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JAN 27 2012

Clerk's Office
N.C. Utilities Commission

January 27, 2012

Ms. Renné C. Vance, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

RE: Docket No. E-100, Sub 128

Dear Ms. Vance:

Enclosed for filing are the original and thirty (30) copies of Duke Energy Carolinas, LLC's Reply Comments in the above referenced docket.

Sincerely,

Robert W. Kaylor

Robert W. Kaylor

Encls.

cc: Parties of Record

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

JAN 27 2012

DOCKET NO. E-100, SUB 128

Clerk's Office
N.C. Utilities Commission

In the Matter of

Investigation of Integrated Resource
Planning in North Carolina – 2011

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DUKE ENERGY CAROLINAS, LLC'S
REPLY COMMENTS

Pursuant to North Carolina Utilities Commission ("Commission") Rule R8-60, Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company"), hereby responds to the Initial Comments of the North Carolina Public Staff ("Public Staff"), Southern Alliance for Clean Energy ("SACE"), the North Carolina Waste Awareness and Reduction Network, Inc. ("NC WARN"), and North Carolina Sustainable Energy Association ("NCSEA") on the Company's 2011 Integrated Resource Plan ("IRP").

Duke Energy Carolinas sets forth its response below:

RESPONSE TO INITIAL COMMENTS OF PUBLIC STAFF

1. In general, Public Staff finds Duke Energy Carolinas' 2011 IRP filing to be reasonable for planning purposes. However, the Public Staff makes certain recommendations for specific actions and explanation from Duke Energy Carolinas regarding aspects of its 2011 IRP.

2. Public Staff recommends that Duke Energy Carolinas be required to file with its reply comments, as required by R8-60(i)(3), the specific explanation for each year in which its projected reserve margins exceeds plus or minus 3% of its target. Public Staff Comments at 12. Duke Energy Carolinas acknowledges that its system reserve margin is projected to exceed its target reserve margin of 17% by more than 3% over the course of the planning period in the years 2021, 2023, and 2024. These projected increases in reserve margin are driven by the recessionary impacts to load and timing of additions of necessary system generating capacity. In

2021, Lee Nuclear unit 1 (1,117 MW) increases the reserve margin to over 20%. The second Lee Nuclear unit (1,117 MW) in 2023 also increases the reserve margin over 20% in 2023 and 2024. By 2025, the reserve margin is projected to move back within the target range due to continued load growth.

3. Public Staff also recommends that approval of Duke Energy Carolinas' Greenhouse Gas Reduction Compliance Plan for Cliffside Unit 6 ("Cliffside Carbon Neutrality Plan"), set forth in Appendix J of the 2011 IRP, and the Company's proposed method of calculating the Emission Reduction Requirements and emission offset values of certain Qualifying Actions, illustrated in Table J.3, be addressed in a separate docket. Public Staff Comments at 11. Public Staff also recommends that retirements relating to Duke Energy Carolinas' execution of its Cliffside Carbon Neutrality Plan, and accounting treatment thereof, also be addressed in a separate docket. *Id.* Public Staff also recommends that the Company be required to continue providing updates in future IRPs related to the Cliffside air permit to (i) retire 800 MW of coal capacity as set out in Table J.1; (ii) accommodate to the extent practicable any future carbon control technology at Cliffside Unit 6; and (iii) take additional actions to make Cliffside Unit 6 carbon neutral by 2018. *Id.*

4. Duke Energy Carolinas submits that the Cliffside Carbon Neutrality Plan is appropriately before the Commission in this docket and should be approved as part of the 2011 IRP. As part of the Greenhouse Gas Reduction Plan included within the Air Quality Permit ("the Permit") issued by the North Carolina Division of Air Quality for Cliffside Unit 6, the Company is required to file its plans to offset the carbon emissions of Cliffside Unit 6 with the Commission for approval. Pursuant to this requirement, Duke Energy Carolinas included the Cliffside Carbon Neutrality Plan in Appendix J of its 2011 IRP and requested the Commission's

approval, as contemplated by the Permit. As noted by the Public Staff in its Comments, the carbon dioxide emissions avoided through the Qualifying Actions proposed within the Cliffside Carbon Neutrality Plan will exceed the projected emissions of Cliffside Unit 6 by approximately 50%. The Cliffside Carbon Neutrality Plan sets forth exactly what the Permit requires and provides a reasonable path for the Company's compliance with the carbon emission reduction standards of the Permit. The Company will certainly provide updates to the Commission through future IRPs as Qualifying Actions are implemented and the Company's compliance with the requirements of the Permit is achieved, but Duke Energy Carolinas submits that its plan is ripe for approval at this time. No party has contested the Company's methods of calculating projected carbon dioxide emissions for Cliffside Unit 6 or emissions to be avoided through implementation of the proposed Qualifying Actions.

5. The Permit also specifies that any cost recovery related to the Company's execution of its proposed Qualifying Actions to comply with its Cliffside Carbon Neutrality Plan shall also be subject to NCUC review and approval. Duke Energy Carolinas is not asking for any cost recovery of any kind through its 2011 IRP relating to any of the proposed Qualifying Actions set forth in the Cliffside Carbon Neutrality Plan. As such, the Company agrees with Public Staff that any such applications for related cost recovery belong in a separate docket.

6. Public Staff further requests the Commission require the utilities to run scenarios with no-carbon alternative plans or scenarios until the future of carbon legislation becomes more clear, arguing that no-carbon scenarios are more plausible now. Public Staff Comments at 17. Duke Energy Carolinas believes that over the long-term planning horizon, the U.S. Congress and/or the federal government will, through legislation or regulation, create specific limitations and restrictions on allowable emissions of carbon dioxide from electric generating facilities, and

establish some form of a market for carbon emission allowances. The Company has, since 2006, incorporated certain assumptions relating to carbon pricing into its IRPs and has continually emphasized that it needs to plan resources over the long-term for a carbon-constrained future. Duke Energy Carolinas continues to evaluate and adjust its assumptions around carbon and has significantly reduced its allowance pricing projections in light of the uncertainty referenced by the Public Staff. However, the Company disagrees with the Public Staff regarding the relative plausibility of future carbon legislation, and does not believe it would be reasonable or prudent to plan as if carbon emissions will not be regulated.

7. Additionally, eliminating considerations of CO₂ constraints and Clean Energy Legislation would have far reaching impacts on the economics of the Company's resource selection and costs. Without constraints, new coal resources may well be selected as components in the proposed resource mix. Gas and coal prices, energy efficiency economics, energy usage and renewable resources economics would all be affected. Further, providing a Load, Capacity, and Reserves table that excludes the impacts of CO₂ would require the development of a load forecast without CO₂ considerations. All load forecasts available at this time have CO₂ considerations embedded in them. Simply removing the CO₂ allowance impacts as sensitivity cases applied to portfolios developed in the IRP only provides a limited indication of the present value revenue requirements impacts of CO₂. Such runs remove this cost from unit dispatch and the resultant operating costs. A full analysis of this impact would require repeating the IRP process with new assumptions; to do as the Public Staff requests, the Company would effectively have to generate two separate IRPs, one with carbon, one without carbon. This outcome would be wasteful of time and resources, and as the Commission concluded in its *Order Approving Integrated Resource Plans and REPS Compliance Plans*, issued in this docket on the 2010 IRPs

(“2010 IRP Order”), “the current scenarios relating to carbon emissions, as provided in the IRPs, are responsive and appropriate for the purposes of this proceeding.” The Company submits that the additional no-carbon scenario planning recommended by the Public Staff is unnecessary at this time and should not be required for future IRPs.

RESPONSE TO INITIAL COMMENTS OF SACE

8. SACE’s criticisms of Duke Energy Carolinas’ 2011 IRP are almost identical in form and substance to its criticisms of the Company’s 2010 IRP. SACE’s arguments and contentions, both within its comments and Attachment 1 to its comments, are essentially duplicative of its comments filed in this docket last year. For this reason, to the extent any particular criticism is not addressed directly in these reply comments, the Company will incorporate by reference into this document its reply comments filed in this docket with respect to the 2010 IRP and rely on its responsive comments to address those duplicative assertions. Also, it is noteworthy that the Commission dismissed SACE’s arguments in the context of the 2010 IRP and similar treatment is in order with respect to SACE’s comments as to the 2011 IRP.

9. Just as it did with respect to the Company’s 2010 IRP, SACE criticizes Duke Energy Carolinas’ 2011 IRP for the following primary reasons: (1) the Company’s High DSM sensitivity portfolios are allegedly lower cost and lower risk to Duke Energy Carolinas’ customers; (2) the Company allegedly failed to adequately consider energy efficiency (“EE”) and demand-side management (“DSM”) resources in its evaluation of resource options; (3) the Company allegedly overstates the need for new generation over the planning period; (4) the Company should evaluate the prudence of continued operation of its scrubbed coal units; and (5) the Company allegedly does not incorporate realistic assumptions about new nuclear generation. SACE Comments at 1. The Company strongly disagrees with SACE’s assertions within its

comments and respectfully submits that its criticisms as to the Company's 2011 IRP should be disregarded and rejected.

10. SACE initially criticizes the Company's portfolio analysis in its 2011 IRP for not prioritizing its High DSM case in all of its portfolios. SACE alleges that the "High DSM Case," when applied to all of the Company's potential portfolios, is lower cost to customer, lower risk to customers, and will result in lower rates to customers than Duke Energy Carolinas' "Base Case," which is its selected portfolio of 2 Nuclear Units (2021/2023) and incorporates the Company's Base Case assumptions with respect to energy efficiency and demand side management programs impacts. See SACE Comments at 3-7. Very simply, SACE's comparison of the Company's High DSM sensitivity cases to its Base Case portfolios still presents an "apples to oranges" comparison and fails to acknowledge that the High DSM case has been applied as a sensitivity to the Company's analysis because the probability of achieving such impacts is less than in the Base Case.

11. Initially, as explained in the Company's reply comments with respect to the 2010 IRP, it is unreasonable to compare the present value revenue requirements ("PVR") for the Company's model portfolios that incorporate Base Case impacts for EE and DSM with the corresponding revenue requirements of those portfolios that incorporate High DSM impacts. SACE's analysis continues to rely upon this flawed methodology of comparing model portfolios with different load profiles and remains useless for the purpose of making any meaningful comparisons for resource planning purposes. SACE alleges that Duke Energy Carolinas has not provided a "substantive basis for this critique," and yet, the Commission found that the Company had "adequately addressed the issues related to EE, DSM, and portfolio selections" in its reply comments in the 2010 IRP Order. The basic fact underlying the Company's assertion is that

each of the model portfolios includes the same load and the production simulation model will dispatch the model to meet that load with the selected resource mix. When a specific sensitivity is applied to a certain aspect of the model portfolios, such as to EE and DSM impacts, fuel costs or load variations, it must be applied to each model portfolio so that the selected aspect of each portfolio to which the sensitivity is being applied will be impacted similarly and the production simulation model will run each portfolio under the same constraints. SACE is mistaken in its allegation that “the High DSM sensitivity was also run under conditions of high and low fuel costs, high and low CO₂ costs, and high and low nuclear capital costs.” The Company does not apply sensitivity aspects over each other; this would distort the impact of the individual sensitivities and eliminate the value in applying the sensitivities to the model portfolios in the first place.

12. The Company’s High DSM case remains a sensitivity case because it represents a lower probability, more optimistic assumption for EE and DSM achievements over the duration of the planning period. In this way, assuming such impacts for purposes of resource planning is not “lower risk” as alleged by SACE. As noted many times before, the High DSM sensitivity includes full target impacts of the Company’s Save-A-Watt program for the first five years and then increases the load impacts at 1% of 2009 weather normalized retail sales every year after that until the load impacts reach the economic potential identified by the Company’s 2007 market potential study. The peak and energy reductions associated with the High DSM sensitivity are certainly the Company’s goal through its implementation of its portfolio of EE and DSM programs, but assuming this level of achievement for purposes of resource planning is not reasonable at this time.

13. Duke Energy Carolinas recognizes and acknowledges the potential value of higher levels of customer participation in its programs and continues to strive to achieve the goal of reaching the full economic potential for its EE and DSM resources. One must always be mindful when planning relating to EE and DSM that program participation, and the achievement of any projected load and capacity impacts, is ultimately dictated by the customers of Duke Energy Carolinas, not the Company itself. As such, there remains a great deal of uncertainty regarding costs and factors influencing potential customer participation levels with both the likelihood and predictability of achieving those actual impacts and the costs necessary to achieve those impacts being unknown. Until further information and experience is gained regarding program adoption rates, program costs, and regulatory approval of programs, it is simply not prudent for the Company to assume the “High Case” EE and DSM accomplishment levels as the Base Case for IRP purposes.

14. SACE next asserts that Duke Energy Carolinas has failed to adequately consider energy efficiency as a resource option in its 2011 IRP. SACE initially applauds the Company for its program performance in 2010, but then states that Duke Energy Carolinas has undervalued energy efficiency in its 2011 IRP. SACE Comments at 7. SACE alleges that in its 2011 IRP, in contrast to the Company’s higher-than-expected performance in 2010, it has reduced the projected long-term impact of energy efficiency from its 2010 IRP by 11% without a clear explanation. SACE Comments at 7-8.

15. As an initial matter, SACE’s contention that the Company’s projections for EE achievements have decreased by 11% in its 2011 IRP is simply incorrect. As time moves forward, the Company achieves energy efficiency load impacts, which show up as reductions in the metered load of customers in the historical load data. Since the Company’s load forecast

relies on historical load data in the development of its forecasting models, the historical load impacts from past EE achievements are already reflected and incorporated into the load forecast. Therefore, the actual 2010 accomplishments (shown as a projection in the 2010 IRP) have been embedded in the 2011 load forecast and are not included a second time in the energy efficiency data shown on the 2011 projections since that would double-count those 2010 impacts. In addition, Table 4.A of the 2011 IRP includes energy efficiency program growth beyond 2021 that was not assumed in the Base Case for the 2010 IRP. In fact, the cumulative energy efficiency projections over the planning period have actually increased in the 2011 IRP rather than decreased.

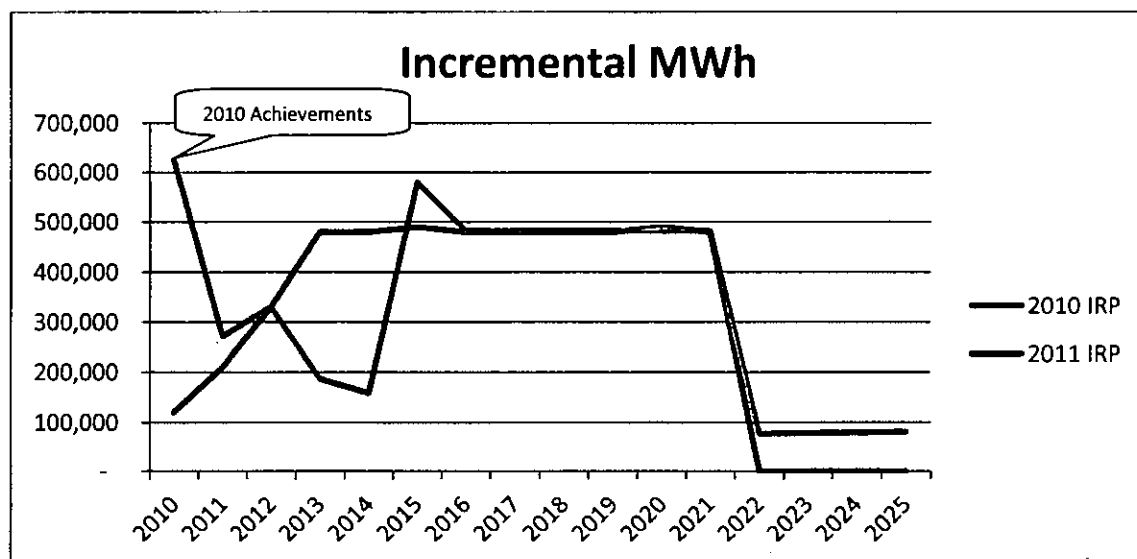
16. To respond more completely to SACE's specific contentions regarding the Company's EE forecast within its 2011 IRP, some background explanation is necessary. In the 2010 IRP, the Company created its Base EE forecast using an estimate of incremental conservation impacts that assumed relatively smooth incremental achievements that increased each year until 2013, at which point they were held constant at roughly 480,000 MWh per year until the cumulative impacts reached 5,000,000 MWh in 2021. Beyond 2021, the assumption was made that no additional incremental achievements would be added.

17. For the 2011 IRP, with an additional year of field experience with its programs, Duke Energy Carolinas replaced its original assumptions on EE portfolio performance (used for the 2010 IRP) with specific projections for impacts from existing and identified programs in the initial 5-year horizon. Beyond 2015, the Company has projected roughly the same incremental annual achievements through 2021, as were included in the Base Case for the 2010 IRP (482,000 MWh), at which point the incremental achievements were allowed to grow at the same rate as the underlying load forecast. The Company followed the same general principle for the High

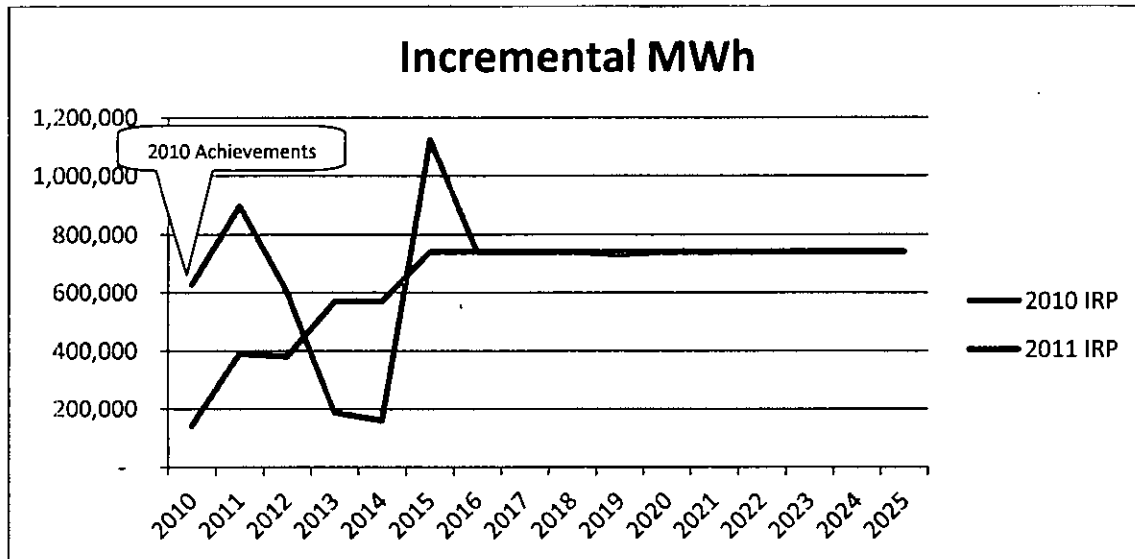
Case projections except that the incremental achievements for 2015 and beyond were set at roughly 1% of the 2009 Weather Adjusted load (approximately 740,000 MWh).

18. As illustrated in the charts below, the use of the Company's specific projections for the first 4 years results in a difference in the timing of the savings, i.e. slightly more incremental achievements in 2011, roughly the same in 2012, lower in 2013 and 2014, then higher in 2015. As noted by SACE, the Company characterizes this variability as a reflection of the timing of the expected roll out of new products, as well as drop off in participation of existing products (e.g. CFLs), as well as the relative impacts gained through participation in the new products and lost through expected reduction in participation in existing products.

Base EE Case – 2010 vs Adjusted 2011 IRP



High EE Case – 2010 vs Adjusted 2011 IRP

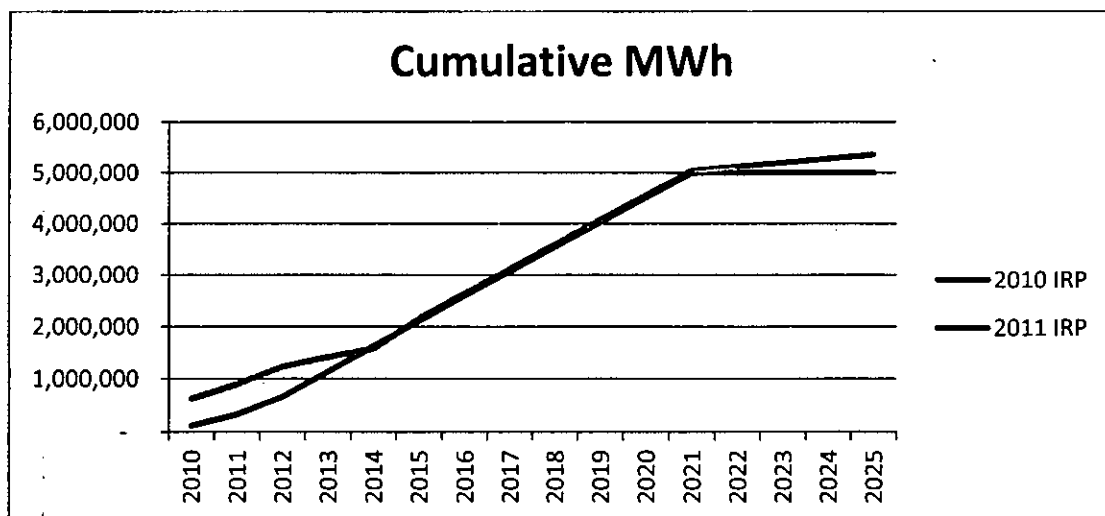


The 2011 IRP EE forecast is based on Duke Energy Carolinas' specific projections derived from its additional field experience with the programs, and represents how the Company expects to implement programs. SACE may be dissatisfied with the up-and-down nature of the Company's expected achievement of incremental impacts, but a smoother projected deployment curve would not mean the projections are any more accurate or meaningful. Duke Energy Carolinas has been gaining valuable and incremental improvements in knowledge regarding the manner in which its programs can be effectively deployed and the Company intends to utilize such knowledge improvements as it continues to expand and refine its program portfolio.

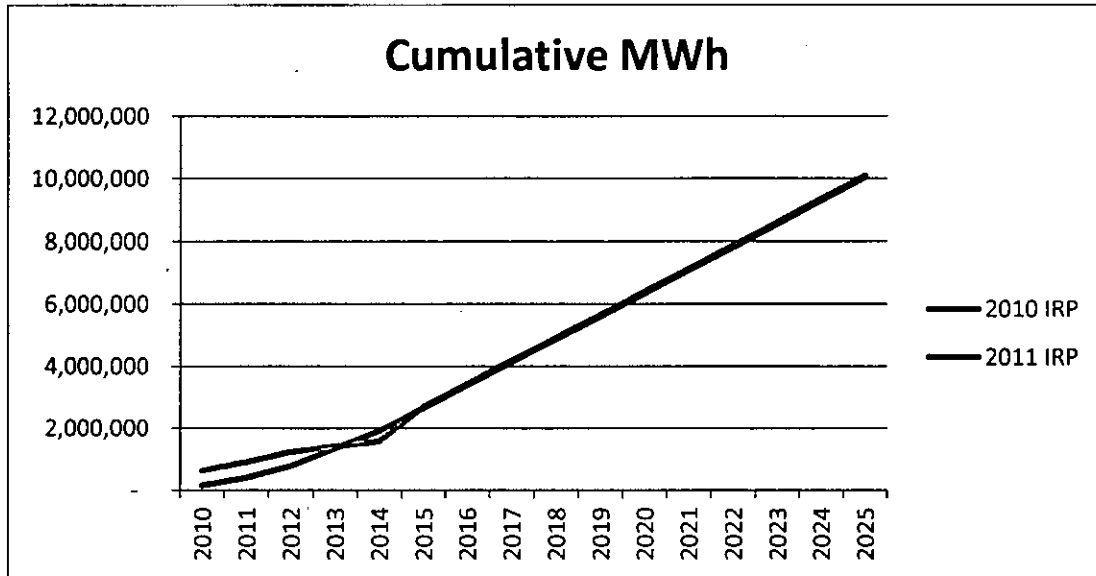
19. SACE also conveniently fails to acknowledge that the Company's forecast for EE achievements still represents a commitment to achieve a cumulative EE reduction in the 2011 IRP equivalent to that forecasted in the 2010 IRP (when the 2011 IRP is adjusted to include actual megawatt-hour ("MWh") achievements from 2010). As mentioned above, it is important

to note that while the incremental achievements by year are different between the 2010 and 2011 IRPs, the cumulative achievements in both the Base Case and High DSM Case in the 2011 IRP are relatively the same as the cumulative achievements in the 2010 IRP when the actual achievements for 2010 are included in the 2011 IRP Tables. As actual EE impacts are achieved through the implementation of the Company's EE and DSM programs, those impacts become part of the historical achievements that are automatically incorporated into the base load forecast. To include the 2010 results in the projected 2011 IRP EE impact forecast (Table 4.A of the 2011 IRP), when those impacts are already reflected in the load forecast, would double-count the impacts. To correctly compare the projected EE impacts between the 2010 and the 2011 IRP, one would need to adjust the 2011 IRP tables to include the actual achievements from 2010, approximately 620,000 MWh. The Cumulative MWh charts below illustrate the consistency of the long-term cumulative forecasts from 2015 and beyond. The cumulative impacts for the Base Case are actually higher beyond 2021 in the adjusted 2011 IRP because the 2011 IRP includes growth in the conservation programs beyond the year 2021 where the 2010 IRP assumed no growth.

Base EE Case – 2010 vs Adjusted 2011 IRP



High EE Case – 2010 vs Adjusted 2011 IRP



20. Duke Energy Carolinas is committed to incorporating all cost-effective EE and DSM resources into its resource portfolio due to their value to customers. The Company plans to update its planning assumptions relating to projected impacts and achievements based upon the results of the updated market potential study to be completed this year. The Company believes that all of its current planning and forecasting relating to EE and DSM impacts is reasonable and based upon the best information available relating to program costs, customer participation level and regulatory review and approval. As such, the Company submits that SACE's contentions on this aspect of the IRP are unfounded and should be disregarded.

21. SACE further alleges that Duke Energy Carolinas overstates its need for new generating capacity by citing concerns about the Company's planning reserve margin and its treatment of DSM as a resource rather than as a load adjustment. SACE Comments at 11-12. As explained in its reply comments on the 2010 IRP, Duke Energy Carolinas has a well-diversified

portfolio of assets that has been designed with sufficient reserves to support hours of unanticipated forced outages, drought conditions, and extreme weather. The Company's target reserve margin of 17% has historically provided sufficient resources to maintain system reliability and the Commission has deemed Duke Energy Carolinas' target reserve margins as reasonable for planning in each of the Company's IRPs over the last eleven (11) years. Pursuant to the requirements of the Commission's 2010 IRP Order, the Company has issued a request for proposals for a comprehensive reserve margin study to be conducted in 2012, the results of which will be incorporated into the Company's 2012 IRP. Duke Energy Carolinas will consider possible adjustments to its target reserve margins, to the extent they can be made without compromising system reliability, based on the results of that study.

22. SACE's continued criticism of the Company's methodology for planning reserves for its DSM resources remains misplaced and presumes that all of its DSM programs are load reduction programs. Duke Energy Carolinas has a number of DSM programs, including Standby Generation ("SG"), Interruptible Service ("IS"), and AC Load Control, that should not and cannot be regarded as load reduction mechanisms. All of these programs require either communication with the customer, customer acceptance at the time of peak, or the reliance on aging infrastructure. Technical issues, such as communication failures or customers not able to cut their full load, can result in less demand reduction than anticipated. Therefore, reserves are necessary to backstand these programs to ensure the Company has adequate resources to meet customer needs and these resources are necessary for prudent planning.

23. SACE further criticizes Duke Energy Carolinas for failing to evaluate the economics of the continued operation of its coal generating facilities with environmental controls already installed. SACE Comments at 12. SACE specifically states that the Company's 2011

IRP does not contain an analysis of the risks faced by its existing scrubbed coal plants or an assessment of what additional pollution controls will be need at each of its coal-fired units. SACE Comments at 13. The Commission, in its 2010 IRP Order, found that the Company responded in satisfactory and appropriate fashion to these same issues raised by SACE in its comments on the Company's 2010 IRP. SACE has not identified any new or different issue, nor has it raised any new information relating to the Company's continued operation of its coal-fired generation resources, particularly those with environmental controls. As the Company stated in its reply comments on the 2010 IRPs, to the extent such resources become less economic to operate, as part of the Company's portfolio in the future, Duke Energy Carolinas will make all necessary adjustments to ensure that its generation system is being planned, constructed, and operated at the least reasonable cost to its customers. The Company's current coal fleet includes some of the most economic units on the system as evidenced by the high capacity factor projections in the 2011 IRP. As Cliffside Unit 6 comes online, the efficiency of Duke Energy Carolinas' coal fleet will improve even more, as the older, less efficient units move even further up the dispatch stack and will ultimately be retired by 2015. Duke Energy Carolinas will continue to evaluate all new environmental regulations as they develop and analyze their ultimate impact on the Company's current generating system. As it did with respect to its 2010 IRP, the Company believes the selected portfolio within the 2011 IRP represents the best plan to meet its customers' energy needs in the most clean, affordable, and reliable way possible over the planning horizon.

24. SACE also again contends that Duke Energy Carolinas' assumptions regarding the cost and schedule for construction of a new nuclear generating facility are unreasonable. SACE Comments at 13-14. In its comments, SACE relies exclusively on the information and

arguments in its comments on the 2010 IRPs and does not introduce any new information or arguments relating to new nuclear generation. In the 2010 IRP Order, the Commission found that Duke Energy Carolinas had provided satisfactory and appropriate responses to SACE's assertions relating to new nuclear generation. As such, the Company would generally refer the Commission to its reply comments filed on the 2010 IRP to respond to SACE's assertions regarding new nuclear cost and schedule. Duke Energy Carolinas continues to believe that its current estimates for the schedule and cost of the proposed Lee Nuclear Station are reasonable and based upon the best information available at this time from the appropriate industry sources.

25. It is noteworthy that the U.S. Nuclear Regulatory Commission certified the final design, as revised, for Westinghouse's AP1000 in December 2011. The AP1000 reference Combined Construction and Operating License ("COL") for Southern Company's Vogtle Nuclear Plant ("Vogtle") and the COL for South Carolina Electric & Gas's ("SCE&G") V.C. Summer Nuclear Plant ("Summer") are expected to be issued in early 2012. Duke Energy Carolinas continues to diligently monitor lead times for critical plant equipment, licensing activities, and construction operations at all AP1000 design facilities both in the U.S. and abroad to stay current on the best available relevant information relating to the future construction of Lee Nuclear Station. Based on its internal analysis and relevant industry information, Duke Energy Carolinas believes that its current schedule for the proposed construction of Lee Nuclear Station remains reasonable and prudent.

26. Also, as to cost, Duke Energy Carolinas continues to monitor all available projects and industry data to ensure that its estimates are in line with recent experience and based on the best available information at that time. Duke Energy Carolinas' most recent projection of the overnight cost of building two twin AP1000 units at the proposed Lee Nuclear Station site in

Cherokee County, SC, remains eleven billion dollars (\$11 billion), in 2011 dollars, exclusive of financing costs and exclusive of the impacts of inflation. Contrary to SACE's implication that the Company's modeling only considers "overnight cost", the Company's PVRR calculations for all model portfolios account for all projected financing costs and escalation relating to the construction of different generation resources.

27. As referenced in the Company's 2010 reply comments, Westinghouse Electric Company, LLC, and its consortium partner Shaw, Stone and Webster, Inc. (collectively "WEC/SN") developed this estimate and WEC/SN Engineering, Procurement & Construction ("EPC") consortium is the EPC contractor for the Vogtle and Summer projects, and is similarly involved in the construction of the four AP1000 units in China. The four AP1000 units in China remain under construction and, as noted above, both Vogtle and Summer are ahead of Duke Energy Carolinas' Lee Nuclear Station in both licensing and construction. The industry-related experience and data continue to support the current level of the Company's cost estimates used for resource planning purposes. Further, Duke Energy Carolinas continues to model various project risks specifically relating to increases in capital cost and incorporated such analysis into the 2011 IRP through the +20%/-10% Nuclear Capital Cost sensitivity. For these reasons, the Company submits that its analysis continues to demonstrate that it is reasonable and prudent for Duke Energy Carolinas to continue to pursue Lee Nuclear Station as a future resource for its customers in the 2020 timeframe.

28. Finally, in a footnote, SACE questions the Company's assumptions relating to the possible addition of new nuclear capacity in 2016 and 2017 in its regional generation portfolio. This projected capacity addition is intended to reflect the Company's potential participation in the Summer project, pursuant to the terms of the Letter of Intent ("LOI") executed by Duke

Energy Carolinas and Santee Cooper in July 2011. Based on the progress of the Summer project to date, it is reasonable to plan for that facility to be in commercial operation in the 2016/2017 timeframe. The Company has not made an ultimate decision relating to its possible involvement in Summer, but based on the terms of the LOI, it remains a viable resource option to meet customer needs in 2016 or 2017.

RESPONSE TO INITIAL COMMENTS OF NC WARN

29. Like SACE, in its comments on the 2011 IRPs, NC WARN presents the same arguments, albeit in different terms, as in its comments on the 2010 IRPs in this docket. NC WARN, through its comments and the supporting editorial paper attached thereto, repeats the same flawed logic, assumptions, and conclusions that formed the basis for its comments filed last year and in the 2006, 2007, 2008, and 2009 IRP proceedings. NC WARN's positions and contentions are all equally inaccurate and unpersuasive today. All of NC WARN's claims have been refuted several times within testimony and comments in the previous IRP proceedings. As with the comments filed by SACE, to the extent any particular criticism leveled by NC WARN is not addressed directly in these reply comments, the Company will incorporate by reference into this document its reply comments filed in this docket with respect to the 2010 IRP and rely on its responsive comments to address those duplicative assertions. The Commission dismissed NC WARN's arguments in the context of the 2010 IRP and their comments should similarly be disregarded with respect to the 2011 IRP.

30. NC WARN's primary argument within its actual comments is a recitation of its annual criticism of the projected load growth in the Company's IRP. The Commission found in its 2010 IRP Order that Duke Energy Carolinas' growth projections and peak and energy

forecasts within its 2010 IRP were reasonable and appropriate for planning. The Company's forecasts within the 2011 IRP remain very consistent with those approved in the context of the 2010 IRP, and Public Staff indicates in its comments that it finds the Company's load growth projections, and peak and energy forecasts, to be reasonable for planning purposes. Public Staff Comments at 10-11.

31. NC WARN further alleges in its comments that the Company's 2011 IRP does not reflect the minimum requirements of North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard ("REPS"), as set for in N.C. Gen. Stat. § 62-133.8. NC WARN Comments at 4. This allegation is plainly false and reflects NC WARN's lack of understanding of the details of the law. First, the pie-charts reflected on page 90 of the Company's 2011 IRP reflect system-wide capacity and energy, and REPS only creates a portfolio standard based upon historical North Carolina retail sales (which creates a corresponding obligation relating to energy only, not capacity). Second, utilities may meet their respective REPS obligations through a variety of eligible qualifying resources that do not contribute energy to the Company's system, including (1) energy efficiency savings (limited to up to 25% in 2012, increases to 40% in 2021), (2) in-state unbundled renewable energy certificates ("RECs"), (3) out-of-state RECs (limited to up to 25% every year) and (4) thermal RECs. Third, the utilities may bank RECs for compliance in future years. Fourth, in the latter years of the planning period, the Company projects that the per-account cost caps, set forth in N.C. Gen. Stat. 62-133.8(h)(4), will limit its requirements to continue to procure renewable energy and/or RECs to comply with REPS. All of these components described above, in combination, reduce the amount of actual renewable energy and renewable capacity the Company plans to have on its system from 2011 through the end of the planning period. And yet, the Company will still be positioned to comply with its REPS

requirements through its reliance on other cost-effective compliance options. The pie charts on page 90 reflect the actual renewable energy the Company expects to have to procure to comply with REPS after all of these other, more cost-effective alternatives have been utilized. To the extent renewable energy becomes more cost-effective than these other compliance options, the Company will adjust its compliance strategy accordingly and the IRP would likely reflect additional energy on the system in future years. NC WARN's allegations are flawed and reflect a simple lack of understanding of the true nuances and impacts of REPS. As such, they should be ignored.

32. In addition to its comments, NC WARN also attached the latest editorial paper authored by its executive director Jim Warren, entitled *New Nuclear Power is Ruining Climate Protection Efforts and Harming Customers: Southeastern Utilities Plan to Expand Generation – Not Replace Coal with Nuclear Power*. It is unclear whether this opinion piece is being offered as some form of evidence or simply a statement of position from the organization on various policy issues, not simply the utilities' IRPs. The editorial paper does not offer specific criticisms as to the Company's 2011 IRP, but instead generally attacks Duke Energy on various issues, both inside and outside of its utility operations in the Carolinas, pertaining to its position on new nuclear and coal resources, as well as the development of EE, DSM and renewable technologies.

33. As Mr. Warren did not comment on the specific plans, assumptions, or data included in the Company's 2011 IRP, Duke Energy Carolinas will address his overall criticisms generally in lieu of addressing each of Mr. Warren's generic unsupported allegations individually. As noted above, many of Mr. Warren's criticisms were addressed in the Company's reply comments filed in this docket on the 2010 IRP. NC WARN continues to ignore that Duke Energy Carolinas' long-term resource planning incorporates a need for a

diversified balance of baseload, intermediate and peaking resources from both the supply and demand-side, including advanced coal, new nuclear, natural gas, EE, DSM and renewables, to meet customer demand in a carbon-constrained future. For the Company, resource planning will continue to be a “both, and” not an “either, or” scenario for the foreseeable future.

34. In a carbon-constrained future, it is the Company’s position that new nuclear resources must play a role to meet customers’ electricity needs. As described above in response to the contentions of SACE, the Company’s assumptions around the cost and schedule for the development of new nuclear resources remain consistent with the best available industry information and the results of the 2011 IRP analysis reflect that those portfolios that include new nuclear capacity are more cost-effective to customers than those that do not.

35. Despite NC WARN’s continuing allegations to the contrary, solar and wind resources are not and will never be the functional equivalent of a nuclear plant, or any other traditional baseload generating plant. From a planning perspective, the Company assumes that wind generation contributes only 15% of nameplate capacity to meet peak load demand and solar only contributes 50% of its nameplate capacity to peak load demand. In a very basic sense, this means that significantly more capacity of these resources would need to be installed to provide the same amount of actual available capacity and energy delivered by one nuclear unit, which is expected to operate approximately 95% of the time. Additionally, due to the inherent intermittency of these resources, they must have dispatchable, reliable back-up generation in place to ensure customer needs may be met in the event environmental conditions prevent such resources from actually delivering the capacity and energy required (i.e., the sun is not shining or the wind is not blowing).

36. The Company supports the development and installation of renewable generation on its system, as reflected by its recently awarded Top 10 national ranking from the Solar Electric Power Association for the amount of solar energy placed into service in 2010, to both meet its REPS requirements and deliver clean energy for the benefit of its customers. However, such resources are not the silver bullet NCWARN alleges they are and must be incorporated in a diversified portfolio with traditional, dispatchable generating resources to maximize the benefit and cost-effectiveness to the Company's customers.

37. Further, NC WARN's continuing criticisms of Duke Energy Carolinas' commitment to EE and DSM are equally misplaced. As referenced above and in the Company's 2010 reply comments, the Company is committed to implementing all cost-effective energy efficiency programs and to achieving the energy efficiency savings commensurate with its High DSM sensitivity projections in its 2011 IRP through implementation of its approved modified Save-A-Watt energy efficiency plan. Duke Energy Carolinas has every incentive to develop and implement as much cost-effective energy efficiency as possible under its approved Save-A-Watt model, as the benefits to the Company are tied directly to the achievement of the stated savings targets. As noted by SACE, the Company outperformed its savings projections in 2010. However, as the Company reiterates time and again, any savings achievements will ultimately be determined by customer participation, and as such, Duke Energy Carolinas must plan its resource needs around the energy efficiency savings it can reasonably expect to achieve through its projected customer participation. To plan in any other manner would be irresponsible and imprudent.

38. NC WARN has not introduced any new, different or otherwise useful information in its comments on the Company's 2011 IRP. It is the same story presented on each of the

utilities' last 6 IRPs, devoid of supportable facts or data that are worthy of consideration by the Commission. As such, NC WARN's comments and supporting submission should be disregarded.

RESPONSE TO INITIAL COMMENTS OF NCSEA

39. NCSEA's comments are directed exclusively to its favorite issue: the disclosure of confidential, market sensitive information in the public forum, presumably for the benefit of its members and investors, at the expense of utility customers. Specifically, NCSEA requests that the Commission require the utilities to disclose in their respective IRPs (1) the levelized cost of energy in a standardized fashion for each resource type for each year in the planning period and the projected delivered fuel costs for each resource option in the planning period; and (2) the quantitative data used in creating the utility's levelized busbar cost curves presented in the utility's IRP, including (i) projected delivered fuel costs, (ii) the utility's fixed charge rates, (iii) expected unit capacity factors, and (iv) data for the remaining variables needed to create a levelized busbar cost curve. NCSEA Comments at 10. NCSEA's proposal should be rejected because it would require the public disclosure of market and commercially sensitive information that would impair the utilities' respective bargaining position as to various aspects of its core business. This issue has been raised by NCSEA and other parties in prior dockets and NCSEA's position has been rejected in each docket by the Commission. See, e.g., *Order Approving REPS and REPS EMF Riders and 2010 REPS Compliance*, Docket No. E-7, Sub 984 (August 23, 2011); *Order Approving Decision to Incur Project Development Costs*, Docket No. E-7, Sub 819 (June 11, 2008) ("2008 Project Development Order").

40. The Company remains concerned about various market participants gaining the value and advantage of commercially sensitive information to the detriment of the Company's

customers. Duke Energy Carolinas, and every other electric power supplier, operates under a least cost mandate for resource planning and for operation of its system resources. Market information directly impacts pricing and negotiating position; NCSEA knows this and does not allege otherwise. Detailed market information related to a utility's capital cost estimates and projected expenditures for fuel and REPS compliance can significantly impact pricing on major expenditures paid for directly by a utility's customers. Disclosing specific information that may impair the Company's ability to negotiate and transact at favorable prices is not in the best interest of the customers who will ultimately pay for these resources. NCSEA specifically states that its proposal is not intended to benefit customers, but rather to provide non-intervening business persons with "access to information critical to their investment decisions." NCSEA Comments at 9. NCSEA's proposal unabashedly seeks to benefit these investors at the expense of the customers of the North Carolina utilities.

41. As referenced above, the Commission has held that commercial information regarding the cost estimate of new generation resources constitutes a trade secret under N.C. Gen. Stat. § 66-153, and thus warrants confidential treatment under N.C. Stat. § 132-1.2. In its 2008 Project Development Order, the Commission determined that the North Carolina Public Records Act, through its "confidential information" exception (N.C. Gen. Stat. §132-1.2(1)), prohibits disclosure of confidential commercial information, such as the information Duke Energy Carolinas redacts from its IRPs and REPS Compliance Plans. Information that (a) meets the definition of a "trade secret" found in N.C. Gen. Stat. §66-152(3), (b) is the property of a "private person," (c) was disclosed to the Commission in compliance with law, and (d) was designated as "confidential" when disclosed is not a public record and is entitled to confidential

treatment by the Commission. As the Commission noted in the 2008 Project Development Order, a “trade secret” is defined by N.C. Gen. Stat. §66-152(3) to include:

[B]usiness or technical information, including but not limited to a formula, pattern, program, device, compilation of information, method, technique, or process that:

- a. *Derives independent actual or potential commercial value from not being generally known or readily ascertainable through independent development or reverse engineering by persons who can obtain economic value from its disclosure or use.*
- b. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Id. at 4-5 (emphasis added).

42. As discussed above, the relevant IRP information that NCSEA seeks to have disclosed through its recommendations concerning the Company’s delivered fuel costs, capital cost estimates and other underlying data supporting busbar projections is clearly a “compilation of information . . . that [has] . . . actual or potential commercial value” Moreover, as the Commission acknowledged in the 2008 Project Development Order, “the ‘confidential information’ provision of the Public Records Act cannot be construed differently in the context of a regulated industry.” *Id.* at 6 (citing *State ex rel. Utilities Comm’n v. MCI Telecommunications. Corp.*, 132 N.C. App. 625, 635, 514 S.E.2d 276, 283 (1999)). The Commission concluded that there is no public interest exception to confidential information provision of N.C. Gen. Stat. §132-1.2(1). *Id.*

43. Duke Energy Carolinas strongly maintains that commercially sensitive information used for the purposes of the IRP process must be maintained as confidential for the protection and benefit of the Company’s customers. Generally speaking, the Company’s customers will be the primarily impacted parties if or when market information is disclosed and

Duke Energy Carolinas bargaining position is negatively affected. NCSEA, Public Staff, SACE, NC WARN, and many other interveners have all been granted access to the Company's confidential information and data supporting its IRP and REPS planning documents (including all of the information NCSEA seeks to have publicly disclosed through its recommendations) subject to the execution of reasonable and appropriate non-disclosure agreements. Thus, intervenors have been able to fully participate in the IRP review process, as contemplated by Rule R8-60, and have been able to conduct its own review and analysis of the Company's methodology and data during each biennial proceeding. In response to its commitments made in Docket No. E-7, Sub 984 last year, the Company did revisit the previously confidential aspects of its REPS Compliance Plan filing and significantly reduced its redacted sections, with only one attachment including any redactions at all and only specific pricing and projected REC volume acquisition being protected from disclosure. Further, the only portions of the Company's 2011 IRP that have been redacted relate to the specific \$/kW estimates for generating resources and undesignated wholesale load projections, which are still the subject of commercial negotiation at the time of the IRP filing. NCSEA's allegations lack substance in the face of the Company's actual practices and the minimal information that is actually redacted from the Company's IRP and REPS Compliance Plan submissions.

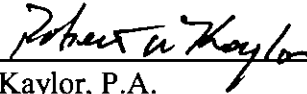
44. For the foregoing reasons, Duke Energy Carolinas submits that NCSEA's recommendation should be rejected. The information sought is clearly protected from disclosure as a "trade secret" under North Carolina law, and the risk of potential negative impact on utility customers is certainly not outweighed by the benefits to NCSEA's allegedly disadvantaged investors.

CONCLUSION

In conclusion, Duke Energy Carolinas submits that its 2011 Integrated Resource Plan and REPS Compliance Plan meet the requirements of all applicable statutes and Commission Rules and should be approved. No evidentiary hearing is required or necessary in this proceeding based on the issues raised by the interveners, as such issues are almost entirely duplicative of those addressed on the utilities' 2010 IRPs. Duke Energy Carolinas submits that as no parties have filed comments contesting the reasonableness or prudence of its 2011 REPS Compliance Plan, it should be approved as filed by the Commission without additional review or consideration.

Respectfully submitted, this the 27th day of January, 2012.

DUKE ENERGY CAROLINAS, LLC



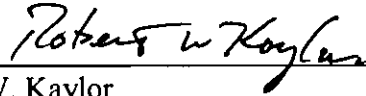
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CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's in Docket No. E-100, Sub 128, has been served by electronic mail (e-mail), hand delivery or by depositing a copy in the United States Mail, first class postage prepaid, properly addressed to parties of record.

This the 27th day of January, 2012.

A handwritten signature in black ink, reading "Robert W. Kaylor", is written over a horizontal line.

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