future resource planning.

- Fuel Cells, although originally envisioned as being a competitor for combustion turbines and central power plants, are now targeted to mostly distributed power generation systems. The size of the distributed generation applications ranges from a few kW to tens of MW in the long-term. Cost and performance issues have generally limited their application to niche markets and/or subsidized installations. While a medium level of research and development continues, this technology is not commercially available for utility-scale application.

- Poultry waste and swine waste digesters remain relatively expensive and are often faced with operational and/or permitting challenges. Research, development, and demonstration continue, but these technologies remain generally too expensive or face obstacles that make them impractical energy choices outside of specific mandates calling for use of these technologies.

- Off-shore wind, although demonstrated on a utility scale and commercially available, is not a widely applied technology and not easily permitted. This technology remains expensive and has yet to actually be constructed anywhere in the United States. Currently, the Cape Wind project in Massachusetts has been approved with assistance from the federal government but has not begun construction. The Company is a contributor to the DOE-sponsored COWICS study.

Economic Screening

The Company screens all technologies using relative dollar per kilowatt-year ($/kW-yr) versus capacity factor screening curves. The screening within each general class (Baseload, Peaking/Intermediate, and Renewables), as well as the final screening across the general classes uses a spreadsheet-based screening curve model developed by Duke Energy. This model is considered proprietary, confidential and competitive information by Duke Energy.

This screening curve analysis model includes the total costs associated with owning and maintaining a technology type over its lifetime and computes a levelized $/kW-year value over a range of capacity factors. The Company repeats this process for each supply technology to be screened resulting in a family of lines (curves). The lower envelope along the curves represents the least costly supply options for various capacity factors or unit utilizations. Some technologies have screening curves limited to their expected operating range on the individual graphs. Lines that never become part of the lower envelope, or those that become part of the lower envelope only at capacity factors outside of their relevant operating ranges, have a very low probability of being part of the least cost solution, and generally can be eliminated from further analysis.

The Company selected the technologies listed below for the screening curve analysis. While EPA's MATS and Greenhouse Gas (GHG) New Source regulations may effectively preclude new coal-fired generation, Duke Energy Progress has included supercritical pulverized coal (SCPC) and integrated gasification combined cycle (IGCC) technologies with carbon capture sequestration (CCS) of 800 pounds/net MWh as options for base load analysis consistent with the proposed EPA NSPS rules. Additional detail on the expected impacts from EPA regulations to new coal-fired options is included in Appendix F.

- Base load – 825 MW Supercritical Pulverized Coal with CCS
- Base load – 618 MW IGCC with CCS
- Base load – 2 x 1,117 MW Nuclear units (AP1000)
- Base load – 680 MW – 2x1 Combined Cycle (Inlet Chiller and Fired)
- Base load – 843 MW – 2x1 Advanced Combined Cycle (Inlet Chiller and Fired)
- Base load – 1,275 MW – 3x1 Advanced Combined Cycle (Inlet Chiller and Fired)
- Peaking/Intermediate – 174 MW 4 x LM6000 CTs
- Peaking/Intermediate – 805 MW 4 x 7FA.05 CTs
- Renewable – 150 MW Wind - On-Shore
- Renewable – 25 MW Solar PV

Information Sources

The cost and performance data for each technology being screened is based on research and information from several sources. These sources include, but may not be limited to the following internal Departments: Duke Energy's New Generation Project Development, Emerging Technologies, and Analytical Engineering. The following external sources may also be utilized: proprietary third-party engineering studies, the EPRI Technology Assessment Guide (TAG®), and Energy Information Administration (EIA). In addition, fuel and operating cost estimates are developed internally by Duke Energy, or from other sources such as those mentioned above, or a combination of the two. EPRI information or other information or estimates from external studies are not site-specific, but generally reflect the costs and operating parameters for installation in the Carolinas. Finally, every effort is made to ensure that capital, O&M and fuel costs and other parameters are current and include similar scope across the technologies being screened. The supply-side screening analysis uses the same fuel prices for coal and natural gas, and NO_x, SO_2, and CO_2 allowance prices as those utilized downstream in the detailed analysis (discussed in Appendix A). Screening curves were developed for each technology to show the economics with and without carbon costs.

Screening Results

The results of the screening within each category are shown in the figures below. Results of the baseload screening show that combined cycle generation is the least-cost baseload resource. With lower gas prices, larger capacities and increased efficiency, combined cycle units have become more cost-effective at higher capacity factors. Supercritical pulverized coal generation closes the gap with combined cycle generation only if carbon capture sequestration and CO_2 costs are excluded. The baseload curves also show that nuclear generation may be a cost effective option at high capacity factors with CO_2 costs included.

The peaking/intermediate technology screening included F-frame combustion turbines and fast start aero-derivative combustion turbines. The screening curves show the F-frame CTs to be the most economic peaking resource unless there is a special application that requires the fast start capability of the aero-derivative CTs.

The renewable screening curves show solar is a more economic alternative than wind generation. Solar and wind projects are technically constrained from achieving high capacity factors making them unsuitable for intermediate or baseload duty cycles. Solar projects, like wind, are not dispatchable and therefore less suited to provide consistent peaking capacity. Aside from their technical limitations, solar and wind technologies are not currently economically competitive generation technologies without state and federal subsidies. These renewable resources do play an important role in meeting the Company's NC REPS requirements.

The screening curves are useful for comparing costs of resource types at various capacity factors but cannot be utilized for determining a long term resource plan because future units must be optimized with an existing system containing various resource types. In the quantitative analysis phase, the Company further evaluates those technologies from each of the three general categories screened which had the lowest levelized busbar cost for a given capacity factor range within each of these categories.

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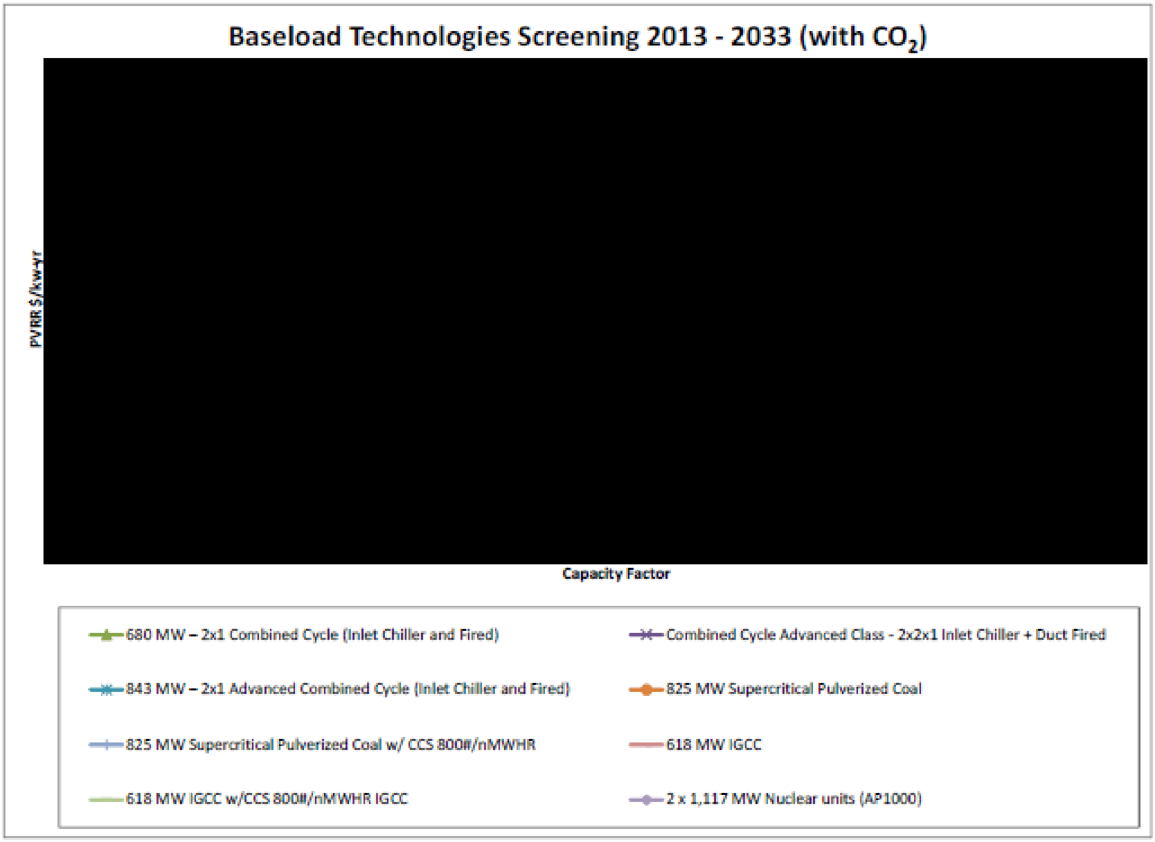

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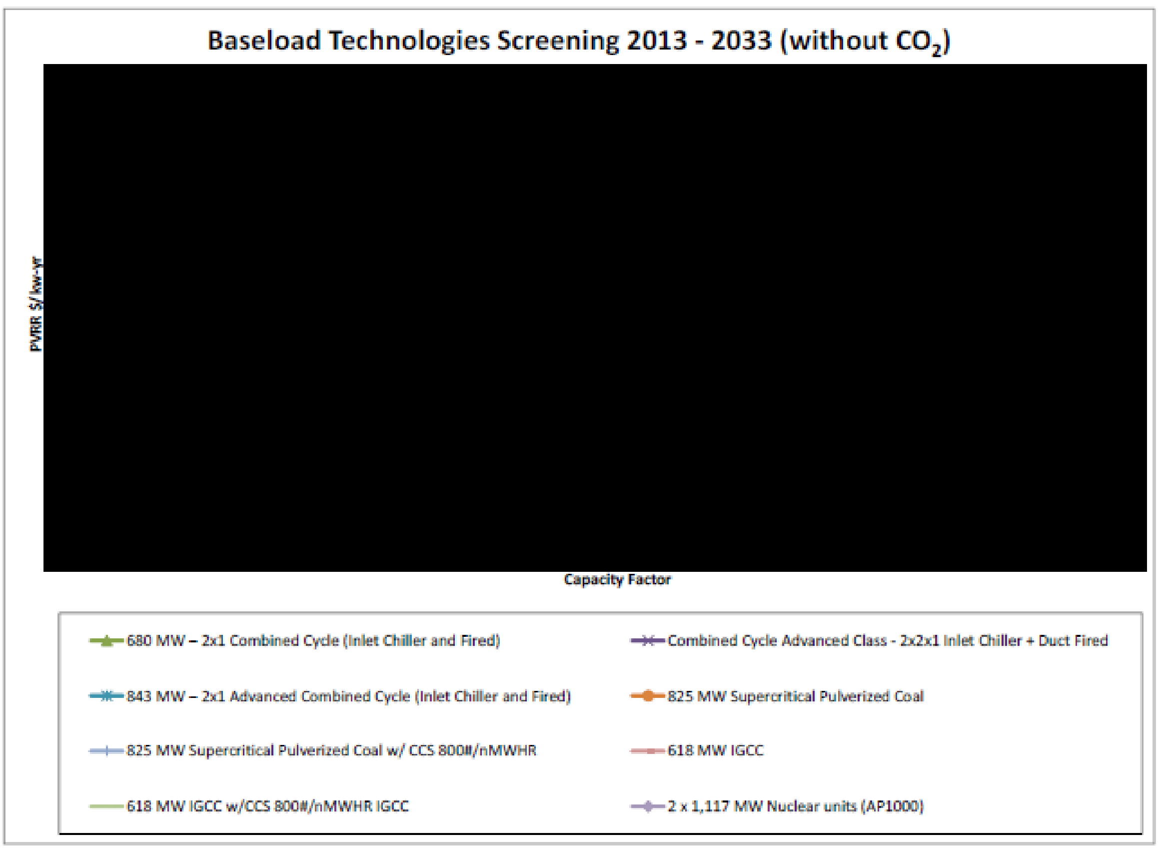

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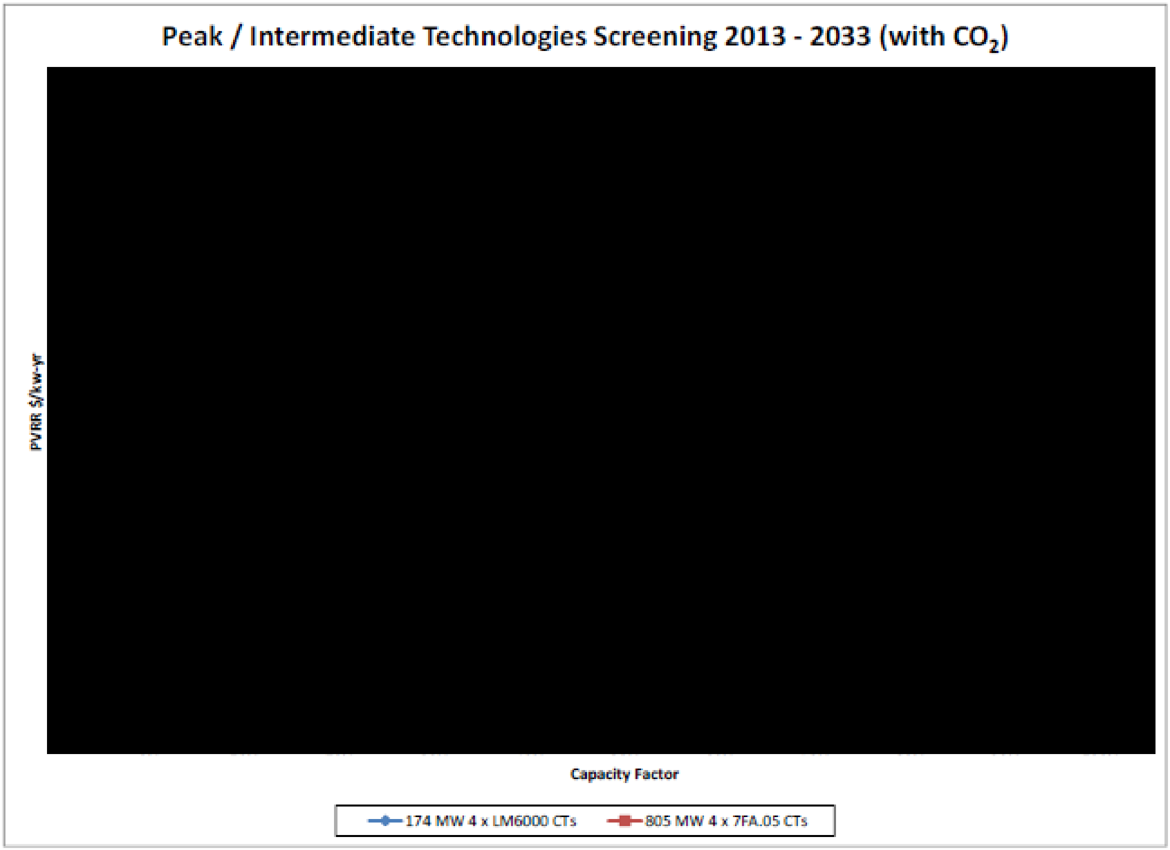

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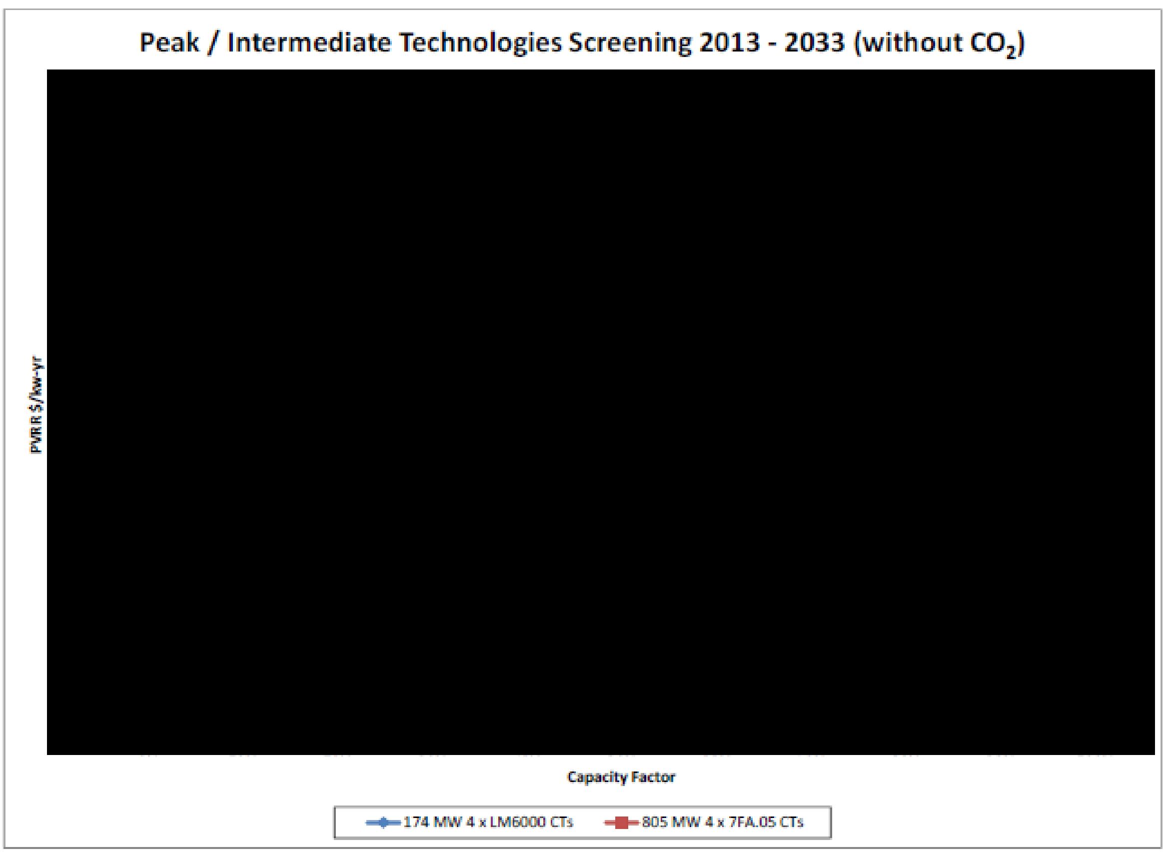
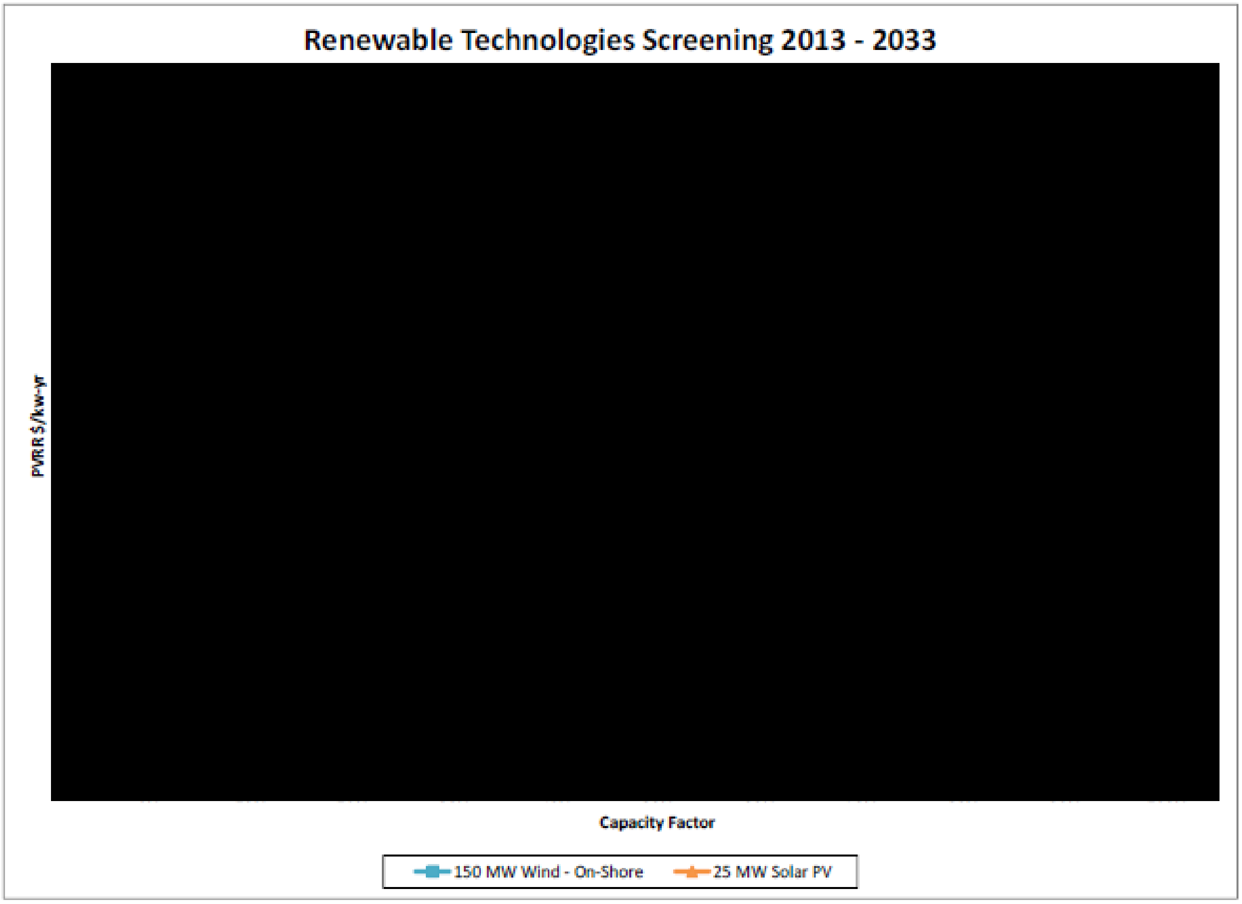



Renewable Technologies Screening 2013 - 2033
PVRR $/kw-yr
[redacted]
Capacity Factor
150 MW Wind - On-Shore
25 MW Solar PV

APPENDIX G: ENVIRONMENTAL COMPLIANCE

Legislative and Regulatory Issues

Duke Energy Progress, which is subject to the jurisdiction of federal agencies including the Federal Energy Regulatory Commission (FERC), EPA, and the NRC, as well as state commissions and agencies, is potentially impacted by state and federal legislative and regulatory actions. This section provides a high-level description of several issues Duke Energy Progress is actively monitoring or engaged in that could potentially influence the Company's existing generation portfolio and choices for new generation resources.

Air Quality

Duke Energy Progress is required to comply with numerous state and federal air emission regulations, including the current Clean Air Interstate Rule (CAIR) NO_X and SO_2 cap-and-trade program, and the 2002 North Carolina Clean Smokestacks Act (NC CSA).

As a result of complying with the NC CSA requirements, by 2013, Duke Energy Progress will reduce SO_2 emissions by approximately 93% from 2000 levels. Also by 2013, as a result of complying with both the NC CSA and NO_X SIP Call requirements, Duke Energy Progress will reduce NO_X emissions by approximately 88% from 2000 levels. The landmark CSA legislation, which was passed by the North Carolina General Assembly in June of 2002, calls for some of the lowest state-mandated emission levels in the nation, and was passed with Duke Energy Progress' input and support. Further reductions are expected in 2014 through the retirements Sutton coal units and their replacement with a state-of-the-art gas-fired combined cycle unit.

The charts below show the significant downward trend in both NO_x and SO_2 emissions through 2012 as a result of actions taken at DEP facilities.

Chart G-1 DEP NO_x Emssions

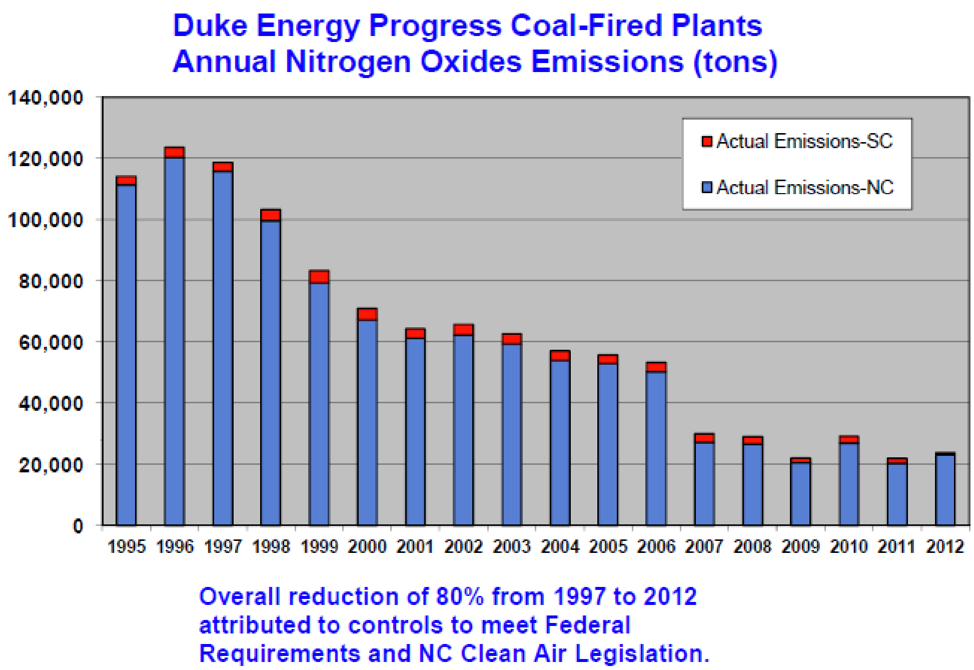
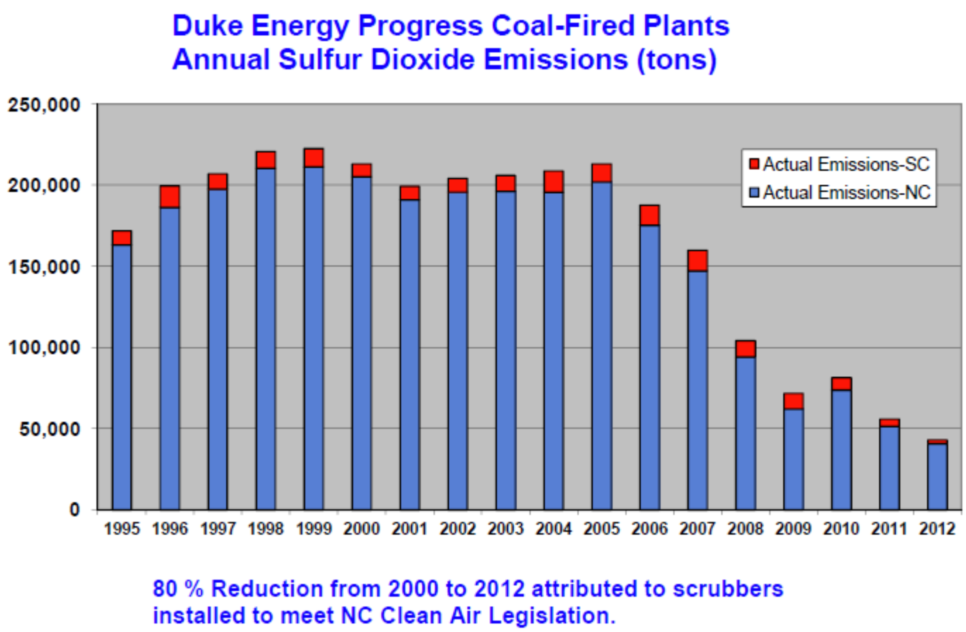


Chart G-2 DEP SO_2 Emissions



In addition to current programs and regulatory requirements, several new regulations are in various stages of implementation and development that will impact operations for Duke Energy Progress in the coming years. Some of the major rules include:

Cross-State Air Pollution Rule and the Clean Air Interstate Rule

The EPA finalized its Clean Air Interstate Rule (CAIR) in May 2005. The CAIR limits total annual and summertime NO_X emissions and annual SO_2 emissions from electric generating facilities across the Eastern U.S. through a two-phased cap-and-trade program. In December 2008, the United States District Court for the District of Columbia issued a decision remanding CAIR to the EPA, allowing CAIR to remain in effect until EPA developed a replacement regulation.

In August 2011, a replacement for CAIR was finalized as the Cross-State Air Pollution Rule (CSAPR), however, on December 30, 2011 the CSAPR was stayed by the U.S. Court of Appeals for the D.C. Circuit. Numerous petitions for review of the CSAPR were filed with the D.C. Circuit Court. On August 21, 2012, by a 2-1 decision, the D.C. Circuit vacated the CSAPR. The Court also directed the EPA to continue administering the CAIR that Duke Energy Progress has been complying with since 2009 pending completion of a remand rulemaking to replace CSAPR with a valid rule. CAIR requires additional Phase II reductions in SO_2 and NO_X emissions beginning in 2015. The court's decision to vacate the CSAPR leaves the future of the rule uncertain. The EPA filed a petition with the D.C. Circuit for en banc rehearing of the CSAPR decision, which the court denied. EPA then filed a petition with the Supreme Court asking that it review the D.C. Circuit's decision. On June 24, 2013 the Supreme Court granted review of the D.C. Circuit's August 21, 2012 decision. The Court will review the three issues presented in EPA's petition. Barring unforeseen developments, the Court could issue its decision by June 2014. The Supreme Court's order granting review does not change the legal status of CSAPR: CSAPR does not have legal effect at this time, and EPA is required to continue to administer the CAIR.

Duke Energy Progress cannot predict the outcome of the review process or how it could affect future emission reduction requirements that might apply as a result of a potential CSAPR replacement rulemaking. If the Supreme Court affirms the D.C. Circuit's decision on all issues, it is likely to take beyond 2015 for a replacement rulemaking to become effective which means that Phase II of CAIR would take effect on January 1, 2015. No risk for compliance with CAIR Phase I or Phase II exists, as such, no additional controls are planned. If the review process results in the CSAPR being reinstated, it is unclear when EPA might move to implement the rule. Regardless of the timing, however, there is no risk for compliance with CSAPR Phase I or Phase II, as such; no additional controls would be required.

Mercury and Air Toxics Standard (MATS)

In February 2008, the United States Court of Appeals for the District of Columbia issued its opinion, vacating the Clean Air Mercury Rule (CAMR). EPA announced a proposed Utility Boiler Maximum Achievable Control Technology (MACT) rule in March 2011 to replace the CAMR. The EPA published the final rule, known as the MATS, in the Federal Register on February 16, 2012. MATS regulates Hazardous Air Pollutants (HAP) and establishes unit-level emission limits for mercury, acid gases, and non-mercury metals, and sets work practice standards for organics for coal and oil-fired electric generating units. Compliance with the emission limits will be required by April 16, 2015. Permitting authorities have the discretion to grant up to a 1-year compliance extension, on a case-by-case basis, to sources that are unable to install emission controls before the compliance deadline.

Numerous petitions for review of the final MATS rule have been filed with the United States Court of Appeals for the District of Columbia. Briefing in the case has been completed. Oral arguments have not been scheduled. A court decision in the case is not likely until the first quarter of 2014. Duke Energy Progress cannot predict the outcome of the litigation or how it might affect the MATS requirements as they apply to operations.

Based on the emission limits established by the MATS rule, compliance with the MATS rule has driven several unit retirements and may drive the retirement or fuel conversion of more non-scrubbed coal-fired generating units in the Carolinas by April 2015. Compliance with MATS will also require various changes to units that have had emission controls added over the last several years to meet the emission requirements of the NC CSA.

National Ambient Air Quality Standards (NAAQS)

8 Hour Ozone Standard

In March 2008, EPA revised the 8 Hour Ozone Standard by lowering it from 84 to 75 parts per billion (ppb). In September of 2009, EPA announced a decision to reconsider the 75 ppb standard in response to a court challenge from environmental groups and their own belief that a lower standard was justified. However, EPA announced in September 2011 that it would retain the 75 ppb primary standard until it is reconsidered under the next 5-year review cycle. It could be mid-2014 before the EPA proposes a revision to the 75 ppb standard and mid-2015 before it finalizes a new standard unless ongoing legal action results in a court ordered schedule requiring the Agency to act sooner.

On May 21, 2012 EPA finalized the area designations for the 2008 75 ppb 8-hour ozone standard. No areas served by Duke Energy Progress were classified as non-attainment.

SO_2 Standards

On June 22, 2010 EPA established a 75 ppb 1-hour SO_2 NAAQS and revoked the annual and 24-hour SO_2 standards. EPA finalized initial nonattainment area designations in TBD 2013. No areas in the Carolinas were designated nonattainment.

On February 6, 2013 the EPA released a document that updated its strategy for addressing all areas that it did not initially designate as nonattainment in July 2013. The document indicated that EPA will allow states to use modeling or monitoring to evaluate the impact of large SO_2 emitting sources relative to the 75 ppb standard. The document also laid out a schedule for implementing the standard.

The EPA plans on undertaking notice and comment rulemaking to codify the implementation requirements for the 75 ppb standard. There is no schedule for EPA to propose or finalize the rulemaking, and the outcome of the rulemaking could be different from what EPA put forth in its February 6, 2013 document.

Particulate Matter (PM) Standard

In September 2006, the EPA announced its decision to revise the $PM_{2.5}$ NAAQS standard. The daily standard was reduced from 65 ug/m^3 (micrograms per cubic meter) to 35 ug/m^3. The annual standard remained at 15 ug/m^3.

EPA finalized designations for the 2006 daily standard in October 2009, which did not include any nonattainment areas in the Duke Energy Progress service territory. In February 2009, the D.C Circuit unanimously remanded to EPA the Agency's decision to retain the annual 15 ug/m^3 primary $PM_{2.5}$ NAAQS and to equate the secondary $PM_{2.5}$ NAAQS with the primary NAAQS. EPA began undertaking new rulemaking to revise the standards consistent with the Court's decision.

On December 14, 2012 the EPA finalized a rule that lowered the annual $PM_{2.5}$ standard to 12 ug/m^3 and retained the 35 ug/m^3 daily $PM_{2.5}$ standard. The EPA plans to finalize area designations by December 2014. States with nonattainment areas will be required to submit SIPs to EPA in early 2018, with the initial attainment date in 2020. The EPA has indicated that it will likely use 2011 – 2013 air quality data to make final designations.

To date neither the annual nor the daily $PM_{2.5}$ standard has directly driven emission reduction requirements at Duke Energy Progress facilities. The reduction in SO_2 and NO_X emissions to address the $PM_{2.5}$ standards has been achieved through the CAIR and the NC CSA. It is unclear if the new lower annual $PM_{2.5}$ standard will require additional SO_2 or NO_X emission reduction requirements at any Duke Energy Progress generating facilities.

Greenhouse Gas Regulation

The EPA has been active in the regulation of greenhouse gases (GHGs). In May 2010, the EPA finalized what is commonly referred to as the Tailoring Rule. This rule sets the emission thresholds to 75,000 tons/year of CO_2 for determining when a modified major stationary source is subject to Prevention of Significant Deterioration (PSD) permitting for greenhouse gases. The Tailoring Rule went into effect beginning January 2, 2011. Being subject to PSD permitting requirements for CO_2 will require a Best Available Control Technology (BACT) analysis and the application of BACT for GHGs. BACT will be determined by the state permitting authority. Since it is not known if, or when, a Duke Energy Progress generating unit might undertake a modification that triggers PSD permitting requirements for GHGs and exactly what might constitute BACT, the potential implications of this regulatory requirement are unknown.

On April 13, 2012, a proposed rule to establish GHG new source performance standards (NSPS) for new electric utility steam generating units (EGUs) was published in the Federal Register. The proposed GHG NSPS applies only to new pulverized coal, IGCC and natural gas combined cycle units. The proposed NSPS is an output-based emission standard of 1,000 lb CO_2/gross MWh of electricity generation. The proposal was very controversial because it set the same emission standard for new natural gas and new coal-fired electric generating units. The only way a new coal unit could meet the proposed standard is with carbon capture and storage technology. The President has directed EPA to re-propose the rule by September 20, 2013. The requirements of a re-proposed rule are not known.

The President has directed EPA to propose CO_2 emission guidelines for existing electric generating units by June 1, 2014, and finalize guidelines by June 1, 2015. Once EPA finalizes emission guidelines for existing sources, the states will be required to develop the regulations that will apply to covered sources, based on the emission performance standards established by EPA in its guidelines.

It is highly unlikely that legislation mandating reductions in GHG emissions or establishing a carbon tax will be passed by the 113th Congress which began on January 3, 2013. Beyond 2014 the prospects for enactment of any federal legislation mandating reductions in GHG emissions or establishing a carbon tax are highly uncertain.

Water Quality and By-product Issues

CWA 316(b) Cooling Water Intake Structures

Federal regulations in Section 316(b) of the Clean Water Act may necessitate cooling water intake modifications for existing facilities to minimize impingement and entrainment of aquatic organisms. EPA published its proposed rule on April 20, 2011.

The proposed rule establishes mortality reduction requirements due to both fish impingement and entrainment and advances one preferred approach and three alternatives. The EPA's preferred approach establishes aquatic protection requirements and new on-site facility additions for existing facilities with a design intake flow of 2 million gallons per day (mgd) or more from rivers, streams, lakes, reservoirs, estuaries, oceans, or other U.S. waters that utilize at least 25% of the water withdrawn for cooling purposes.

The most recent EPA settlement agreement now calls for the EPA to finalize the 316(b) rule by November 4, 2013. If the rule is finalized as proposed, initial submittals, station details, study plans, etc, for some facilities would be due in mid-late 2014. If required, modifications to the intakes to comply with the impingement requirements could be required as early as late 2016. Within the proposed rule, EPA did not provide a compliance deadline for meeting the entrainment requirements.

Steam Electric Effluent Guidelines

In September 2009, EPA announced plans to revise the steam electric effluent limitation guidelines. The steam electric effluent limitation guidelines are technology-based, in that limits are based on the capability of the best technology available. On April 19, 2013, the EPA Acting Administrator signed the proposed revisions to the Steam Electric Effluent Limitations Guidelines (ELGs). The proposal was published in the Federal Register on June 7, 2013 with comments due to EPA by the extended date of September 20, 2013. Under the current revision of the consent decree, the EPA has agreed to issue a final rule by May 22, 2014. The EPA has proposed eight different regulatory options for the rule, of which four are listed as preferred by EPA. The eight regulatory options vary in stringency and cost, and propose revisions or develop new standards for seven waste streams, including wastewater from air pollution control equipment and ash transport water. The proposed revisions are focused primarily on coal generating units, but some revisions would be applicable to all steam electric generating units, including natural gas and nuclear-fueled generating facilities. After the final rulemaking, effluent limitation guideline requirements will be included in a station's National Pollutant Discharge Elimination System (NPDES) permit renewals. Portions of the rule would be implemented immediately after the effective date of the rule upon the renewal of wastewater discharge permits, while other portions of the rule will be implemented upon the renewal of the wastewater discharge permits after July, 2017. EPA expects that all facilities will be in compliance with the rule by July 2022. The deadline to comply will depend upon each station's permit renewal schedule.

Coal Combustion Residuals

Following Tennessee Valley Authority's (TVA) Kingston ash dike failure in December 2008, EPA began to assess the integrity of ash dikes nationwide and to begin developing a rule to manage coal combustion residuals (CCRs). CCRs primarily include fly ash, bottom ash and Flue Gas Desulfurization (FGD) byproducts (gypsum). Since the 2008 TVA dike failure, numerous ash dike inspections have been completed by EPA and an enormous amount of input has been received by EPA as it developed proposed regulations. In June 2010, EPA published its proposed rule regarding CCRs. The proposed rule offers two options: 1) a hazardous waste classification under Resource Conservation Recovery Act (RCRA) Subtitle C; and 2) a non-hazardous waste classification under RCRA Subtitle D, along with dam safety and alternative rules. Both options would require strict new requirements regarding the handling, disposal and potential re-use ability of CCRs. The proposal will likely result in more conversions to dry handling of ash, more landfills, the closing or lining of existing ash ponds and the addition of new wastewater treatment systems. Final regulations are not expected to be issued by EPA until 2014 or later. EPA's regulatory classification of CCRs as hazardous or non-hazardous will be critical in developing plans for handling CCRs. However, under either option of the proposed rule, the impact to Duke Energy Progress is likely to be significant. Based on a 2014 final rule date, compliance with new regulations is generally expected to begin around 2019.

APPENDIX H: NON-UTILITY GENERATION AND WHOLESALE

This appendix contains wholesale sales contracts, firm wholesale purchased power contracts and non-utility generation contracts.

Table H-1 Wholesale Sales Contracts

			Wholesale Contracts Commitment (MWs)									
Customer	**Product**	**Term**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Camden	Full Requirements	2014-2023	50	51	51	52	52	53	53	54	54	54
Fayetteville	Full Requirements	2012-2032	458	464	470	476	483	489	495	501	507	513
French Broad EMC	Full Requirements	2013-2027	90	90	91	92	93	94	95	95	96	97
Haywood EMC	Partial Requirements	2009-2021	19	19	17	18	18	19	20	24	27	28
NCEMC	Partial Requirements	2005-2022	225	225	225	225	225	225	225	225	225	225
NCEMC	Partial Requirements	2005-2019	420	420	420	420	420	420	420	0	0	0
NCEMC	Partial Requirements	2005-2021	275	325	325	325	325	325	325	325	150	0
NCEMC	Partial Requirements	2005-2024	1,195	1,176	1,205	1,237	1,273	1,310	1,349	1,808	2,023	2,212
NCEMPA	Partial Requirements	2010-2017	709	715	720	725	729	734	739	744	749	753
Piedmont EMC	Full Requirements	2006-2021	22	22	23	23	24	25	26	26	27	28
Tritowns	Full Requirements	2008-2017	21	21	22	22	22	22	22	22	23	23
Waynesville	Full Requirements	2010-2015	17	17	17	17	17	18	18	18	18	18
Winterville	Full Requirements	2008-2017	13	14	14	14	14	14	14	14	14	14

Table H-2 Firm Wholesale Purchased Power Contracts

Firm Wholesale Purchased Power Contracts

Purchased Power Contract	Primary Fuel Type	Summer Capacity (MW)	Capacity Designation	Location	Term	Volume of Purchases (MWh) June '12 - June '13
Broad River CTs # 1-3	Gas	478	Peaking	Gaffney, SC	5/31/2021	303,393
Broad River CTs # 4-5	Gas	329	Peaking	Gaffney, SC	2/28/2022	208,214
Public Works Commission of the City of Fayetteville	Gas	220	Peaking	Fayetteville, NC	9/30/2017	29,233
North Carolina Electric Membership Corporation (NCEMC)	Gas	Lilesville Unit - 622; Hamlet Unit - 122	Peaking	Lilesville, NC/Hamlet, NC	Lilesville Unit ends 12/31/2012; Hamlet Unit ends 12/31/2013	345,278
NCEMC	Gas	168	Peaking	Hamlet, NC	1/1/2014-4/30/2019	N/A
NCEMC	Gas	341	Peaking	Lilesville, NC (Anson)	12/31/2032	28,337
Southern Company	Gas	145	Intermediate	Rowan County, NC	12/31/2019	1,087,303

Table H-3 Non-Utility Generation – North Carolina

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
			North Carolina Generators:		
Facility 1	SOUTHPORT	NC	Natural Gas	46,000.0	Baseload
Facility 2	CANTON	NC	Process By-product & Coal	51,000.0	Baseload
Facility 3	RIEGELWOOD	NC	Process By-product	60,000.0	Baseload
Facility 4	ASHEVILLE	NC	Hydro	2,500.0	Baseload
Facility 5	NASHVILLE	NC	Diesel Fuel	2,250.0	Baseload
Facility 6	EDWARD	NC	Process By-product	50,000.0	Intermediate/Peaking
Facility 7	RALEIGH	NC	Solar PV	500.0	Intermediate/Peaking
Facility 8	RALEIGH	NC	Solar PV	260.0	Intermediate/Peaking
Facility 9	ASHEVILLE	NC	Solar PV	900.0	Intermediate/Peaking
Facility 10	CARY	NC	Solar PV	144.0	Intermediate/Peaking
Facility 11	FOUR OAKS	NC	Solar PV	450.0	Intermediate/Peaking
Facility 12	VANCEBORO	NC	Process By -products	27,000.0	Baseload
Facility 13	FUQUAY VARINA	NC	Solar PV	385.0	Intermediate/Peaking
Facility 14	RALEIGH	NC	Diesel Fuel	5,000.0	Intermediate/Peaking
Facility 15	CHOCOWINITY	NC	Diesel Fuel	1,800.0	Intermediate/Peaking
Facility 16	CARY	NC	Diesel Fuel	5,000.0	Intermediate/Peaking
Facility 17	KURE BEACH	NC	Diesel Fuel	300.0	Intermediate/Peaking
Facility 18	KURE BEACH	NC	Diesel Fuel	300.0	Intermediate/Peaking
Facility 19	RALEIGH	NC	Diesel Fuel	2,472.0	Intermediate/Peaking
Facility 20	RALEIGH	NC	Diesel Fuel	6,000.0	Intermediate/Peaking
Facility 21	RALEIGH	NC	Diesel Fuel	6,500.0	Intermediate/Peaking
Facility 22	Morrisville	NC	Diesel Fuel	750.0	Intermediate/Peaking
Facility 23	Clayton	NC	Diesel Fuel	3,000.0	Intermediate/Peaking
Facility 24	Asheville	NC	Diesel Fuel	750.0	Intermediate/Peaking
Facility 25	Asheville	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 26	Oxford	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 27	Whispering Pines	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 28	Hope Mills	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 29	Morrisville	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 30	Cary	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 31	Raleigh	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 32	Clayton	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 33	Morehead City	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 34	Wilmington	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 35	Riegelwood	NC	Diesel Fuel	2,700.0	Intermediate/Peaking
Facility 36	Raleigh	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 37	Asheville	NC	Diesel Fuel	n/a	Intermediate/Peaking
Facility 38	Tabor City	NC	Diesel Fuel	250.0	Intermediate/Peaking
Facility 39	Cary	NC	Diesel Fuel	4,000.0	Intermediate/Peaking
Facility 40	Wilmington	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 41	Wilmington	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 42	Atlantic Beach	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 43	New Bern	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 44	Wilmington	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 45	Rocky Point	NC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 46	Hope Mills	NC	Diesel Fuel	600.0	Intermediate/Peaking
Facility 47	Raleigh	NC	Diesel/ Natural Gas Bi-Fuel	6,000.0	Intermediate/Peaking
Facility 48	Garner	NC	Solar PV	38.4	Intermediate/Peaking
Facility 49	Raleigh	NC	Solar PV	400.0	Intermediate/Peaking
Facility 50	Buncombe	NC	Solar PV	4.5	Intermediate/Peaking
Facility 51	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 52	Holly Springs	NC	Solar PV	400.0	Intermediate/Peaking
Facility 53	Cary	NC	Solar PV	2.8	Intermediate/Peaking
Facility 54	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 55	Raleigh	NC	Solar PV	3.7	Intermediate/Peaking
Facility 56	Wake	NC	Solar PV	1.6	Intermediate/Peaking
Facility 57	Sanford	NC	Solar PV	25.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 58	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 59	Raleigh	NC	Solar PV	4.8	Intermediate/Peaking
Facility 60	Pittsboro	NC	Solar PV	77.0	Intermediate/Peaking
Facility 61	Wilmington	NC	Solar PV	9.0	Intermediate/Peaking
Facility 62	Goldsboro	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 63	Wake	NC	Solar PV	7.5	Intermediate/Peaking
Facility 64	ORANGE	NC	Solar PV	4.2	Intermediate/Peaking
Facility 65	Buncombe	NC	Solar PV	3.9	Intermediate/Peaking
Facility 66	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 67	Chapel Hill	NC	Solar PV	4.2	Intermediate/Peaking
Facility 68	Chatham	NC	Solar PV	3.7	Intermediate/Peaking
Facility 69	Wake	NC	Solar PV	5.0	Intermediate/Peaking
Facility 70	Montgomery	NC	Solar PV	2.3	Intermediate/Peaking
Facility 71	Buncombe	NC	Solar PV	2.4	Intermediate/Peaking
Facility 72	N/A	NC	Solar PV	2.3	Intermediate/Peaking
Facility 73	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 74	Arden	NC	Solar PV	23.0	Intermediate/Peaking
Facility 75	Asheboro	NC	Solar PV	398.0	Intermediate/Peaking
Facility 76	Cary	NC	Solar PV	190.0	Intermediate/Peaking
Facility 77	Warrenton	NC	Solar PV	383.0	Intermediate/Peaking
Facility 78	Laurinburg	NC	Solar PV	193.0	Intermediate/Peaking
Facility 79	Fairview	NC	Solar PV	5.9	Intermediate/Peaking
Facility 80	Chatham	NC	Solar PV	2.1	Intermediate/Peaking
Facility 81	Fairview	NC	Solar PV	34.0	Intermediate/Peaking
Facility 82	Asheville	NC	Solar PV	5.0	Intermediate/Peaking
Facility 83	Morrisville	NC	Solar PV	2.8	Intermediate/Peaking
Facility 84	Pender	NC	Solar PV	10.0	Intermediate/Peaking
Facility 85	Clayton	NC	Solar PV	2.4	Intermediate/Peaking
Facility 86	Henderson	NC	Solar PV	5.3	Intermediate/Peaking
Facility 87	Cameron	NC	Solar PV	9.0	Intermediate/Peaking
Facility 88	Asheville	NC	Solar PV	9.6	Intermediate/Peaking
Facility 89	N/A	NC	Solar PV	5.0	Intermediate/Peaking
Facility 90	Raleigh	NC	Solar PV	27.0	Intermediate/Peaking
Facility 91	Raleigh	NC	Solar PV	4.0	Intermediate/Peaking
Facility 92	Chatham	NC	Solar PV	6.9	Intermediate/Peaking
Facility 93	Asheville	NC	Solar PV	60.0	Intermediate/Peaking
Facility 94	Apex	NC	Solar PV	20.0	Intermediate/Peaking
Facility 95	Weaverville	NC	Solar PV	4.4	Intermediate/Peaking
Facility 96	Clayton	NC	Solar PV	17.5	Intermediate/Peaking
Facility 97	Jacksonville	NC	Solar PV	5.7	Intermediate/Peaking
Facility 98	Raleigh	NC	Solar PV	798.0	Intermediate/Peaking
Facility 99	Moore	NC	Solar PV	3.0	Intermediate/Peaking
Facility 100	Wilmington	NC	Solar PV	3.2	Intermediate/Peaking
Facility 101	Buncombe	NC	Solar PV	3.0	Intermediate/Peaking
Facility 102	Buncombe	NC	Solar PV	3.1	Intermediate/Peaking
Facility 103	Mitchell	NC	Solar PV	1.0	Intermediate/Peaking
Facility 104	Clayton	NC	Solar PV	2.5	Intermediate/Peaking
Facility 105	Boiling Spring Lakes	NC	Solar PV	2.4	Intermediate/Peaking
Facility 106	Buncombe	NC	Solar PV	2.0	Intermediate/Peaking
Facility 107	Carolina Beach	NC	Solar PV	4.3	Intermediate/Peaking
Facility 108	Buncombe	NC	Solar PV	3.4	Intermediate/Peaking
Facility 109	Wake	NC	Solar PV	1.1	Intermediate/Peaking
Facility 110	Lillington	NC	Solar PV	3.2	Intermediate/Peaking
Facility 111	Wake	NC	Solar PV	2.4	Intermediate/Peaking
Facility 112	Wake	NC	Solar PV	2.1	Intermediate/Peaking
Facility 113	Clayton	NC	Solar PV	407.0	Intermediate/Peaking
Facility 114	Buncombe	NC	Solar PV	6.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 115	N/A	NC	Solar PV	20.0	Intermediate/Peaking
Facility 116	Asheville	NC	Solar PV	1,200.0	Intermediate/Peaking
Facility 117	N/A	NC	Solar PV	2.5	Intermediate/Peaking
Facility 118	Granville	NC	Solar PV	7.4	Intermediate/Peaking
Facility 119	Buncombe	NC	Solar PV	3.9	Intermediate/Peaking
Facility 120	Buncombe	NC	Solar PV	2.4	Intermediate/Peaking
Facility 121	Buncombe	NC	Solar PV	3.9	Intermediate/Peaking
Facility 122	Buncombe	NC	Solar PV	1.4	Intermediate/Peaking
Facility 123	Asheville	NC	Solar PV	3.6	Intermediate/Peaking
Facility 124	Sampson County	NC	Landfill Gas	6,400.0	Baseload
Facility 125	Buncombe	NC	Solar PV	3.2	Intermediate/Peaking
Facility 126	Willow Spring	NC	Solar PV	5.5	Intermediate/Peaking
Facility 127	Fuquay Varina	NC	Solar PV	3.9	Intermediate/Peaking
Facility 128	Fuquay-Varina	NC	Solar PV	385.0	Intermediate/Peaking
Facility 129	Wake	NC	Solar PV	3.9	Intermediate/Peaking
Facility 130	Pittsboro	NC	Solar PV	3.2	Intermediate/Peaking
Facility 131	Cary	NC	Solar PV	2.2	Intermediate/Peaking
Facility 132	Pinehurst	NC	Solar PV	2.9	Intermediate/Peaking
Facility 133	Buncombe	NC	Solar PV	2.9	Intermediate/Peaking
Facility 134	Buncombe	NC	Solar PV	3.0	Intermediate/Peaking
Facility 135	Asheville	NC	Solar PV	2.9	Intermediate/Peaking
Facility 136	Asheville	NC	Solar PV	5.9	Intermediate/Peaking
Facility 137	Wilmington	NC	Solar PV	2.5	Intermediate/Peaking
Facility 138	Black Mountain	NC	Solar PV	3.9	Intermediate/Peaking
Facility 139	Leland	NC	Solar PV	3.0	Intermediate/Peaking
Facility 140	N/A	NC	Solar PV	2.8	Intermediate/Peaking
Facility 141	Wayne	NC	Solar PV	4.6	Intermediate/Peaking
Facility 142	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 143	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 144	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 145	Wake	NC	Solar PV	3.6	Intermediate/Peaking
Facility 146	Buncombe	NC	Solar PV	2.2	Intermediate/Peaking
Facility 147	Hampstead	NC	Solar PV	2.3	Intermediate/Peaking
Facility 148	Sanford	NC	Solar PV	5.0	Intermediate/Peaking
Facility 149	Wake	NC	Solar PV	2.2	Intermediate/Peaking
Facility 150	Moncure	NC	Hydro	1,500.0	Intermediate/Peaking
Facility 151	Cary	NC	Solar PV	5.3	Intermediate/Peaking
Facility 152	Wilmington	NC	Solar PV	2.5	Intermediate/Peaking
Facility 153	Chatham	NC	Solar PV	2.7	Intermediate/Peaking
Facility 154	N/A	NC	Solar PV	3.8	Intermediate/Peaking
Facility 155	Haywood	NC	Solar PV	5.7	Intermediate/Peaking
Facility 156	Alexander	NC	Landfill Gas	1,415.0	Baseload
Facility 157	Vass	NC	Solar PV	4.0	Intermediate/Peaking
Facility 158	Black Mountain	NC	Solar PV	5.3	Intermediate/Peaking
Facility 159	Buncombe	NC	Solar PV	0.9	Intermediate/Peaking
Facility 160	Apex	NC	Solar PV	5.4	Intermediate/Peaking
Facility 161	Ramseur	NC	Solar PV	4.5	Intermediate/Peaking
Facility 162	Holly Springs	NC	Solar PV	3.3	Intermediate/Peaking
Facility 163	Buncombe	NC	Solar PV	6.1	Intermediate/Peaking
Facility 164	N/A	NC	Solar PV	2.3	Intermediate/Peaking
Facility 165	Raleigh	NC	Solar PV	9.0	Intermediate/Peaking
Facility 166	NEW HANOVER	NC	Solar PV	1.4	Intermediate/Peaking
Facility 167	NEW HANOVER	NC	Solar PV	4.0	Intermediate/Peaking
Facility 168	Asheville	NC	Solar PV	5.3	Intermediate/Peaking
Facility 169	Roxboro	NC	wood biomass/tdf/coal	4,200.0	Baseload
Facility 170	Southport	NC	wood biomass/tdf/coal	8,000.0	Baseload
Facility 171	Raleigh	NC	Solar PV	2.4	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 172	Pittsboro	NC	Solar PV	3.6	Intermediate/Peaking
Facility 173	Buncombe	NC	Solar PV	1.8	Intermediate/Peaking
Facility 174	Person County	NC	Solar PV	520.0	Intermediate/Peaking
Facility 175	Raleigh	NC	Solar PV	40.0	Intermediate/Peaking
Facility 176	Raleigh	NC	Solar PV	200.0	Intermediate/Peaking
Facility 177	Asheville	NC	Solar PV	193.0	Intermediate/Peaking
Facility 178	Carteret	NC	Solar PV	1.2	Intermediate/Peaking
Facility 179	Lee	NC	Solar PV	3.0	Intermediate/Peaking
Facility 180	Bayboro	NC	Solar PV	10.0	Intermediate/Peaking
Facility 181	Wilmington	NC	Solar PV	3.0	Intermediate/Peaking
Facility 182	Raleigh	NC	Solar PV	4.4	Intermediate/Peaking
Facility 183	Laurinburg	NC	Solar PV	2.2	Intermediate/Peaking
Facility 184	Garner	NC	Solar PV	1,050.0	Intermediate/Peaking
Facility 185	Raleigh	NC	Solar PV	43.0	Intermediate/Peaking
Facility 186	N/A	NC	Solar PV	0.7	Intermediate/Peaking
Facility 187	Chatham	NC	Solar PV	3.1	Intermediate/Peaking
Facility 188	Whiteville	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 189	Pinehurst	NC	Solar PV	4.8	Intermediate/Peaking
Facility 190	N/A	NC	Solar PV	4.7	Intermediate/Peaking
Facility 191	NEW HANOVER	NC	Solar PV	2.2	Intermediate/Peaking
Facility 192	Moore	NC	Solar PV	8.5	Intermediate/Peaking
Facility 193	NEW HANOVER	NC	Solar PV	1.4	Intermediate/Peaking
Facility 194	Chatham	NC	Solar PV	2.6	Intermediate/Peaking
Facility 195	Buncombe	NC	Solar PV	5.2	Intermediate/Peaking
Facility 196	Raleigh	NC	Solar PV	4.3	Intermediate/Peaking
Facility 197	Mitchell	NC	Solar PV	4.7	Intermediate/Peaking
Facility 198	N/A	NC	Solar PV	9.9	Intermediate/Peaking
Facility 199	N/A	NC	Solar PV	2.0	Intermediate/Peaking
Facility 200	Newdale	NC	Hydro	80.0	Intermediate/Peaking
Facility 201	Haywood	NC	Solar PV	2.7	Intermediate/Peaking
Facility 202	Johnston County	NC	Landfill Gas	1,760.0	Baseload
Facility 203	Raleigh	NC	Solar PV	19.0	Intermediate/Peaking
Facility 204	Raleigh	NC	Solar PV	39.0	Intermediate/Peaking
Facility 205	Raleigh	NC	Solar PV	23.0	Intermediate/Peaking
Facility 206	Raleigh	NC	Solar PV	2.3	Intermediate/Peaking
Facility 207	Wilmington	NC	Solar PV	24.0	Intermediate/Peaking
Facility 208	Wilmington	NC	Solar PV	60.0	Intermediate/Peaking
Facility 209	NEW HANOVER	NC	Solar PV	5.4	Intermediate/Peaking
Facility 210	Franklin	NC	Solar PV	3.9	Intermediate/Peaking
Facility 211	Raleigh	NC	Solar PV	2.0	Intermediate/Peaking
Facility 212	Pender	NC	Solar PV	3.0	Intermediate/Peaking
Facility 213	Holly Springs	NC	Solar PV	4.9	Intermediate/Peaking
Facility 214	Raleigh	NC	Solar PV	5.2	Intermediate/Peaking
Facility 215	Barnardsville	NC	Solar PV	7.6	Intermediate/Peaking
Facility 216	Raleigh	NC	Solar PV	5.5	Intermediate/Peaking
Facility 217	Kenansville	NC	wood biomass energy	25,000.0	Baseload
Facility 218	Chatham	NC	Solar PV	3.6	Intermediate/Peaking
Facility 219	Hampstead	NC	Solar PV	4.2	Intermediate/Peaking
Facility 220	Morehead City	NC	Solar PV	2.2	Intermediate/Peaking
Facility 221	Raleigh	NC	Solar PV	3.3	Intermediate/Peaking
Facility 222	Carolina Beach	NC	Solar PV	2.2	Intermediate/Peaking
Facility 223	Hampstead	NC	Solar PV	4.8	Intermediate/Peaking
Facility 224	Raleigh	NC	Solar PV	8.0	Intermediate/Peaking
Facility 225	Mount Olive	NC	Solar PV	2.3	Intermediate/Peaking
Facility 226	Raleigh	NC	Solar PV	2.5	Intermediate/Peaking
Facility 227	Cary	NC	Solar PV	5.2	Intermediate/Peaking
Facility 228	Cary	NC	Solar PV	3.7	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 229	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 230	Zebulon	NC	Solar PV	257.0	Intermediate/Peaking
Facility 231	Randleman (Cedar Falls)	NC	Hydro	400.0	Intermediate/Peaking
Facility 232	N/A	NC	Solar PV	2.9	Intermediate/Peaking
Facility 233	Asheville	NC	Solar PV	4.0	Intermediate/Peaking
Facility 234	Wake Forest	NC	Solar PV	2.7	Intermediate/Peaking
Facility 235	New Bern	NC	wood biomass energy	48,000.0	Baseload
Facility 236	Clayton	NC	Solar PV	3.5	Intermediate/Peaking
Facility 237	Asheville	NC	Solar PV	3.4	Intermediate/Peaking
Facility 238	Raleigh	NC	Solar PV	4.9	Intermediate/Peaking
Facility 239	Laurinburg	NC	Solar PV	2.1	Intermediate/Peaking
Facility 240	Arden	NC	Solar PV	160.0	Intermediate/Peaking
Facility 241	New Hill	NC	Solar PV	2.9	Intermediate/Peaking
Facility 242	Chatham	NC	Solar PV	1.6	Intermediate/Peaking
Facility 243	Buncombe	NC	Solar PV	3.9	Intermediate/Peaking
Facility 244	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 245	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 246	Wake	NC	Solar PV	3.9	Intermediate/Peaking
Facility 247	Raleigh	NC	Solar PV	3.8	Intermediate/Peaking
Facility 248	Nash	NC	Solar PV	4.5	Intermediate/Peaking
Facility 249	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 250	Chatham	NC	Solar PV	3.6	Intermediate/Peaking
Facility 251	Wake	NC	Solar PV	2.3	Intermediate/Peaking
Facility 252	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 253	Buncombe	NC	Solar PV	2.6	Intermediate/Peaking
Facility 254	N/A	NC	Solar PV	0.7	Intermediate/Peaking
Facility 255	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 256	Wake	NC	Solar PV	2.4	Intermediate/Peaking
Facility 257	Chatham	NC	Solar PV	5.2	Intermediate/Peaking
Facility 258	Wilmington	NC	Solar PV	2.5	Intermediate/Peaking
Facility 259	Pinehurst	NC	Solar PV	4.4	Intermediate/Peaking
Facility 260	Raeford	NC	Solar PV	7.2	Intermediate/Peaking
Facility 261	Wake	NC	Solar PV	3.2	Intermediate/Peaking
Facility 262	Coleridge	NC	Hydro	680.0	Intermediate/Peaking
Facility 263	Arden	NC	Solar PV	2.5	Intermediate/Peaking
Facility 264	Garner	NC	Solar PV	4.3	Intermediate/Peaking
Facility 265	Asheville	NC	Solar PV	44.0	Intermediate/Peaking
Facility 266	Cary	NC	Solar PV	5.4	Intermediate/Peaking
Facility 267	Wake	NC	Solar PV	3.2	Intermediate/Peaking
Facility 268	Buncombe	NC	Solar PV	4.7	Intermediate/Peaking
Facility 269	Asheville	NC	Solar PV	2.1	Intermediate/Peaking
Facility 270	Carolina Beach	NC	Solar PV	2.5	Intermediate/Peaking
Facility 271	Wake	NC	Solar PV	7.3	Intermediate/Peaking
Facility 272	Fairview	NC	Solar PV	5.3	Intermediate/Peaking
Facility 273	Buncombe	NC	Solar PV	2.1	Intermediate/Peaking
Facility 274	Wilmington	NC	Solar PV	3.7	Intermediate/Peaking
Facility 275	Carteret	NC	Solar PV	3.9	Intermediate/Peaking
Facility 276	Nash	NC	Solar PV	3.4	Intermediate/Peaking
Facility 277	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 278	Chatham	NC	Solar PV	2.3	Intermediate/Peaking
Facility 279	Haywood	NC	Solar PV	2.9	Intermediate/Peaking
Facility 280	Smithfield	NC	Solar PV	5.5	Intermediate/Peaking
Facility 281	Hampstead	NC	Solar PV	3.0	Intermediate/Peaking
Facility 282	Arden	NC	Solar PV	5.3	Intermediate/Peaking
Facility 283	NEW HANOVER	NC	Solar PV	6.0	Intermediate/Peaking
Facility 284	Chatham	NC	Solar PV	6.3	Intermediate/Peaking
Facility 285	Wake	NC	Solar PV	2.9	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 286	Carteret	NC	Solar PV	9.0	Intermediate/Peaking
Facility 287	Wake	NC	Solar PV	48.0	Intermediate/Peaking
Facility 288	Chatham	NC	Solar PV	3.7	Intermediate/Peaking
Facility 289	Cary	NC	Solar PV	5.1	Intermediate/Peaking
Facility 290	Raleigh	NC	Solar PV	16.0	Intermediate/Peaking
Facility 291	Morehead City	NC	Solar PV	2.5	Intermediate/Peaking
Facility 292	Alexander	NC	Solar PV	2.0	Intermediate/Peaking
Facility 293	Weaverville	NC	Solar PV	6.2	Intermediate/Peaking
Facility 294	Dunn	NC	Solar PV	1,990.0	Intermediate/Peaking
Facility 295	Bald Head Island	NC	Solar PV	4.6	Intermediate/Peaking
Facility 296	Southern Pines	NC	Solar PV	4.3	Intermediate/Peaking
Facility 297	Wake	NC	Solar PV	2.7	Intermediate/Peaking
Facility 298	Cary	NC	Solar PV	8.8	Intermediate/Peaking
Facility 299	Raleigh	NC	Solar PV	5.3	Intermediate/Peaking
Facility 300	Moore	NC	Solar PV	7.4	Intermediate/Peaking
Facility 301	Wake	NC	Solar PV	3.6	Intermediate/Peaking
Facility 302	Buncombe	NC	Solar PV	7.4	Intermediate/Peaking
Facility 303	Buncombe	NC	Solar PV	7.4	Intermediate/Peaking
Facility 304	Chatham	NC	Solar PV	2.0	Intermediate/Peaking
Facility 305	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 306	Cary	NC	Solar PV	2.6	Intermediate/Peaking
Facility 307	Raleigh	NC	Solar PV	9.9	Intermediate/Peaking
Facility 308	Wake	NC	Solar PV	2.9	Intermediate/Peaking
Facility 309	Chatham	NC	Solar PV	6.4	Intermediate/Peaking
Facility 310	Asheville	NC	Solar PV	2.9	Intermediate/Peaking
Facility 311	Buncombe	NC	Solar PV	7.8	Intermediate/Peaking
Facility 312	Asheville	NC	Landfill Gas	980.0	Baseload
Facility 313	N/A	NC	Solar PV	5.0	Intermediate/Peaking
Facility 314	N/A	NC	Solar PV	2.0	Intermediate/Peaking
Facility 315	Wendell	NC	Solar PV	4.1	Intermediate/Peaking
Facility 316	Raleigh	NC	Solar PV	4.1	Intermediate/Peaking
Facility 317	N/A	NC	Solar PV	8.5	Intermediate/Peaking
Facility 318	Apex	NC	Solar PV	4.1	Intermediate/Peaking
Facility 319	Fletcher	NC	Solar PV	410.0	Intermediate/Peaking
Facility 320	New Bern	NC	Solar PV	977.9	Intermediate/Peaking
Facility 321	Buncombe	NC	Solar PV	3.7	Intermediate/Peaking
Facility 322	N/A	NC	Solar PV	2.7	Intermediate/Peaking
Facility 323	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 324	Garner	NC	Solar PV	24.0	Intermediate/Peaking
Facility 325	Apex	NC	Solar PV	4.1	Intermediate/Peaking
Facility 326	Raleigh	NC	Solar PV	3.3	Intermediate/Peaking
Facility 327	Sanford	NC	Solar PV	4.4	Intermediate/Peaking
Facility 328	Chapel Hill	NC	Solar PV	1,000.0	Intermediate/Peaking
Facility 329	Eagle Springs	NC	Solar PV	4.1	Intermediate/Peaking
Facility 330	Pinehurst	NC	Solar PV	5.0	Intermediate/Peaking
Facility 331	Candler	NC	Solar PV	9.5	Intermediate/Peaking
Facility 332	Chapel Hill	NC	Solar PV	2.0	Intermediate/Peaking
Facility 333	Pinehurst	NC	Solar PV	2.3	Intermediate/Peaking
Facility 334	N/A	NC	Solar PV	9.7	Intermediate/Peaking
Facility 335	Raleigh	NC	Solar PV	565.0	Intermediate/Peaking
Facility 336	Raleigh	NC	Solar PV	1,139.0	Intermediate/Peaking
Facility 337	Weaverville	NC	Solar PV	19.0	Intermediate/Peaking
Facility 338	Canton	NC	Solar PV	440.0	Intermediate/Peaking
Facility 339	Cary	NC	Solar PV	1,800.0	Intermediate/Peaking
Facility 340	Clyde	NC	Solar PV	77.0	Intermediate/Peaking
Facility 341	Asheville	NC	Solar PV	66.0	Intermediate/Peaking
Facility 342	Pittsboro	NC	Solar PV	81.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 343	Raleigh	NC	Solar PV	204.0	Intermediate/Peaking
Facility 344	Asheville	NC	Solar PV	3.5	Intermediate/Peaking
Facility 345	Southport	NC	Solar PV	2.3	Intermediate/Peaking
Facility 346	Black Mountain	NC	Solar PV	4.3	Intermediate/Peaking
Facility 347	Raleigh	NC	Solar PV	4.0	Intermediate/Peaking
Facility 348	Randolph	NC	Solar PV	4.1	Intermediate/Peaking
Facility 349	N/A	NC	Solar PV	3.1	Intermediate/Peaking
Facility 350	Wilmington	NC	Solar PV	2.4	Intermediate/Peaking
Facility 351	Fuquay Varina	NC	Solar PV	6.5	Intermediate/Peaking
Facility 352	Zebulon	NC	Solar PV	3.4	Intermediate/Peaking
Facility 353	Willow Spring	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 354	Chapel Hill	NC	Solar PV	3.3	Intermediate/Peaking
Facility 355	Raleigh	NC	Solar PV	3.5	Intermediate/Peaking
Facility 356	Asheville	NC	Solar PV	2.9	Intermediate/Peaking
Facility 357	Swansboro	NC	Solar PV	2.1	Intermediate/Peaking
Facility 358	Wake	NC	Solar PV	4.7	Intermediate/Peaking
Facility 359	Morrisville	NC	Solar PV	5.2	Intermediate/Peaking
Facility 360	Asheville	NC	Solar PV	4.0	Intermediate/Peaking
Facility 361	Raleigh	NC	Solar PV	4.5	Intermediate/Peaking
Facility 362	Zebulon	NC	Solar PV	5.7	Intermediate/Peaking
Facility 363	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 364	Wake	NC	Solar PV	2.1	Intermediate/Peaking
Facility 365	N/A	NC	Solar PV	2.4	Intermediate/Peaking
Facility 366	Wilmington	NC	Solar PV	3.7	Intermediate/Peaking
Facility 367	Buncombe	NC	Solar PV	2.7	Intermediate/Peaking
Facility 368	Roxboro	NC	Solar PV	3.3	Intermediate/Peaking
Facility 369	Nash	NC	Solar PV	10.0	Intermediate/Peaking
Facility 370	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 371	N/A	NC	Solar PV	2.8	Intermediate/Peaking
Facility 372	Wake	NC	Solar PV	3.4	Intermediate/Peaking
Facility 373	Chatham	NC	Solar PV	3.1	Intermediate/Peaking
Facility 374	Weaverville	NC	Solar PV	3.7	Intermediate/Peaking
Facility 375	Wilmington	NC	Solar PV	5.9	Intermediate/Peaking
Facility 376	Willard	NC	Solar PV	4.1	Intermediate/Peaking
Facility 377	Cary	NC	Solar PV	3.9	Intermediate/Peaking
Facility 378	Knightdale	NC	Solar PV	2.0	Intermediate/Peaking
Facility 379	Wilmington	NC	Solar PV	4.8	Intermediate/Peaking
Facility 380	Apex	NC	Solar PV	5.6	Intermediate/Peaking
Facility 381	Norlina	NC	Solar PV	384.0	Intermediate/Peaking
Facility 382	Buncombe	NC	Solar PV	6.5	Intermediate/Peaking
Facility 383	N/A	NC	Solar PV	2.8	Intermediate/Peaking
Facility 384	Chapel Hill	NC	Solar PV	4.5	Intermediate/Peaking
Facility 385	Pittsboro	NC	Solar PV	6.9	Intermediate/Peaking
Facility 386	Chapel Hill	NC	Solar PV	5.4	Intermediate/Peaking
Facility 387	Raleigh	NC	Solar PV	2.6	Intermediate/Peaking
Facility 388	N/A	NC	Solar PV	3.6	Intermediate/Peaking
Facility 389	Franklin	NC	Solar PV	5.5	Intermediate/Peaking
Facility 390	Wake	NC	Solar PV	2.7	Intermediate/Peaking
Facility 391	Chatham	NC	Solar PV	3.0	Intermediate/Peaking
Facility 392	Buncombe	NC	Solar PV	2.7	Intermediate/Peaking
Facility 393	Oxford	NC	Solar PV	2,750.0	Intermediate/Peaking
Facility 394	Buncombe	NC	Solar PV	9.0	Intermediate/Peaking
Facility 395	Raleigh	NC	Solar PV	4.2	Intermediate/Peaking
Facility 396	Bahama	NC	Solar PV	3.7	Intermediate/Peaking
Facility 397	Kinston	NC	Solar PV	192.5	Intermediate/Peaking
Facility 398	Buncombe	NC	Solar PV	2.5	Intermediate/Peaking
Facility 399	Garner	NC	Solar PV	160.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 400	Morrisville	NC	Solar PV	3.5	Intermediate/Peaking
Facility 401	Hampstead	NC	Solar PV	3.1	Intermediate/Peaking
Facility 402	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 403	Raleigh	NC	Solar PV	7.7	Intermediate/Peaking
Facility 404	Cary	NC	Solar PV	4.4	Intermediate/Peaking
Facility 405	Wilmington	NC	Solar PV	5.2	Intermediate/Peaking
Facility 406	Asheville	NC	Solar PV	2.1	Intermediate/Peaking
Facility 407	Wake	NC	Solar PV	2.5	Intermediate/Peaking
Facility 408	Pinehurst	NC	Solar PV	3.9	Intermediate/Peaking
Facility 409	Asheville	NC	Solar PV	4.8	Intermediate/Peaking
Facility 410	Wilmington	NC	Solar PV	2.8	Intermediate/Peaking
Facility 411	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 412	Raleigh	NC	Solar PV	3.5	Intermediate/Peaking
Facility 413	Kure Beach	NC	Solar PV	2.4	Intermediate/Peaking
Facility 414	Buncombe	NC	Solar PV	6.0	Intermediate/Peaking
Facility 415	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 416	Buncombe	NC	Solar PV	1.4	Intermediate/Peaking
Facility 417	Chatham	NC	Solar PV	2.8	Intermediate/Peaking
Facility 418	Henderson	NC	Solar PV	100.0	Intermediate/Peaking
Facility 419	Henderson	NC	Solar PV	125.0	Intermediate/Peaking
Facility 420	Raleigh	NC	Solar PV	3.5	Intermediate/Peaking
Facility 421	Wilmington	NC	Solar PV	2.8	Intermediate/Peaking
Facility 422	Spruce Pine	NC	Solar PV	17.0	Intermediate/Peaking
Facility 423	Mitchell	NC	Solar PV	3.8	Intermediate/Peaking
Facility 424	Wilmington	NC	Solar PV	6.3	Intermediate/Peaking
Facility 425	Pittsboro	NC	Solar PV	3.7	Intermediate/Peaking
Facility 426	Asheville	NC	Solar PV	5.3	Intermediate/Peaking
Facility 427	Chatham	NC	Solar PV	4.1	Intermediate/Peaking
Facility 428	Linden	NC	Solar PV	4.2	Intermediate/Peaking
Facility 429	Raleigh	NC	Solar PV	3.7	Intermediate/Peaking
Facility 430	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 431	Smyrna	NC	Solar PV	2.2	Intermediate/Peaking
Facility 432	Cary	NC	Solar PV	5.8	Intermediate/Peaking
Facility 433	Clayton	NC	Solar PV	3.5	Intermediate/Peaking
Facility 434	N/A	NC	Wind	1.8	Intermediate/Peaking
Facility 435	Alexander	NC	Solar PV	3.4	Intermediate/Peaking
Facility 436	Wake	NC	Solar PV	4.9	Intermediate/Peaking
Facility 437	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 438	Chatham	NC	Solar PV	6.4	Intermediate/Peaking
Facility 439	Chapel Hill	NC	Solar PV	3.5	Intermediate/Peaking
Facility 440	Holly Springs	NC	Solar PV	5.1	Intermediate/Peaking
Facility 441	Raleigh	NC	Solar PV	2.5	Intermediate/Peaking
Facility 442	Candler	NC	Solar PV	2.2	Intermediate/Peaking
Facility 443	High Falls	NC	Hydro	600.0	Intermediate/Peaking
Facility 444	Troy	NC	Hydro	990.0	Intermediate/Peaking
Facility 445	Oxford	NC	Solar PV	158.0	Intermediate/Peaking
Facility 446	Oxford	NC	Solar PV	172.8	Intermediate/Peaking
Facility 447	N/A	NC	Solar PV	7.9	Intermediate/Peaking
Facility 448	New Bern	NC	Landfill Gas	400.0	Baseload
Facility 449	NEW HANOVER	NC	Solar PV	1.0	Intermediate/Peaking
Facility 450	Asheboro	NC	Solar PV	5.3	Intermediate/Peaking
Facility 451	Wake	NC	Solar PV	3.4	Intermediate/Peaking
Facility 452	PERSON	NC	Solar PV	1.9	Intermediate/Peaking
Facility 453	Dudley	NC	Solar PV	22.3	Intermediate/Peaking
Facility 454	Fletcher	NC	Solar PV	3.9	Intermediate/Peaking
Facility 455	Cary	NC	Solar PV	2.9	Intermediate/Peaking
Facility 456	Wilmington	NC	Solar PV	2.5	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 457	Harnett	NC	Solar PV	8.5	Intermediate/Peaking
Facility 458	N/A	NC	Solar PV	4.0	Intermediate/Peaking
Facility 459	N/A	NC	Solar PV	3.4	Intermediate/Peaking
Facility 460	Wake	NC	Solar PV	2.7	Intermediate/Peaking
Facility 461	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 462	N/A	NC	Solar PV	6.6	Intermediate/Peaking
Facility 463	Wayne	NC	Solar PV	1.5	Intermediate/Peaking
Facility 464	Buncombe	NC	Solar PV	3.7	Intermediate/Peaking
Facility 465	Buncombe	NC	Solar PV	7.5	Intermediate/Peaking
Facility 466	Buncombe	NC	Solar PV	3.0	Intermediate/Peaking
Facility 467	Wayne	NC	Solar PV	4.5	Intermediate/Peaking
Facility 468	Boiling Spring Lakes	NC	Solar PV	2.5	Intermediate/Peaking
Facility 469	Wayne	NC	Solar PV	3.8	Intermediate/Peaking
Facility 470	JOHNSTON	NC	Solar PV	3.6	Intermediate/Peaking
Facility 471	Buncombe	NC	Solar PV	4.4	Intermediate/Peaking
Facility 472	Pittsboro	NC	Solar PV	3.0	Intermediate/Peaking
Facility 473	Wake	NC	Solar PV	3.3	Intermediate/Peaking
Facility 474	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 475	NEW HANOVER	NC	Solar PV	3.1	Intermediate/Peaking
Facility 476	Granville	NC	Solar PV	2.9	Intermediate/Peaking
Facility 477	Wake	NC	Solar PV	1.5	Intermediate/Peaking
Facility 478	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 479	NEW HANOVER	NC	Solar PV	1.8	Intermediate/Peaking
Facility 480	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 481	Manson	NC	Solar PV	3.9	Intermediate/Peaking
Facility 482	Harnett	NC	Solar PV	4.4	Intermediate/Peaking
Facility 483	Chatham	NC	Solar PV	3.6	Intermediate/Peaking
Facility 484	Buncombe	NC	Solar PV	5.0	Intermediate/Peaking
Facility 485	VANCE	NC	Solar PV	3.0	Intermediate/Peaking
Facility 486	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 487	Buncombe	NC	Solar PV	1.6	Intermediate/Peaking
Facility 488	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 489	Wake	NC	Solar PV	2.4	Intermediate/Peaking
Facility 490	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 491	Wake	NC	Solar PV	2.7	Intermediate/Peaking
Facility 492	Buncombe	NC	Solar PV	3.6	Intermediate/Peaking
Facility 493	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 494	Buncombe	NC	Solar PV	4.3	Intermediate/Peaking
Facility 495	JOHNSTON	NC	Solar PV	9.9	Intermediate/Peaking
Facility 496	N/A	NC	Solar PV	4.0	Intermediate/Peaking
Facility 497	Mitchell	NC	Solar PV	3.2	Intermediate/Peaking
Facility 498	Buncombe	NC	Solar PV	1.6	Intermediate/Peaking
Facility 499	Wake	NC	Solar PV	3.7	Intermediate/Peaking
Facility 500	Wake	NC	Solar PV	2.3	Intermediate/Peaking
Facility 501	Wake	NC	Solar PV	5.3	Intermediate/Peaking
Facility 502	Chatham	NC	Solar PV	2.5	Intermediate/Peaking
Facility 503	Wake	NC	Solar PV	3.7	Intermediate/Peaking
Facility 504	NEW HANOVER	NC	Solar PV	1.0	Intermediate/Peaking
Facility 505	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 506	Buncombe	NC	Solar PV	2.7	Intermediate/Peaking
Facility 507	Moncure	NC	Hydro	4,400.0	Intermediate/Peaking
Facility 508	Wake	NC	Solar PV	4.2	Intermediate/Peaking
Facility 509	N/A	NC	Solar PV	4.7	Intermediate/Peaking
Facility 510	Wake	NC	Solar PV	2.8	Intermediate/Peaking
Facility 511	Wayne	NC	Solar PV	4.1	Intermediate/Peaking
Facility 512	Cary	NC	Solar PV	4.0	Intermediate/Peaking
Facility 513	Moore	NC	Solar PV	8.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 514	Moore	NC	Solar PV	10.0	Intermediate/Peaking
Facility 515	Buncombe	NC	Solar PV	1.8	Intermediate/Peaking
Facility 516	Buncombe	NC	Solar PV	1.9	Intermediate/Peaking
Facility 517	Buncombe	NC	Solar PV	1.7	Intermediate/Peaking
Facility 518	Asheville	NC	Solar PV	22.5	Intermediate/Peaking
Facility 519	Waynesville	NC	Solar PV	22.5	Intermediate/Peaking
Facility 520	Wake	NC	Solar PV	2.3	Intermediate/Peaking
Facility 521	Raleigh	NC	Solar PV	5.5	Intermediate/Peaking
Facility 522	Raleigh	NC	Solar PV	10.0	Intermediate/Peaking
Facility 523	Moore	NC	Solar PV	8.2	Intermediate/Peaking
Facility 524	Buncombe	NC	Solar PV	3.1	Intermediate/Peaking
Facility 525	Buncombe	NC	Solar PV	0.9	Intermediate/Peaking
Facility 526	Buncombe	NC	Solar PV	6.0	Intermediate/Peaking
Facility 527	Pinehurst	NC	Solar PV	4.3	Intermediate/Peaking
Facility 528	Candler	NC	Solar PV	2.3	Intermediate/Peaking
Facility 529	N/A	NC	Solar PV	3.0	Intermediate/Peaking
Facility 530	Carteret	NC	Solar PV	2.0	Intermediate/Peaking
Facility 531	Chatham	NC	Solar PV	1.9	Intermediate/Peaking
Facility 532	N/A	NC	Solar PV	1.7	Intermediate/Peaking
Facility 533	Wake	NC	Solar PV	2.3	Intermediate/Peaking
Facility 534	Buncombe	NC	Solar PV	3.7	Intermediate/Peaking
Facility 535	N/A	NC	Solar PV	4.3	Intermediate/Peaking
Facility 536	Chatham	NC	Solar PV	7.1	Intermediate/Peaking
Facility 537	N/A	NC	Solar PV	3.4	Intermediate/Peaking
Facility 538	Clyde	NC	Solar PV	2.9	Intermediate/Peaking
Facility 539	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 540	Moore	NC	Solar PV	8.4	Intermediate/Peaking
Facility 541	NEW HANOVER	NC	Solar PV	1.4	Intermediate/Peaking
Facility 542	Chatham	NC	Solar PV	5.5	Intermediate/Peaking
Facility 543	Raleigh	NC	Solar PV	4.4	Intermediate/Peaking
Facility 544	Raleigh	NC	Solar PV	2.4	Intermediate/Peaking
Facility 545	Broadway	NC	Solar PV	5.8	Intermediate/Peaking
Facility 546	Asheville	NC	Solar PV	4.4	Intermediate/Peaking
Facility 547	Cary	NC	Solar PV	4.3	Intermediate/Peaking
Facility 548	Wake	NC	Solar PV	10.3	Intermediate/Peaking
Facility 549	Fletcher	NC	Solar PV	7.4	Intermediate/Peaking
Facility 550	Kure Beach	NC	Solar PV	2.6	Intermediate/Peaking
Facility 551	Cary	NC	Solar PV	2.1	Intermediate/Peaking
Facility 552	Cary	NC	Solar PV	4.4	Intermediate/Peaking
Facility 553	Pinehurst	NC	Solar PV	4.6	Intermediate/Peaking
Facility 554	Vass	NC	Solar PV	8.6	Intermediate/Peaking
Facility 555	Wilmington	NC	Solar PV	4.5	Intermediate/Peaking
Facility 556	Asheville	NC	Solar PV	4.7	Intermediate/Peaking
Facility 557	Pittsboro	NC	Solar PV	5.1	Intermediate/Peaking
Facility 558	Franklinville	NC	Hydro	550.0	Intermediate/Peaking
Facility 559	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 560	Morrisville	NC	Solar PV	8.5	Intermediate/Peaking
Facility 561	Wake	NC	Solar PV	2.4	Intermediate/Peaking
Facility 562	Hope Mills	NC	Hydro	800.0	Intermediate/Peaking
Facility 563	Asheville	NC	Solar PV	2.1	Intermediate/Peaking
Facility 564	Chapel Hill	NC	Solar PV	2.5	Intermediate/Peaking
Facility 565	Weaverville	NC	Solar PV	42.0	Intermediate/Peaking
Facility 566	Arden	NC	Solar PV	4.4	Intermediate/Peaking
Facility 567	Apex	NC	Solar PV	4.6	Intermediate/Peaking
Facility 568	Raleigh	NC	Solar PV	5.6	Intermediate/Peaking
Facility 569	Nash	NC	Solar PV	1.6	Intermediate/Peaking
Facility 570	ORANGE	NC	Solar PV	1.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 571	Pittsboro	NC	Solar PV	3.0	Intermediate/Peaking
Facility 572	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 573	Wake	NC	Solar PV	2.5	Intermediate/Peaking
Facility 574	Wake	NC	Solar PV	6.6	Intermediate/Peaking
Facility 575	Buncombe	NC	Solar PV	2.9	Intermediate/Peaking
Facility 576	Buncombe	NC	Solar PV	2.9	Intermediate/Peaking
Facility 577	Chapel Hill	NC	Solar PV	4.6	Intermediate/Peaking
Facility 578	Raleigh	NC	Solar PV	6.2	Intermediate/Peaking
Facility 579	N/A	NC	Solar PV	3.0	Intermediate/Peaking
Facility 580	Buncombe	NC	Solar PV	3.3	Intermediate/Peaking
Facility 581	Kinston	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 582	Kinston	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 583	Moore	NC	Solar PV	2.8	Intermediate/Peaking
Facility 584	Buncombe	NC	Solar PV	1.9	Intermediate/Peaking
Facility 585	Buncombe	NC	Solar PV	2.3	Intermediate/Peaking
Facility 586	Wilmington	NC	Solar PV	4.6	Intermediate/Peaking
Facility 587	Raleigh	NC	Solar PV	5.4	Intermediate/Peaking
Facility 588	Raleigh	NC	Solar PV	2.3	Intermediate/Peaking
Facility 589	Cary	NC	Solar PV	3.7	Intermediate/Peaking
Facility 590	Wake	NC	Solar PV	2.4	Intermediate/Peaking
Facility 591	Sanford	NC	Solar PV	3.8	Intermediate/Peaking
Facility 592	Wake	NC	Solar PV	2.5	Intermediate/Peaking
Facility 593	Apex	NC	Solar PV	9.8	Intermediate/Peaking
Facility 594	Wilmington	NC	Solar PV	4.0	Intermediate/Peaking
Facility 595	N/A	NC	Solar PV	6.1	Intermediate/Peaking
Facility 596	Wilmington	NC	Solar PV	4.6	Intermediate/Peaking
Facility 597	Buncombe	NC	Solar PV	0.8	Intermediate/Peaking
Facility 598	Buncombe	NC	Solar PV	3.2	Intermediate/Peaking
Facility 599	Wilmington	NC	Solar PV	4.1	Intermediate/Peaking
Facility 600	Chatham	NC	Solar PV	2.8	Intermediate/Peaking
Facility 601	Lee	NC	Solar PV	5.0	Intermediate/Peaking
Facility 602	Asheville	NC	Solar PV	10.0	Intermediate/Peaking
Facility 603	Asheville	NC	Solar PV	21.0	Intermediate/Peaking
Facility 604	Chatham	NC	Solar PV	4.9	Intermediate/Peaking
Facility 605	Asheville	NC	Solar PV	6.0	Intermediate/Peaking
Facility 606	Jupiter	NC	Hydro	1,000.0	Intermediate/Peaking
Facility 607	Cary	NC	Solar PV	9.0	Intermediate/Peaking
Facility 608	Raleigh	NC	Solar PV	4.2	Intermediate/Peaking
Facility 609	Fayetteville	NC	Solar PV	3.3	Intermediate/Peaking
Facility 610	Harnett	NC	Solar PV	4.7	Intermediate/Peaking
Facility 611	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 612	Buncombe	NC	Solar PV	1.0	Intermediate/Peaking
Facility 613	Moore	NC	Solar PV	2.8	Intermediate/Peaking
Facility 614	Buncombe	NC	Solar PV	5.3	Intermediate/Peaking
Facility 615	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 616	Fletcher	NC	Solar PV	20.0	Intermediate/Peaking
Facility 617	Chatham	NC	Solar PV	7.6	Intermediate/Peaking
Facility 618	Wake	NC	Solar PV	2.9	Intermediate/Peaking
Facility 619	Wake	NC	Solar PV	1.6	Intermediate/Peaking
Facility 620	Wake	NC	Solar PV	2.1	Intermediate/Peaking
Facility 621	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 622	Buncombe	NC	Solar PV	2.5	Intermediate/Peaking
Facility 623	Raleigh	NC	Solar PV	5.3	Intermediate/Peaking
Facility 624	Clayton	NC	Solar PV	4.6	Intermediate/Peaking
Facility 625	Raleigh	NC	Solar PV	12.0	Intermediate/Peaking
Facility 626	Wilmington	NC	Solar PV	4.9	Intermediate/Peaking
Facility 627	Asheville	NC	Solar PV	5.0	Intermediate/Peaking
Facility 628	Buncombe	NC	Solar PV	2.2	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 629	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 630	Madison	NC	Solar PV	4.0	Intermediate/Peaking
Facility 631	Wake	NC	Solar PV	3.7	Intermediate/Peaking
Facility 632	Candler	NC	Solar PV	6.1	Intermediate/Peaking
Facility 633	Apex	NC	Solar PV	4.3	Intermediate/Peaking
Facility 634	NEW HANOVER	NC	Solar PV	1.4	Intermediate/Peaking
Facility 635	NEW HANOVER	NC	Solar PV	3.4	Intermediate/Peaking
Facility 636	New Bern	NC	Solar PV	4.4	Intermediate/Peaking
Facility 637	Wilmington	NC	Solar PV	2.4	Intermediate/Peaking
Facility 638	Wilmington	NC	Solar PV	2.6	Intermediate/Peaking
Facility 639	Weaverville	NC	Solar PV	4.9	Intermediate/Peaking
Facility 640	Asheville	NC	Solar PV	2.8	Intermediate/Peaking
Facility 641	Asheville	NC	Solar PV	2.0	Intermediate/Peaking
Facility 642	Raleigh	NC	Solar PV	2.6	Intermediate/Peaking
Facility 643	Raleigh	NC	Solar PV	5.7	Intermediate/Peaking
Facility 644	Hampstead	NC	Solar PV	4.3	Intermediate/Peaking
Facility 645	Buncombe	NC	Solar PV	1.5	Intermediate/Peaking
Facility 646	Wake	NC	Solar PV	1.6	Intermediate/Peaking
Facility 647	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 648	Pittsboro	NC	Solar PV	3.6	Intermediate/Peaking
Facility 649	Wake	NC	Solar PV	1.1	Intermediate/Peaking
Facility 650	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 651	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 652	Chatham	NC	Solar PV	2.1	Intermediate/Peaking
Facility 653	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 654	Nash	NC	Solar PV	2.2	Intermediate/Peaking
Facility 655	Wake	NC	Solar PV	1.6	Intermediate/Peaking
Facility 656	Buncombe	NC	Solar PV	3.2	Intermediate/Peaking
Facility 657	Chatham	NC	Solar PV	1.9	Intermediate/Peaking
Facility 658	Raleigh	NC	Solar PV	3.7	Intermediate/Peaking
Facility 659	Asheville	NC	Solar PV	4.0	Intermediate/Peaking
Facility 660	Asheville	NC	Solar PV	2.9	Intermediate/Peaking
Facility 661	Chatham	NC	Solar PV	2.6	Intermediate/Peaking
Facility 662	Wake	NC	Solar PV	3.4	Intermediate/Peaking
Facility 663	Raleigh	NC	Solar PV	4.8	Intermediate/Peaking
Facility 664	Wilmington	NC	Solar PV	3.5	Intermediate/Peaking
Facility 665	Beaufort	NC	Solar PV	2.6	Intermediate/Peaking
Facility 666	Wake	NC	Solar PV	4.9	Intermediate/Peaking
Facility 667	Wilmington	NC	Solar PV	5.2	Intermediate/Peaking
Facility 668	Wayne County	NC	Landfill Gas	3,180.0	Baseload
Facility 669	Mount Olive	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 670	Randolph	NC	Solar PV	3.3	Intermediate/Peaking
Facility 671	Asheville	NC	Solar PV	5.2	Intermediate/Peaking
Facility 672	Cary	NC	Solar PV	2.5	Intermediate/Peaking
Facility 673	Cary	NC	Solar PV	6.3	Intermediate/Peaking
Facility 674	Buncombe	NC	Solar PV	2.5	Intermediate/Peaking
Facility 675	Raleigh	NC	Solar PV	2.9	Intermediate/Peaking
Facility 676	Sampson	NC	Wind	1.9	Intermediate/Peaking
Facility 677	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 678	Buncombe	NC	Solar PV	1.9	Intermediate/Peaking
Facility 679	Garner	NC	Solar PV	4.3	Intermediate/Peaking
Facility 680	Chatham	NC	Solar PV	2.7	Intermediate/Peaking
Facility 681	Smyrna	NC	Solar & Wind	17.7	Intermediate/Peaking
Facility 682	Vass	NC	Solar PV	13.0	Intermediate/Peaking
Facility 683	Wake	NC	Solar PV	4.8	Intermediate/Peaking
Facility 684	Wake	NC	Solar PV	5.4	Intermediate/Peaking
Facility 685	Raleigh	NC	Solar PV	3.7	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 686	Wilmington	NC	Solar PV	4.9	Intermediate/Peaking
Facility 687	NEW HANOVER	NC	Solar PV	3.6	Intermediate/Peaking
Facility 688	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 689	Apex	NC	Solar PV	3.1	Intermediate/Peaking
Facility 690	Raleigh	NC	Solar PV	1,040.0	Intermediate/Peaking
Facility 691	Clayton	NC	Solar PV	4.2	Intermediate/Peaking
Facility 692	Raleigh	NC	Solar PV	2.4	Intermediate/Peaking
Facility 693	West End	NC	Solar PV	4.3	Intermediate/Peaking
Facility 694	Semora	NC	Solar PV	3.6	Intermediate/Peaking
Facility 695	Wake	NC	Solar PV	3.4	Intermediate/Peaking
Facility 696	Laurinburg	NC	Solar PV	2,000.0	Intermediate/Peaking
Facility 697	Laurinburg	NC	Solar PV	2,000.0	Intermediate/Peaking
Facility 698	Henderson	NC	Solar PV	5.5	Intermediate/Peaking
Facility 699	Wilmington	NC	Solar PV	2.3	Intermediate/Peaking
Facility 700	Wilmington	NC	Solar PV	3.4	Intermediate/Peaking
Facility 701	Onslow	NC	Solar PV	4.6	Intermediate/Peaking
Facility 702	Cary	NC	Solar PV	3.6	Intermediate/Peaking
Facility 703	Asheville	NC	Solar PV	7.3	Intermediate/Peaking
Facility 704	Asheville	NC	Solar PV	4.8	Intermediate/Peaking
Facility 705	Wilmington	NC	Solar PV	2.6	Intermediate/Peaking
Facility 706	Chapel Hill	NC	Solar PV	6.8	Intermediate/Peaking
Facility 707	Carolina Beach	NC	Solar PV	4.4	Intermediate/Peaking
Facility 708	Arden	NC	Solar PV	6.2	Intermediate/Peaking
Facility 709	Moore	NC	Solar PV	3.1	Intermediate/Peaking
Facility 710	Garner	NC	Solar PV	6.3	Intermediate/Peaking
Facility 711	Raleigh	NC	Solar PV	3.4	Intermediate/Peaking
Facility 712	Cary	NC	Solar PV	4.1	Intermediate/Peaking
Facility 713	Rocky Point	NC	Solar PV	2.5	Intermediate/Peaking
Facility 714	Barnardsville	NC	Solar PV	2.5	Intermediate/Peaking
Facility 715	Cary	NC	Solar PV	5.0	Intermediate/Peaking
Facility 716	Willow Spring	NC	Solar PV	2.0	Intermediate/Peaking
Facility 717	Buncombe	NC	Solar PV	4.0	Intermediate/Peaking
Facility 718	Moore	NC	Solar PV	3.8	Intermediate/Peaking
Facility 719	Asheville	NC	Solar PV	3.4	Intermediate/Peaking
Facility 720	Asheville	NC	Solar PV	3.4	Intermediate/Peaking
Facility 721	Buncombe	NC	Solar PV	4.6	Intermediate/Peaking
Facility 722	Buncombe	NC	Solar PV	3.1	Intermediate/Peaking
Facility 723	JOHNSTON	NC	Solar PV	1.1	Intermediate/Peaking
Facility 724	Chatham	NC	Solar PV	1.9	Intermediate/Peaking
Facility 725	Buncombe	NC	Solar PV	1.0	Intermediate/Peaking
Facility 726	Wake	NC	Solar PV	3.0	Intermediate/Peaking
Facility 727	Buncombe	NC	Solar PV	1.4	Intermediate/Peaking
Facility 728	Wilmington	NC	Solar PV	2.4	Intermediate/Peaking
Facility 729	Siler City	NC	Solar PV	8.6	Intermediate/Peaking
Facility 730	Person County	NC	Solar PV	1,000.0	Intermediate/Peaking
Facility 731	Person County	NC	Solar PV	2,400.0	Intermediate/Peaking
Facility 732	Wilmington	NC	Solar PV	2.4	Intermediate/Peaking
Facility 733	Raleigh	NC	Solar PV	2.5	Intermediate/Peaking
Facility 734	Holly Springs	NC	Solar PV	7.0	Intermediate/Peaking
Facility 735	Pittsboro	NC	Solar PV	11.0	Intermediate/Peaking
Facility 736	Buncombe	NC	Solar PV	1.7	Intermediate/Peaking
Facility 737	Buncombe	NC	Solar PV	1.0	Intermediate/Peaking
Facility 738	Wake	NC	Solar PV	6.4	Intermediate/Peaking
Facility 739	Asheville	NC	Solar PV	4.8	Intermediate/Peaking
Facility 740	Chatham	NC	Solar PV	2.5	Intermediate/Peaking
Facility 741	Leland	NC	Solar PV	4.9	Intermediate/Peaking
Facility 742	Cary	NC	Solar PV	5.3	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 743	Asheville	NC	Solar PV	5.4	Intermediate/Peaking
Facility 744	Bynum	NC	Hydro	500.0	Intermediate/Peaking
Facility 745	Chatham	NC	Solar PV	500.0	Intermediate/Peaking
Facility 746	Cary	NC	Solar PV	3.9	Intermediate/Peaking
Facility 747	Raleigh	NC	Solar PV	2.2	Intermediate/Peaking
Facility 748	Wilmington	NC	Solar PV	3.8	Intermediate/Peaking
Facility 749	Clinton	NC	Wood Chip/Steam	150.0	Baseload
Facility 750	Bunn	NC	Solar PV	3,600.0	Intermediate/Peaking
Facility 751	Fairmont	NC	Solar PV	3,600.0	Intermediate/Peaking
Facility 752	Maxton	NC	Solar PV	3,600.0	Intermediate/Peaking
Facility 753	Wilmington	NC	Solar PV	383.0	Intermediate/Peaking
Facility 754	Pinehurst	NC	Solar PV	4.3	Intermediate/Peaking
Facility 755	Hoke	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 756	Robeson	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 757	NEW HANOVER	NC	Wind	4.2	Intermediate/Peaking
Facility 758	Chatham	NC	Solar PV	4.2	Intermediate/Peaking
Facility 759	Wake	NC	Solar PV	2.8	Intermediate/Peaking
Facility 760	Chatham	NC	Solar PV	2.5	Intermediate/Peaking
Facility 761	NEW HANOVER	NC	Solar PV	3.9	Intermediate/Peaking
Facility 762	NEW HANOVER	NC	Solar PV	1.6	Intermediate/Peaking
Facility 763	Franklin	NC	Solar PV	7.6	Intermediate/Peaking
Facility 764	Raleigh	NC	Solar PV	2.4	Intermediate/Peaking
Facility 765	Fuquay-Varina	NC	Solar PV	410.0	Intermediate/Peaking
Facility 766	Pittsboro	NC	Solar PV	7.1	Intermediate/Peaking
Facility 767	Fairview	NC	Solar PV	8.7	Intermediate/Peaking
Facility 768	Candler	NC	Solar PV	5.6	Intermediate/Peaking
Facility 769	Wake	NC	Solar PV	3.7	Intermediate/Peaking
Facility 770	Cary	NC	Solar PV	192.5	Intermediate/Peaking
Facility 771	Apex	NC	Solar PV	2.4	Intermediate/Peaking
Facility 772	Raleigh	NC	Solar PV	10.0	Intermediate/Peaking
Facility 773	Candler	NC	Solar PV	5.5	Intermediate/Peaking
Facility 774	Wake	NC	Solar PV	1.9	Intermediate/Peaking
Facility 775	Wilmington	NC	Solar PV	2.5	Intermediate/Peaking
Facility 776	Hampstead	NC	Solar PV	3.4	Intermediate/Peaking
Facility 777	Raleigh	NC	Solar PV	5.3	Intermediate/Peaking
Facility 778	Pittsboro	NC	Solar PV	2.6	Intermediate/Peaking
Facility 779	Raleigh	NC	Solar PV	2.9	Intermediate/Peaking
Facility 780	Buncombe	NC	Solar PV	11.0	Intermediate/Peaking
Facility 781	Buncombe	NC	Solar PV	11.0	Intermediate/Peaking
Facility 782	Buncombe	NC	Solar PV	4.9	Intermediate/Peaking
Facility 783	JOHNSTON	NC	Solar PV	4.6	Intermediate/Peaking
Facility 784	Onslow	NC	Solar PV	2.5	Intermediate/Peaking
Facility 785	Wake	NC	Solar PV	4.1	Intermediate/Peaking
Facility 786	NEW HANOVER	NC	Solar PV	2.0	Intermediate/Peaking
Facility 787	NEW HANOVER	NC	Solar PV	1.2	Intermediate/Peaking
Facility 788	N/A	NC	Solar PV	4.2	Intermediate/Peaking
Facility 789	NEW HANOVER	NC	Solar PV	9.9	Intermediate/Peaking
Facility 790	LENOIR	NC	Solar PV	5.1	Intermediate/Peaking
Facility 791	Rockingham	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 792	Pittsboro	NC	Hydro	310.0	Intermediate/Peaking
Facility 793	Lee	NC	Hydro	310.0	Intermediate/Peaking
Facility 794	NEW HANOVER	NC	Solar PV	2.0	Intermediate/Peaking
Facility 795	Buncombe	NC	Solar PV	2.4	Intermediate/Peaking
Facility 796	Wake	NC	Solar PV	3.1	Intermediate/Peaking
Facility 797	Buncombe	NC	Solar PV	2.3	Intermediate/Peaking
Facility 798	NEW HANOVER	NC	Solar PV	3.6	Intermediate/Peaking
Facility 799	Rose Hill	NC	Solar PV	1,600.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 800	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 801	Wilmington	NC	Solar PV	2.6	Intermediate/Peaking
Facility 802	Apex	NC	Solar PV	3.6	Intermediate/Peaking
Facility 803	Cary	NC	Solar PV	2.6	Intermediate/Peaking
Facility 804	Moore	NC	Solar PV	3.6	Intermediate/Peaking
Facility 805	Wake	NC	Solar PV	7.5	Intermediate/Peaking
Facility 806	Chapel Hill	NC	Solar PV	2.3	Intermediate/Peaking
Facility 807	Raleigh	NC	Solar PV	3.5	Intermediate/Peaking
Facility 808	Wake	NC	Solar PV	1.9	Intermediate/Peaking
Facility 809	Nash County	NC	Solar PV	1,200.0	Intermediate/Peaking
Facility 810	Cary	NC	Solar PV	800.0	Intermediate/Peaking
Facility 811	Cary	NC	Solar PV	960.0	Intermediate/Peaking
Facility 812	Cary	NC	Solar PV	2.9	Intermediate/Peaking
Facility 813	Sanford	NC	Solar PV	6.1	Intermediate/Peaking
Facility 814	Nashville	NC	Solar PV	4.5	Intermediate/Peaking
Facility 815	Holly Springs	NC	Solar PV	4.1	Intermediate/Peaking
Facility 816	Castle Hayne	NC	Solar PV	3.3	Intermediate/Peaking
Facility 817	Black Mountain	NC	Solar PV	4.7	Intermediate/Peaking
Facility 818	Selma	NC	Solar PV	4.7	Intermediate/Peaking
Facility 819	Raleigh	NC	Solar PV	3.6	Intermediate/Peaking
Facility 820	Wilmington	NC	Solar PV	2.6	Intermediate/Peaking
Facility 821	Chapel Hill	NC	Solar PV	2.0	Intermediate/Peaking
Facility 822	Asheville	NC	Solar PV	4.3	Intermediate/Peaking
Facility 823	Scotland	NC	Solar PV	5.0	Intermediate/Peaking
Facility 824	Chatham	NC	Solar PV	1.7	Intermediate/Peaking
Facility 825	Wake	NC	Solar PV	3.6	Intermediate/Peaking
Facility 826	Buncombe	NC	Solar PV	7.1	Intermediate/Peaking
Facility 827	Raleigh	NC	Solar PV	4.5	Intermediate/Peaking
Facility 828	CUMBERLAND	NC	Solar PV	3.9	Intermediate/Peaking
Facility 829	CUMBERLAND	NC	Solar PV	2.3	Intermediate/Peaking
Facility 830	Cary	NC	Solar PV	4.2	Intermediate/Peaking
Facility 831	Cary	NC	Solar PV	2.0	Intermediate/Peaking
Facility 832	Wake	NC	Solar PV	2.6	Intermediate/Peaking
Facility 833	N/A	NC	Solar PV	5.0	Intermediate/Peaking
Facility 834	Cary	NC	Solar PV	4.6	Intermediate/Peaking
Facility 835	Shannon	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 836	N/A	NC	Solar PV	2.0	Intermediate/Peaking
Facility 837	Raleigh	NC	Solar PV	3.5	Intermediate/Peaking
Facility 838	Fairview	NC	Solar PV	3.5	Intermediate/Peaking
Facility 839	Cameron	NC	Solar PV	3.4	Intermediate/Peaking
Facility 840	Wilmington	NC	Solar PV	4.2	Intermediate/Peaking
Facility 841	Kenly	NC	Solar PV	3.8	Intermediate/Peaking
Facility 842	Arden	NC	Solar PV	3.7	Intermediate/Peaking
Facility 843	Cary	NC	Solar PV	3.5	Intermediate/Peaking
Facility 844	Weaverville	NC	Solar PV	3.1	Intermediate/Peaking
Facility 845	Hope Mills	NC	Solar PV	2.3	Intermediate/Peaking
Facility 846	Cary	NC	Solar PV	3.0	Intermediate/Peaking
Facility 847	Wilmington	NC	Solar PV	4.3	Intermediate/Peaking
Facility 848	Fuquay-Varina	NC	Solar PV	5.6	Intermediate/Peaking
Facility 849	Raleigh	NC	Solar PV	4.2	Intermediate/Peaking
Facility 850	Wilmington	NC	Solar PV	2.3	Intermediate/Peaking
Facility 851	Scotland	NC	Solar PV	11.0	Intermediate/Peaking
Facility 852	Scotland	NC	Solar PV	10.0	Intermediate/Peaking
Facility 853	Pittsboro	NC	Solar PV	2.2	Intermediate/Peaking
Facility 854	Wilmington	NC	Solar PV	6.4	Intermediate/Peaking
Facility 855	Wilmington	NC	Solar PV	2.0	Intermediate/Peaking
Facility 856	Raleigh	NC	Solar PV	2.0	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 857	Raleigh	NC	Solar PV	385.0	Intermediate/Peaking
Facility 858	Chapel Hill	NC	Solar PV	2.6	Intermediate/Peaking
Facility 859	Robeson	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 860	Rowland	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 861	Cary	NC	Solar PV	5.7	Intermediate/Peaking
Facility 862	Asheboro	NC	Solar PV	6.2	Intermediate/Peaking
Facility 863	N/A	NC	Solar PV	3.9	Intermediate/Peaking
Facility 864	Asheville	NC	Solar PV	4.2	Intermediate/Peaking
Facility 865	N/A	NC	Solar PV	5.5	Intermediate/Peaking
Facility 866	Wake	NC	Solar PV	3.4	Intermediate/Peaking
Facility 867	Moore	NC	Solar PV	1.9	Intermediate/Peaking
Facility 868	Moore	NC	Solar PV	1.9	Intermediate/Peaking
Facility 869	Buncombe	NC	Solar PV	3.8	Intermediate/Peaking
Facility 870	Raleigh	NC	Solar PV	2.9	Intermediate/Peaking
Facility 871	Wilmington	NC	Solar PV	4.2	Intermediate/Peaking
Facility 872	Chatham	NC	Solar PV	3.4	Intermediate/Peaking
Facility 873	Buncombe	NC	Solar PV	3.3	Intermediate/Peaking
Facility 874	Wilmington	NC	Solar PV	4.1	Intermediate/Peaking
Facility 875	Wake	NC	Solar PV	3.8	Intermediate/Peaking
Facility 876	Rocky Point	NC	Solar PV	2.3	Intermediate/Peaking
Facility 877	Holly Springs	NC	Solar PV	2.5	Intermediate/Peaking
Facility 878	N/A	NC	Solar PV	4.7	Intermediate/Peaking
Facility 879	Wake	NC	Solar PV	8.7	Intermediate/Peaking
Facility 880	Wilmington	NC	Solar PV	2.6	Intermediate/Peaking
Facility 881	Arden	NC	Solar PV	3.2	Intermediate/Peaking
Facility 882	Buncombe	NC	Solar PV	7.3	Intermediate/Peaking
Facility 883	Wilmington	NC	Solar PV	1,000.0	Intermediate/Peaking
Facility 884	Weaverville	NC	Solar PV	193.0	Intermediate/Peaking
Facility 885	Black Mountain	NC	Solar PV	40.0	Intermediate/Peaking
Facility 886	Wake	NC	Solar PV	2.9	Intermediate/Peaking
Facility 887	Wendell	NC	Solar PV	3.8	Intermediate/Peaking
Facility 888	Buncombe	NC	Solar PV	4.3	Intermediate/Peaking
Facility 889	NEW HANOVER	NC	Solar PV	5.4	Intermediate/Peaking
Facility 890	Raleigh	NC	Solar PV	3.2	Intermediate/Peaking
Facility 891	Holly Springs	NC	Solar PV	4.2	Intermediate/Peaking
Facility 892	Wilmington	NC	Solar PV	4.3	Intermediate/Peaking
Facility 893	Southern Pines	NC	Solar PV	19.9	Intermediate/Peaking
Facility 894	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 895	Holly Springs	NC	Solar PV	6.0	Intermediate/Peaking
Facility 896	Asheville	NC	Solar PV	3.4	Intermediate/Peaking
Facility 897	Cary	NC	Solar PV	3.5	Intermediate/Peaking
Facility 898	Youngsville	NC	Solar PV	2.6	Intermediate/Peaking
Facility 899	Morehead City	NC	Solar PV	2.4	Intermediate/Peaking
Facility 900	Moore	NC	Solar PV	3.6	Intermediate/Peaking
Facility 901	Buncombe	NC	Solar PV	3.9	Intermediate/Peaking
Facility 902	NEW HANOVER	NC	Solar PV	7.7	Intermediate/Peaking
Facility 903	Asheboro	NC	Solar PV	340.0	Intermediate/Peaking
Facility 904	Moore	NC	Solar PV	4.1	Intermediate/Peaking
Facility 905	Buncombe	NC	Solar PV	3.1	Intermediate/Peaking
Facility 906	Buncombe	NC	Solar PV	4.7	Intermediate/Peaking
Facility 907	Buncombe	NC	Solar PV	2.6	Intermediate/Peaking
Facility 908	Wake	NC	Solar PV	1.7	Intermediate/Peaking
Facility 909	Buncombe	NC	Solar PV	3.1	Intermediate/Peaking
Facility 910	Raleigh	NC	Solar PV	2.1	Intermediate/Peaking
Facility 911	Wake	NC	Solar PV	4.0	Intermediate/Peaking
Facility 912	Raleigh	NC	Solar PV	3.8	Intermediate/Peaking
Facility 913	Raleigh	NC	Solar PV	4.1	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 914	Chatham	NC	Solar PV	2.5	Intermediate/Peaking
Facility 915	Hampstead	NC	Solar PV	2.3	Intermediate/Peaking
Facility 916	Buncombe	NC	Solar PV	1.7	Intermediate/Peaking
Facility 917	N/A	NC	Solar PV	1.8	Intermediate/Peaking
Facility 918	VANCE	NC	Solar PV	6.8	Intermediate/Peaking
Facility 919	Buncombe	NC	Solar PV	4.8	Intermediate/Peaking
Facility 920	Wendell	NC	Solar PV	4.2	Intermediate/Peaking
Facility 921	Buncombe	NC	Solar PV	1.5	Intermediate/Peaking
Facility 922	Raleigh	NC	Solar PV	2.1	Intermediate/Peaking
Facility 923	NEW HANOVER	NC	Solar PV	1.0	Intermediate/Peaking
Facility 924	Black Mountain	NC	Solar PV	4.8	Intermediate/Peaking
Facility 925	West End	NC	Solar PV	5.6	Intermediate/Peaking
Facility 926	Garner	NC	Solar PV	3.0	Intermediate/Peaking
Facility 927	Wake	NC	Solar PV	9.6	Intermediate/Peaking
Facility 928	Raleigh	NC	Solar PV	3.3	Intermediate/Peaking
Facility 929	Apex	NC	Solar PV	3.1	Intermediate/Peaking
Facility 930	Black Mountain	NC	Solar PV	30.0	Intermediate/Peaking
Facility 931	Black Mountain	NC	Solar PV	6.2	Intermediate/Peaking
Facility 932	Holly Springs	NC	Solar PV	3.3	Intermediate/Peaking
Facility 933	Raleigh	NC	Solar PV	515.0	Intermediate/Peaking
Facility 934	Wilmington	NC	Solar PV	3.7	Intermediate/Peaking
Facility 935	Cary	NC	Solar PV	5.6	Intermediate/Peaking
Facility 936	Cary	NC	Solar PV	2.5	Intermediate/Peaking
Facility 937	Pittsboro	NC	Solar PV	3.2	Intermediate/Peaking
Facility 938	Cary	NC	Solar PV	3.7	Intermediate/Peaking
Facility 939	Garner	NC	Solar PV	3.1	Intermediate/Peaking
Facility 940	Chapel Hill	NC	Solar PV	4.1	Intermediate/Peaking
Facility 941	Raleigh	NC	Solar PV	2.7	Intermediate/Peaking
Facility 942	N/A	NC	Solar PV	6.5	Intermediate/Peaking
Facility 943	Wilmington	NC	Solar PV	3.8	Intermediate/Peaking
Facility 944	Buncombe	NC	Solar PV	1.4	Intermediate/Peaking
Facility 945	Moore	NC	Solar PV	0.6	Intermediate/Peaking
Facility 946	Raleigh	NC	Solar PV	4.5	Intermediate/Peaking
Facility 947	Buncombe	NC	Solar PV	2.6	Intermediate/Peaking
Facility 948	Weaverville	NC	Solar PV	6.3	Intermediate/Peaking
Facility 949	Rolesville	NC	Solar PV	4.0	Intermediate/Peaking
Facility 950	Raleigh	NC	Solar PV	308.0	Intermediate/Peaking
Facility 951	Chapel Hill	NC	Solar PV	3.5	Intermediate/Peaking
Facility 952	Cary	NC	Solar PV	4.0	Intermediate/Peaking
Facility 953	N/A	NC	Solar PV	3.3	Intermediate/Peaking
Facility 954	Raleigh	NC	Solar PV	2.1	Intermediate/Peaking
Facility 955	Youngsville	NC	Solar PV	3.6	Intermediate/Peaking
Facility 956	Moore	NC	Solar PV	1.0	Intermediate/Peaking
Facility 957	Wilmington	NC	Solar PV	40.0	Intermediate/Peaking
Facility 958	Hampstead	NC	Solar PV	2.7	Intermediate/Peaking
Facility 959	N/A	NC	Solar PV	2.3	Intermediate/Peaking
Facility 960	Buncombe	NC	Solar PV	9.5	Intermediate/Peaking
Facility 961	Warrenton	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 962	Maxton	NC	Solar PV	4,975.0	Intermediate/Peaking
Facility 963	Wilmington	NC	Solar PV	4.8	Intermediate/Peaking
Facility 964	Moore	NC	Solar PV	4.6	Intermediate/Peaking
Facility 965	Wayne	NC	Solar PV	4.0	Intermediate/Peaking
Facility 966	N/A	NC	Solar PV	0.5	Intermediate/Peaking
Facility 967	Clayton	NC	Solar PV	3.8	Intermediate/Peaking
Facility 968	Asheville	NC	Solar PV	2.8	Intermediate/Peaking
Facility 969	Oxford	NC	Solar PV	4.2	Intermediate/Peaking
Facility 970	Wilmington	NC	Solar PV	3.4	Intermediate/Peaking

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
Facility 971	Raleigh	NC	Solar PV	79.0	Intermediate/Peaking
Facility 972	Oxford	NC	Solar PV	4.6	Intermediate/Peaking
Facility 973	Willow Spring	NC	Solar PV	4.0	Intermediate/Peaking
Facility 974	Wilmington	NC	Solar PV	2.4	Intermediate/Peaking
Facility 975	Willow Spring	NC	Solar PV	2.6	Intermediate/Peaking
Facility 976	N/A	NC	Solar PV	2.6	Intermediate/Peaking
Facility 977	Raleigh	NC	Solar PV	4.2	Intermediate/Peaking
Facility 978	Wake	NC	Solar PV	1.8	Intermediate/Peaking
Facility 979	Chatham	NC	Solar PV	1.8	Intermediate/Peaking
Facility 980	Spring Hope	NC	Solar PV	13.0	Intermediate/Peaking
Facility 981	N/A	NC	Solar PV	5.7	Intermediate/Peaking
Facility 982	Chatham	NC	Solar PV	2.5	Intermediate/Peaking
Facility 983	Moore	NC	Solar PV	4.7	Intermediate/Peaking
Facility 984	Wake	NC	Solar PV	3.2	Intermediate/Peaking
Facility 985	Garner	NC	Solar PV	4.9	Intermediate/Peaking
Facility 986	Apex	NC	Solar PV	4.1	Intermediate/Peaking
Facility 987	West End	NC	Solar PV	4.2	Intermediate/Peaking
Facility 988	Princeton	NC	Solar PV	4.0	Intermediate/Peaking
Facility 989	Wilmington	NC	Solar PV	4.3	Intermediate/Peaking
Facility 990	Vass	NC	Solar PV	3.7	Intermediate/Peaking
Facility 991	New Hill	NC	Solar PV	5.5	Intermediate/Peaking
Facility 992	Chapel Hill	NC	Solar PV	4.0	Intermediate/Peaking
Facility 993	Raleigh	NC	Solar PV	2.1	Intermediate/Peaking
Facility 994	Wilmington	NC	Solar PV	3.7	Intermediate/Peaking
Facility 995	Arden	NC	Solar PV	4.5	Intermediate/Peaking
Facility 996	Cary	NC	Solar PV	6.8	Intermediate/Peaking
Facility 997	Fletcher	NC	Solar PV	7.0	Intermediate/Peaking
Facility 998	Wilmington	NC	Solar PV	5.5	Intermediate/Peaking
Facility 999	Wake Forest	NC	Solar PV	2.8	Intermediate/Peaking
Facility 1000	Cary	NC	Solar PV	3.9	Intermediate/Peaking
Facility 1001	Morehead City	NC	Solar PV	3.3	Intermediate/Peaking

Note: Data provided in Table H-3 reflects nameplate capacity for the facility

Table H-4 Non-Utility Generation – South Carolina

Facility Name	City/County	State	Primary Fuel Type	Capacity (AC KW)	Designation
South Carolina Generators:					
Facility 1	CAMDEN	SC	Fossil Coal	28,000.0	Baseload
Facility 2	FLORENCE	SC	Process By-product & Coal	73,000.0	Baseload
Facility 3	HARTSVILLE	SC	Process By-product	27,000.0	Baseload
Facility 4	FLORENCE	SC	Fossil/Waste Wood	10,000.0	Baseload
Facility 5	FLORENCE	SC	Diesel Fuel	1,500.0	Intermediate/Peaking
Facility 6	BISHOPVILLE	SC	Diesel Fuel	1,500.0	Intermediate/Peaking
Facility 7	Elgin	SC	Diesel Fuel	350.0	Intermediate/Peaking
Facility 8	Darlington	SC	Solar PV	4.2	Intermediate/Peaking
Facility 9	N/A	SC	Solar PV	4.9	Intermediate/Peaking
Facility 10	N/A	SC	Solar PV	6.1	Intermediate/Peaking
Facility 11	Chatham	SC	Solar PV	2.9	Intermediate/Peaking
Facility 12	N/A	SC	Solar PV	2.7	Intermediate/Peaking
Facility 13	Hartsville	SC	Solar PV	9.0	Intermediate/Peaking
Facility 14	Sumter	SC	Solar PV	2.6	Intermediate/Peaking
Facility 15	Kershaw	SC	Solar PV	3.0	Intermediate/Peaking
Facility 16	N/A	SC	Solar PV	1.7	Intermediate/Peaking

Note: Data provided in Table H-4 reflects nameplate capacity for the facility.

APPENDIX I: TRANSMISSION PLANNED OR UNDER CONSTRUCTION

This appendix lists the planned transmission line and substation additions, and a discussion of the adequacy of DEP's transmission system. The transmission additions are sub-divided into two (2) tables. Table I-1 lists the transmission line projects that DEP has agreed to construct as part of its merger commitments. Table 2 lists the line projects that were planned to meet reliability needs. This appendix also provides information pursuant to the North Carolina Utility Commission Rule R8-62.

Table I-1: DEP Merger Mitigation Line Additions

	Location				
Year	From	To	Capacity MVA	Voltage KV	Comments
2014	Lilesville	Rockingham	793	230	New
2014	Greenville	Kinston Dupont	1195	230	New*
2014	Kinston Dupont	Wommack	1195	230	Uprate
2014	Wake	Carson(DVP)	3442	500	Uprate
2014	Durham	E. Durham(Duke)	1077	230	Uprate
2014	Roxboro S.E.P	E. Danville(AEP) South	960	230	Modification

* The Greenville-Kinston Dupont 230 kV line was planned for 2017 pre-merger and is now planned for 2014

Table I-2: DEP Transmission Line Additions (Non merger related)

	Location				
			Capacity	Voltage	
Year	From	To	MVA	KV	Comments
2014	Harris	RTP Switching Sta.	1195	230	New
2018	Richmond	Raeford	1195	230	Relocate, new
2018	Ft. Bragg Woodruff St.	Raeford	1195	230	Relocate, new

Rule R8-62: Certificates of environmental compatibility and public convenience and necessity for the construction of electric transmission lines in North Carolina.

(p) Plans for the construction of transmission lines in North Carolina (161 kV and above) shall be incorporated in filings made pursuant to Commission Rule R8-60. In addition, each public utility or person covered by this rule shall provide the following information on an annual basis no later than September 1:

(1) For existing lines, the information required on FERC Form 1, pages 422, 423, 424, and 425, except that the information reported on pages 422 and 423 may be reported every five years.

Please refer to the Company's FERC Form No. 1 filed with NCUC in April, 2013.

(p) Plans for the construction of transmission lines in North Carolina (161 kV and above) shall be incorporated in filings made pursuant to Commission Rule R8-60. In addition, each public utility or person covered by this rule shall provide the following information on an annual basis no later than September 1:

(2) For lines under construction, the following:

a. Commission docket number;

b. Location of end point(s);

c. length;

d. range of right-of-way width;
e. range of tower heights;
f. number of circuits;
g. operating voltage;
h. design capacity;
i. date construction started;
j. projected in-service date;

The following pages represent those projects in response to Rule R8-62 parts (1) and (2).

Lilesville – Rockingham 230 kV South Line

Project Description: Construct approximately 14 miles of new 230 kV transmission line from the Lilesville 230 kV Substation in Anson County to the Rockingham 230 kV Substation in Richmond County.

a. Commission docket number; NCUC Docket No. E2, Sub 922
b. County location of end point(s); Anson and Richmond Counties
c. Approximate length; 14 Miles
d. Typical right-of-way width for proposed type of line; 100 Feet
e. Typical tower height for proposed type of line; 80 - 120 Feet
f. Number of circuits; 1
g. Operating voltage; 230 kV
h. Design capacity; 793 MVA
i. Date construction started; July 2012
j. Estimated in-service date; June 2014

Greenville – Kinston DuPont 230 kV Line

Project Description: Construct approximately 25.3 miles of new 230 kV transmission line from the Greenville 230 kV Substation in Pitt County to the Kinston DuPont 230 kV Substation in Lenoir County. Pursuant to N.C.G.S. 62-101, no Certificate of Environmental Compatibility and Public Convenience and Necessity is required because the rights-of-way for this line were acquired prior to March 6, 1989.

a. N/A – ROW acquired prior to March 6, 1989
b. County location of end point(s); Lenoir and Pitt Counties
c. Approximate length; 25.3 Miles
d. Typical right-of-way width for proposed type of line; 100 Feet
e. Typical tower height for proposed type of line; 80 - 120 Feet
f. Number of circuits; 1
g. Operating voltage; 230 kV
h. Design capacity; 1195 MVA
i. Date construction started; July 2012
j. Estimated in-service date; June 2014

<u>Harris – Research Triangle Park (RTP) 230kV Line</u>

Project Description: Construct 22 miles of new 230 kV line from the Harris 230 kV Substation in Wake County to the RTP 230 kV Substation in Wake County. The four-mile segment from Amberly Substation to RTP Substation is in service and built on self-supporting single poles. The seven-mile segment from Green Level Substation to Amberly Substation is in service and built on self-supporting single poles. The seven-mile segment from Apex US1 to Green Level Substation was an existing 115 kV line, which is to be removed and rebuilt as 230 kV on self-supporting single poles; the three-mile section of this portion between Green Level Substation and Mt. Zion Road POD is in service. The remaining construction is planned to be placed in service 6/2014 and consists of a four-mile segment from Harris Substation to Apex US1 Substation built on H-frame construction.

a. Commission docket number; NCUC Docket No. E2, Sub 914
b. County location of end point(s); Wake
c. Approximate length; 22 miles
d. Range of right-of-way width; 70 feet
e. Range of tower heights; 100 feet
f. Number of circuits; 1
g. Operating voltage; 230 kV
h. Design capacity; 1195 MVA
i. Date construction started; 2010- RTP-Amberly 230 kV Section in-service, Amberly-Green Level-Mt. Zion Road POD Section in-service, 2011- Construction of line resumed.
j. Projected in-service date; June 2014

(p) Plans for the construction of transmission lines in North Carolina (161 kV and above) shall be incorporated in filings made pursuant to Commission Rule R8-60. In addition, each public utility or person covered by this rule shall provide the following information on an annual basis no later than September 1:

(3) For all other proposed lines, as the information becomes available, the following:

a. county location of end point(s);

b. approximate length;

c. typical right-of-way width for proposed type of line;

d. typical tower height for proposed type of line;

e. number of circuits;

f. operating voltage;

g. design capacity;

h. estimated date for starting construction (if more than 6 month delay from last report, explain); and

i. estimated in-service date (if more than 6-month delay from last report, explain). (NCUC Docket No. E-100, Sub 62, 12/4/92; NCUC Docket No. E-100, Sub 78A, 4/29/98.)

The following pages represent those projects in response to Rule R8-62 part (3).

Richmond – Raeford 230 kV Line loop-in

Project Description: Loop-In the existing 230 kV transmission line from the Richmond 230 kV Substation in Richmond County to the Ft. Bragg Woodruff St 230 kV Substation in Cumberland County at Raeford 230 kV Substation in Hoke County.

a. County location of end point(s); Hoke County
b. Approximate length; 5 miles
c. Typical right-of-way width for proposed type of line; 100 feet
d. Typical tower height for proposed type of line; 80 -120 feet
e. Number of circuits; 1
f. Operating voltage; 230 kV
g. Design capacity; 1195 MVA
h. Estimated date for starting construction; March 2015
i. Estimated in-service date; June 2018

Ft. Bragg Woodruff St – Raeford 230 kV Line loop-in

Project Description: Loop-In the existing 230 kV transmission line from the Richmond 230 kV Substation in Richmond County to the Ft. Bragg Woodruff St 230 kV Substation in Cumberland County at Raeford 230 kV Substation in Hoke County.

a. County location of end point(s); Hoke County
b. Approximate length; 5 miles
c. Typical right-of-way width for proposed type of line; 100 feet
d. Typical tower height for proposed type of line; 80 – 120 feet
e. Number of circuits; 1
f. Operating voltage; 230 kV
g. Design capacity; 1195 MVA
h. Estimated date for starting construction; March 2015
i. Estimated in-service date; June 2018

DEP Transmission System Adequacy

Duke Energy Progress monitors the adequacy and reliability of its transmission system and interconnections through internal analysis and participation in regional reliability groups. Internal transmission planning looks 10 years ahead at available generating resources and projected load to identify transmission system upgrade and expansion requirements. Corrective actions are planned and implemented in advance to ensure continued cost-effective and high-quality service. The DEP transmission model is incorporated into models used by regional reliability groups in developing plans to maintain interconnected transmission system reliability. DEP works with DEC, NCEMC and ElectriCities to develop an annual NC Transmission Planning Collaborative (NCTPC) plan for the DEP and DEC systems in both North and South Carolina. In addition, transmission planning is coordinated with neighboring systems including South Carolina Electric & Gas (SCE&G) and Santee Cooper under a number of mechanisms including legacy interchange agreements between SCE&G, Santee Cooper, DEP, and DEC.

The Company monitors transmission system reliability by evaluating changes in load, generating capacity, transactions and topography. A detailed annual screening ensures compliance with DEP's Transmission Planning Summary guidelines for voltage and thermal loading. The annual screening uses methods that comply with SERC policy and NERC Reliability Standards and the screening results identify the need for future transmission system expansion and upgrades. The transmission system is planned to ensure that no equipment overloads and adequate voltage is maintained to provide reliable service. The most stressful scenario is typically at peak load with certain equipment out of service. A thorough screening process is used to analyze the impact of potential equipment failures or other disturbances. As problems are identified, solutions are developed and evaluated.

Transmission planning and requests for transmission service and generator interconnection are interrelated to the resource planning process. DEP currently evaluates all transmission reservation requests for impact on transfer capability, as well as compliance with the Company's Transmission Planning Summary guidelines and the FERC Open Access Transmission Tariff (OATT). The Company performs studies to ensure transfer capability is acceptable to meet reliability needs and customers' expected use of the transmission system. Generator interconnection requests are studied in accordance with the Large and Small Generator Interconnection Procedures in the OATT.

SERC audits DEP every three years for compliance with NERC Reliability Standards. Specifically, the audit requires DEP to demonstrate that its transmission planning practices meet NERC standards and to provide data supporting the Company's annual compliance filing certifications. SERC conducted a NERC Reliability Standards compliance audit of DEP in May 2011. The scope of this audit included Transmission Planning Standards TPL-002-0.a and TPL- 003-0a. For both Standards, DEP received "No Findings" from the audit team.

DEP participates in a number of regional reliability groups to coordinate analysis of regional, sub-regional and inter-balancing authority area transfer capability and interconnection reliability. Each reliability group's purpose is to:

- Assess the interconnected system's capability to handle large firm and non-firm transactions for purposes of economic access to resources and system reliability;

- Ensure that planned future transmission system improvements do not adversely affect neighboring systems; and

- Ensure interconnected system compliance with NERC Reliability Standards.

Regional reliability groups evaluate transfer capability and compliance with NERC Reliability Standards for the upcoming peak season and five- and ten-year periods. The groups also perform computer simulation tests for high transfer levels to verify satisfactory transfer capability.

Application of the practices and procedures described above have ensured DEP's transmission system is expected to continue to provide reliable service to its native load and firm transmission customers.

APPENDIX J: ECONOMIC DEVELOPMENT

Customers Served Under Economic Development

In the NCUC Order issued in Docket No. E-100, Sub 73 dated November 28, 1994, the NCUC ordered North Carolina utilities to review the combined effects of existing economic development rates within the approved IRP process and file the results in its short-term action plan. The incremental load (demand) for which customers are receiving credits under economic development rates and/or self-generation deferral rates (Rider EC), as well as economic redevelopment rates (Rider ER) as of June 2013 is:

Rider EC:
37 MW for North Carolina
13 MW for South Carolina

Rider ER:
0 MW for North Carolina
0 MW for South Carolina

APPENDIX K: CROSS-REFERENCE OF IRP REQUIREMENTS

The following table cross-references IRP regulatory requirements for NC R8-60 in North Carolina and S.C. Code Ann. § 58-37-10 in South Carolina, and identifies where those requirements are discussed in the IRP.

Requirement	Location	Reference	Updated
15-year Forecast of Load, Capacity and Reserves	Ch 8, Tables 8.C & D	NC R8-60 (c) 1	Yes
Comprehensive analysis of all resource options	Ch 4, 5 & 8, App A	NC R8-60 (c) 2	Yes
Assessment of Purchased Power	Table H.1	NC R8-60 (d)	Yes
Assessment of Alternative Supply-Side Energy Resources	Ch 5, App B & D	NC R8-60 (e)	Yes
Assessment of Demand-Side Management	Ch 4, App D	NC R8-60 (f)	Yes
Evaluation of Resource Options	Ch 8, App A, C & F	NC R8-60 (g)	Yes
Short-Term Action Plan	Ch 9	NC R8-60 (h) 3	Yes
REPS Compliance Plan	Attachment	NC R8-60 (h) 4	Yes
Forecasts of Load, Supply-Side Resources, and Demand-Side Resources			
* 10-year History of Customers and Energy Sales	App C	NC R8-60 (i) 1(i)	Yes
* 15-year Forecast w & w/o Energy Efficiency	Ch 3 & App C	NC R8-60 (i) 1(ii)	Yes
* Description of Supply-Side Resources	Ch 6 & App A	NC R8-60 (i) 1(iii)	Yes
Generating Facilities			
* Existing Generation	Ch 2, App B	NC R8-60 (i) 2(i)	Yes
* Planned Generation	Ch 8 & App A	NC R8-60 (i) 2(ii)	Yes
* Non Utility Generation	Ch 5, App H	NC R8-60 (i) 2(iii)	Yes
Reserve Margins	Ch 7, 8, Table 8.D	NC R8-60 (i) 3	Yes
Wholesale Contracts for the Purchase and Sale of Power			
* Wholesale Purchased Power Contracts	App H	NC R8-60 (i) 4(i)	Yes
* Request for Proposal	Ch 9	NC R8-60 (i) 4(ii)	Yes
* Wholesale Power Sales Contracts	App C & H	NC R8-60 (i) 4(iii)	Yes
Transmission Facilities	Ch 2, 7 & App I	NC R8-60 (i) 5	Yes
Energy Efficiency and Demand-Side Management			
* Existing Programs	Ch 4 & App D	NC R8-60 (i) 6(i)	Yes
* Future Programs	Ch 4 & App D	NC R8-60 (i) 6(ii)	Yes
* Rejected Programs	App D	NC R8-60 (i) 4(iii)	Yes
* Consumer Education Programs	App D	NC R8-60 (i) 4(iv)	Yes
Assessment of Alternative Supply-Side Energy Resources			
* Current and Future Alternative Supply-Side Resources	Ch 5, App F	NC R8-60 (i) 7(i)	Yes
* Rejected Alternative Supply-Side Resources	Ch 5, App F	NC R8-60 (i) 7(ii)	Yes
Evaluation of Resource Options (Quantitative Analysis)	App A	NC R8-60 (i) 8	Yes
Levelized Bus-bar Costs	App F	NC R8-60 (i) 9	Yes
Smart Grid Impacts	App D	NC R8-60 (i) 10	Yes
Legislative and Regulatory Issues	App G		Yes
Greenhouse Gas Reduction Compliance Plan	App G		Yes
Other Information (Economic Development)	App J		Yes

The Duke Energy Progress

N.C. Renewable Energy & Energy Efficiency Portfolio Standard (NC REPS) Compliance Plan

October 15, 2013

NC REPS Compliance Plan
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I. INTRODUCTION

Duke Energy Progress (DEP or the Company) submits its annual Renewable Energy and Energy Efficiency Portfolio Standard (NC REPS or REPS) Compliance Plan (Compliance Plan) in accordance with N.C. Gen. Stat. § 62-133.8 and North Carolina Utilities Commission (the Commission) Rule R8-67(b). This Compliance Plan, set forth in detail in Section II and Section III, provides the required information and outlines the Company's projected plans to comply with NC REPS for the period 2013 to 2015 (the Planning Period). Section IV addresses the cost implications of the Company's REPS Compliance Plan.

In 2007, the North Carolina General Assembly enacted Session Law 2007-397 (Senate Bill 3), codified in relevant part as N.C. Gen. Stat. § 62-133.8, in order to:

(1) Diversify the resources used to reliably meet the energy needs of consumers in the State;
(2) Provide greater energy security through the use of indigenous energy resources available within the State;
(3) Encourage private investment in renewable energy and energy efficiency; and
(4) Provide improved air quality and other benefits to energy consumers and citizens of the State.

As part of the broad policy initiatives listed above, Senate Bill 3 established the NC REPS, which requires the investor-owned utilities, electric membership corporations or co-operatives, and municipalities to procure or produce renewable energy, or achieve energy efficiency savings, in amounts equivalent to specified percentages of their respective retail megawatt-hour (MWh) sales from the prior calendar year.

Duke Energy Progress seeks to advance these State policies and comply with its REPS obligations through a diverse portfolio of cost-effective renewable energy and energy efficiency resources. Specifically, the key components of Duke Energy Progress' 2013 Compliance Plan include: (1) introduction of energy efficiency programs that will generate savings that can be counted towards the Company's REPS obligation; (2) purchases of renewable energy certificates (RECs); and (3) research studies to enhance the Company's ability to comply with its REPS obligations in the future. The Company believes that these actions yield a diverse portfolio of qualifying resources and allow a flexible mechanism for compliance with the requirements of N.C. Gen. Stat. § 62-133.8.

In addition, the Company has undertaken, and will continue to undertake, specific regulatory and operational initiatives to support REPS compliance, including: (1) submission of regulatory applications to pursue reasonable and appropriate renewable energy and energy efficiency initiatives in support of the Company's REPS compliance needs; (2) solicitation, review, and analysis of proposals from renewable energy suppliers offering RECs and diligent pursuit of the most attractive opportunities, as appropriate; and (3) development and implementation of administrative processes to manage the Company's REPS compliance operations, such as procuring and managing renewable resource contracts, accounting for

RECs, safely interconnecting renewable energy suppliers, reporting renewable generation to the North Carolina Renewable Energy Tracking System (NC-RETS), and forecasting renewable resource availability and cost in the future.

The Company believes these actions collectively constitute a thorough and prudent plan for compliance with NC REPS and demonstrate the Company's commitment to pursue its renewable energy and energy efficiency strategies for the benefit of its customers.

II. REPS COMPLIANCE OBLIGATION

Duke Energy Progress calculates its NC REPS Compliance Obligations[3] in 2013, 2014, and 2015 based on interpretation of the statute (N.C. Gen. Stat. § 62-133.8), the Commission's rules implementing Senate Bill 3 (Rule R8-67), and subsequent Commission orders, as applied to the Company's actual or forecasted retail sales in the Planning Period, as well as the actual and forecasted retail sales of those wholesale customers for whom the Company is supplying REPS compliance. The Company's wholesale customers for which it supplies REPS compliance services are the Town of Sharpsburg, the Town of Stantonsburg, the Town of Lucama, the Town of Black Creek, and the City of Waynesville (collectively referred to as Wholesale or Wholesale Customers)[4]. Table 1 below shows the Company's retail and Wholesale customers' REPS Compliance Obligation.

[3] For the purposes of this Compliance Plan, Compliance Obligation is more specifically defined as the sum of Duke Energy Progress' native load obligations for both the Company's retail sales and for wholesale native load priority customers' retail sales for whom the Company is supplying REPS compliance. All references to the respective Set-Aside requirements, the General Requirements, and REPS Compliance Obligation of the Company include the aggregate obligations of both Duke Energy Progress and the Wholesale Customers. Also, for purposes of this Compliance Plan, all references to the compliance activities and plans of the Company shall encompass such activities and plans being undertaken by Duke Energy Progress on behalf of the Wholesale Customers.

[4] For purposes of this Compliance Plan, Retail Sales is defined as the sum of Duke Energy Progress' retail sales and the retail sales of the wholesale customers for whom the company is supplying REPS compliance. As of September 1, 2013, the Company is in discussions with the Town of Winterville regarding potential provision of compliance services similar to those provided to the Wholesale Customers. Due to the ongoing nature of those discussions, the Company has not included Winterville's obligation in its 2013 Compliance Plan, however, the Company does not expect material changes would result from such inclusion.

Table 1: Duke Energy Progress' NC REPS Compliance Obligation

Compliance Year	Previous Year DEP Retail Sales (MWhs)	Previous Year Wholesale Retail Sales (MWhs)	Total Retail sales for REPS Compliance (MWhs)	Solar Set-Aside (RECs)	Swine Set-Aside (RECs)	Poultry Set-Aside (RECs)	REPS Requirement (%)	Total REPS Compliance Obligation (RECs)
2013	36,589,273	148,177	36,737,450	25,716	25,716	47,474	3%	1,102,124
2014	37,068,535	148,480	37,217,015	26,052	26,052	197,329	3%	1,116,510
2015	37,573,523	149,222	37,722,745	52,812	52,812	256,241	6%	2,263,365

Note: Obligation is determined by prior-year MWh sales. Thus, retail sales figures for compliance years 2014 and 2015 are estimates.

As shown in Table 1, the Company's requirements in the Planning Period include the solar energy resource requirement (Solar Set-Aside), swine waste resource requirement (Swine Set-Aside), and poultry waste resource requirement (Poultry Set-Aside). In addition, the Company must also ensure that, in total, the RECs that it produces or procures, combined with energy efficiency savings, is an amount equivalent to 3% of its prior year retail sales in compliance years 2013 and 2014, and 6% of its prior year retail sales in compliance year 2015. The Company refers to this as its Total Obligation. For clarification, the Company refers to its Total Obligation, net of the Solar, Swine, and Poultry Set-Aside requirements, as its General Requirement.

III. REPS COMPLIANCE PLAN

In accordance with Commission Rule R8-67b(1)(i), the Company describes its planned actions to comply with the Solar, Swine, and Poultry Set-Asides, as well as the General Requirement below. The discussion first addresses the Company's efforts to meet the Set-Aside requirements and then outlines the Company's efforts to meet its General Requirement in the Planning Period.

A. SOLAR ENERGY RESOURCES

Pursuant to N.C. Gen. Stat. § 62-133.8(d), the Company must produce or procure solar RECs equal to a minimum of 0.07% of the prior year total electric energy in megawatt-hours (MWh) sold to retail customers in North Carolina in 2013 and 2014, rising to a minimum of 0.14% in 2015.

Based on the Company's actual retail sales in 2012, the Solar Set-Aside is approximately 25,716 RECs in 2013. Based on forecasted retail sales, the Solar Set-Aside is projected to be approximately 26,052 RECs and 52,812 RECs in 2014 and 2015, respectively.

The Company's plan for meeting the Solar Set-Aside in the Planning Period consists of multiple solar REC purchase agreements with third parties for the purchase of solar RECs. These agreements include contracts with multiple in-state and out-of-state counterparties to procure solar RECs from both photovoltaic (PV) and solar water heating installations. Additional details with respect to the REC purchase agreements are set forth in Exhibit A.

Also, the Company maintains a residential solar PV program which offers incentives to customers who install solar. In exchange, the Company receives RECs created by the systems for 5 years. By year-end 2013, the Company expects total program participation of approximately 2MW of solar PV from around 500 program participants.

The Company has made and continues to make reasonable efforts to meet the Solar Set-Aside requirement in the Planning Period, and remains confident that it will be able to comply with this requirement. Therefore, the Company sees minimal risk in meeting the Solar Set-Aside and will continue to monitor the development and progress of solar initiatives and take appropriate actions as necessary.

B. SWINE WASTE-TO-ENERGY RESOURCES

Pursuant to N.C. Gen. Stat. § 62-133.8(e), for calendar years 2013 and 2014, at least 0.07% of prior year total retail electric energy sold in aggregate by utilities in North Carolina must be supplied by energy derived from swine waste. In 2015, at least 0.14% of prior year total retail electric energy sold in aggregate by utilities in North Carolina must be supplied by energy derived from swine waste. The Company's Swine Set-Aside is estimated to be 25,716 RECs in 2013, 26,052 RECs in 2014, and 52,812 RECs in 2015.

In spite of Duke Energy Progress' active and diligent efforts to secure resources to comply with its Swine Set-Aside requirements, the Company has been unable to secure sufficient volumes of RECs to meet its pro-rata share of the swine set-aside requirements in 2013 and 2014. The Company remains actively engaged in seeking additional resources and continues to make every reasonable effort to comply with the swine waste set-aside requirements. The Company's ability to comply in 2015 remains highly uncertain and subject to multiple variables, particularly relating to counterparty achievement of projected delivery requirements and commercial operation milestones. Additional details with respect to the Company's compliance efforts and REC purchase agreements are set forth in Exhibit A and the Company's tri-annual progress reports, filed confidentially in Docket E-100 Sub113A.

Due to its expected non-compliance in 2013, the Company will submit a motion to the Commission for approval of a request to relieve the Company from compliance with the swine-waste requirements until calendar year 2014 by delaying the compliance obligation for a one year period.

C. POULTRY WASTE-TO-ENERGY RESOURCES

Pursuant to N.C. Gen. Stat. § 62-133.8(f) and as amended by NCUC *Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Requirements and Motion for Clarification* in Docket E-100, Sub113, for calendar years 2013, 2014, and 2015, at least 170,000 MWh, 700,000 MWh, and 900,000 MWh, respectively, of the prior year total electric energy sold to retail electric customers in the State or an equivalent amount of energy shall be produced or procured each year from poultry waste, as defined per the Statute and additional clarifying Orders. As the Company's retail sales share of the State's total retail megawatt-hour sales is approximately 28%, the Company's Poultry Set-Aside is estimated to be 47,474 RECs in 2013, 197,329 RECs in 2014, and 256,241 in 2015.

As a result of Duke Energy Progress' active and diligent efforts, the Company has secured, or contracted for delivery, sufficient volumes of RECs to meet its pro-rata share of the Poultry Set-Aside in 2013. However, compliance in 2014 and 2015 is unlikely and subject to multiple variables, particularly relating to counterparty achievement of projected delivery requirements and commercial operation milestones. Additional details with respect to the Company's compliance efforts and REC purchase agreements are set forth in Exhibit A and the Company's tri-annual progress reports, filed confidentially in Docket E-100 Sub113A.

D. GENERAL REQUIREMENT RESOURCES

Pursuant to N.C. Gen. Stat. § 62-133.8, Duke Energy Progress is required to comply with its Total Obligation in 2013, 2014, and 2015 by submitting for retirement a total volume of RECs equivalent to 3% of retail sales in North Carolina in the prior year: approximately 1,102,124 RECs in 2013, 1,116,510 RECs in 2014, and 2,263,365 RECs in 2015. This requirement, net of the Solar, Swine, and Poultry Set-Aside requirements, is estimated to be 1,003,217 RECs in 2013, 867,078 RECs in 2014, and 1,901,500 in 2015.[5] The various resource options available to the Company to meet the General Requirement are discussed below, as well as the Company's plan to meet the General Requirement with these resources.

1. Energy Efficiency

During the Planning Period, the Company plans to meet 25% of the Total Obligation with Energy Efficiency (EE) savings, which is the maximum allowable amount under N.C. Gen. Stat. § 62-133.7(b)(2)c. The Company continues to develop and offer its customers new and innovative EE programs that deliver savings and count towards its NC REPS requirements. Please refer to Appendix D of the Company's 2013 Integrated Resource Plan (IRP) filed concurrently with this Compliance Plan in

[5] If the Commission grants relief from any 2013 animal-waste obligation, the Company's Total Obligation would not changed but its General Requirement would increase as the animal-waste set asides would not be netted against the Total Obligation in compliance year 2013.

this docket, for descriptions of each of these programs. The Company forecasts creation of 876,047 EECs in 2013, 1,070,249 in 2014, and 1,277,046 in 2015.

2. Hydroelectric Power

Duke Energy Progress plans to use hydroelectric power from two sources to meet the General Requirement in the Planning Period: (1) Wholesale Customers' Southeastern Power Administration (SEPA) allocations; and (2) hydroelectric generation suppliers whose facilities have received Qualifying Facility (QF or QF Hydro) status. Wholesale Customers may also bank and utilize hydroelectric resources arising from their full allocations of SEPA. When supplying compliance for the Wholesale Customers, the Company will ensure that hydroelectric resources do not comprise more than 30% of each Wholesale Customers' respective compliance portfolio, pursuant to N.C. Gen. Stat. § 62-133.8(c)(2)c. In addition, the Company is purchasing RECs from a QF Hydro facility and will use RECs from this facility towards the General Requirements of Duke Energy Progress' retail customers. Please see Exhibit A for more information on this contract.

3. Biomass Resources

Duke Energy Progress plans to meet a portion of the General Requirement through a variety of biomass resources, including landfill gas to energy, combined-heat and power, and direct combustion of biomass fuels. The Company is purchasing RECs from multiple biomass facilities in the Carolinas, including landfill gas to energy facilities and biomass-fueled combined heat and power facilities, all of which which qualify as renewable energy facilities. Please see Exhibit A for more information on each of these contracts.

4. Wind

Duke Energy Progress plans to meet a portion of the General Requirement with RECs from wind facilities. As discussed in the Company's 2013 IRP, the Company believes it is reasonable to expect that land-based wind will be developed in both North and South Carolina in the next decade. However, in the short-term, extension of the federal tax subsidy available to new wind generation facilities remains uncertain. While the company expects to rely upon wind resources for our REPS compliance effort, the extent and timing of that reliance will likely vary commensurately with changes to supporting policies and prevailing market prices. The Company also has observed that opportunities may exist to transmit land-based wind energy resources into the Carolinas from other regions, which could supplement the amount of wind that could be developed within the Carolinas.

5. Use of Solar Resources for General Requirement

Duke Energy Progress plans to meet a portion of the General Requirement with RECs from solar facilities. As discussed in the Company's 2013 IRP, the Company views the downward trend in solar equipment and installation costs over the past several years as a positive development. Additionally, new solar facilities also benefit from generous supportive federal and state policies that are expected to be in place through the middle of this decade. While uncertainty remains around possible alterations or extensions of policy support, as well as the pace of future cost declines, the Company fully expects solar resources to contribute to our compliance efforts beyond the solar set-aside minimum threshold for NC REPS during the Planning Period.

6. Review of Company's General Requirement Plan

The Company has contracted for or otherwise procured sufficient resources to meet its General Requirement in the Planning Period. Based on the known information available at the time of this filing, the Company is confident that it will meet this General Requirement during the Planning Period and submits that the actions and plans described herein represent a reasonable and prudent plan for meeting the General Requirement.

E. SUMMARY OF RENEWABLE RESOURCES

The Company has evaluated, procured, and/or developed a variety of types of renewable and energy efficiency resources to meet its NC REPS requirements within the compliance Planning Period. As noted above, several risks and uncertainties exist across the various types of resources and the associated parameters of the NC REPS requirements. The Company continues to carefully monitor opportunities and unexpected developments across all facets of its compliance requirements. Duke Energy Progress submits that it has crafted a prudent, reasonable plan with a diversified balance of renewable resources that will allow the Company to comply with its NC REPS obligation over the Planning Period.

IV. COST IMPLICATIONS OF REPS COMPLIANCE PLAN

A. CURRENT AND PROJECTED AVOIDED COST RATES

The 2013 variable rate represents the avoided cost rate in Schedule CSP-27 (NC), Distribution Interconnection, approved in the Commission's *Order Establishing Standard Rates and Contract Terms for Qualifying Facilities*, issued in Docket No. E-100, Sub 127 (July 27, 2011). The 2013 long-term rates represent the annualized avoided cost rates proposed by the Company and approved in the Commission's *Order on Motion to Suspend Avoided Cost Rates*, issued in Docket No. E-100, Sub 136

(December 21, 2012). The 2014 and 2015 projected avoided cost rates represent the annualized avoided cost rates proposed by the Company in Docket No. E-100, Sub 136.

Table 2: Annualized Capacity and Energy Rates (cents per KWh)

	2013 (Current)	2014 (Projected)	2015 (Projected)
Variable Rates	5.786¢	4.654¢	4.654¢
5 Year	4.857¢	4.857¢	4.857¢
10 Year	5.356¢	5.356¢	5.356¢
15 Year	5.752¢	5.752¢	5.752¢

B. PROJECTED TOTAL NORTH CAROLINA RETAIL AND WHOLESALE SALES AND YEAR-END NUMBER OF CUSTOMER ACCOUNTS BY CLASS

The tables below reflect the inclusion of the Wholesale Customers in the Compliance Plan.

Table 3: Retail Sales for Retail and Wholesale Customers

	2012 (Actual)	2013 (Projected)	2014 (Projected)
Retail MWh Sales	36,589,273	37,068,535	37,573,523
Wholesale MWh Sales	148,177	148,480	149,222
Total MWh Sales	36,737,450	37,217,015	37,722,745

Note: The MWh sales reported above are those applicable to REPS compliance years 2013 – 2015, and represent actual MWh sales for 2012, and projected MWh sales for 2013 and 2014, respectively.

Table 4: Retail and Wholesale Year-end Number of Customer Accounts

	2012 (Actual)	2013 (Projected)	2014 (Projected)	2015 (Projected)
Residential Accts	1,111,055	1,107,093	1,121,829	1,139,665
General Accts	181,188	183,391	191,469	195,375
Industrial Accts	2,010	2,031	2,027	2,029

Note: The number of accounts reported above are those applicable to the cost caps for compliance years 2013 – 2015, and represent the actual number of accounts for year-end 2012, and the projected number of accounts for year-end 2013 through 2015.

C. PROJECTED ANNUAL COST CAP COMPARISON OF TOTAL AND INCREMENTAL COSTS, REPS RIDER AND FUEL COST IMPACT

Projected compliance costs for the Planning Period are presented in the cost tables below by calendar year. The cost cap data is based on the number of accounts as reported above.

Table 5: Projected Annual Cost Caps and Fuel Related Cost Impact

	2013	2014	2015
Total projected REPS compliance costs	$ 132,030,172	$ 138,479,470	$ 156,147,304
Recovered through the Fuel Rider	$ 111,706,006	$ 114,462,707	$ 134,349,964
Total incremental costs (REPS Rider)	$ 20,324,166	$ 24,016,763	$ 21,797,340
Total including GRT and Regulatory Fee	$ 21,026,450	$ 24,846,641	$ 22,550,528
Projected Annual Cost Caps (REPS Rider)	$ 42,520,860	$ 42,825,158	$ 68,889,101

EXHIBIT A

Duke Energy Progress, LLC's 2013 REPS Compliance Plan
Duke Energy Progress' Renewable Resource Procurement from 3rd Parties
(signed contracts as of July 1, 2013)

[BEGIN CONFIDENTIAL]

Resource Supplier	Contract Duration	Estimated RECs		
		2013	2014	2015
SOLAR RESOURCES				
[redacted]				

Resource Supplier	Contract Duration	Estimated RECs		
		2013	2014	2015
[redacted]				

Resource Supplier	Contract Duration	Estimated RECs		
		2013	2014	2015
[redacted]				
Total Solar REC Purchases		[redacted]		

BIOMASS RESOURCES		2013	2014	2015
[redacted]				
Total Biomass REC Purchases		[redacted]		

Resource Supplier	Contract Duration	Estimated RECs		
POULTRY WASTE TO ENERGY RESOURCES		2013	2014	2015
[redacted]				
Total Poultry REC Purchases		[redacted]		
SWINE WASTE TO ENERGY RESOURCES		2013	2014	2015
[redacted]				
Total Swine REC Purchases		[redacted]		

HYDROELECTRIC RESOURCES		2013	2014	2015
[redacted]				
Total Hydro REC Purchases		[redacted]		

[redacted]

[END CONFIDENTIAL]