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STATE OF SOUTH CAROLINA

(Caption of Case)

Duke Energy Progress, Inc's
Integrated Resource Plan (IRP)

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BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

COVER SHEET

DOCKET NUMBER: 2013 - 8 - E

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PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2013-8-E

IN THE MATTER OF:	)	
	)	**COMMENTS OF**
Duke Energy Progress, Inc.'s	)	**NUCOR STEEL –**
Integrated Resource Plan (IRP)	)	**SOUTH CAROLINA**
	)	

Pursuant to South Carolina Public Service Commission Order No. 2012-95, and the December 20, 2013 Standing Hearing Officer Directive extending the comment date in this proceeding, Nucor Steel-South Carolina, a Division of Nucor Corporation, hereby submits the following comments on Duke Energy Progress, Inc.'s ("DEP's") 2013 Integrated Resource Plan.

I. INTRODUCTION

DEP's 2013 IRP is an annual planning document in which DEP details its current plan to meet the capacity and energy needs of its customers into the future. The IRP reflects DEP's current long-range forecasts of its expected load, plans to build or acquire (and to retire) generation, capital and fuel cost projections, as well as projected changes in DEP's portfolio of energy efficiency ("EE") and demand side management ("DSM") programs. The IRP is based on currently-available information and forecasts, and the plan, by necessity, will change and evolve over time. The IRP filed by DEP is a summary document and, by necessity, does not address all of the details and analyses necessary to fully understand DEP's planning process and plan. Nevertheless, the IRP provides important high-level insight into DEP's planning process and strategy, as well as other factors that could ultimately affect the long-term cost of electric service to customers.

Like the IRP filed by DEP in 2012,[1] the 2013 IRP describes an electric system going through considerable changes, including the retirement of large amounts of coal-

[1] Docket No. 2012-8-E, Progress Energy Carolinas, Incorporated's Integrated Resource Plan ("2012 IRP"). On July 10, 2013, the Commission approved the name change from Progress Energy Carolinas, Inc. to

fired generation, the addition of new natural-gas fired generation, and the possible purchase or construction of new nuclear generation. In addition, the IRP details DEP's plans for increased renewable energy and expanded EE and DSM programs. All of these resource plans, if eventually implemented, could significantly impact the cost and quality of electric service to DEP's customers.

While some major events affecting DEP have occurred in recent years (most notably the completion of the Duke/Progress merger[2]), the 2013 IRP does not appear to make any U-turns or major changes in resource planning strategy as compared to the 2012 IRP. Consequently, the comments Nucor filed in last year's IRP proceeding are equally relevant and applicable to the 2013 IRP. We summarize those comments below and incorporate them in the instant comments by reference. We also offer some selective additional comments on new features contained in the 2013 IRP. In particular, we discuss DEP's joint planning scenario and the need for DEP to carefully assess the benefits of joint planning and resource development with Duke Energy Carolinas, Inc. ("DEC") going forward. We also discuss DEP's changed methodology for reflecting demand response in the load forecast, and the importance of ensuring that the load forecast accurately reflects the full benefit that DEP's DSM programs, as well as curtailable/interruptible rates and time-of-use rates, provide to the system.

It should be noted that at this point, Nucor has not engaged in an extensive, detailed and/or comprehensive review of DEP's IRP due to the nature of the document, nor do we purport to offer comprehensive comments. However, Nucor reserves the right to provide additional comments in this proceeding if necessary, and to take other positions as this proceeding continues.[3]

Duke Energy Progress, Inc. For purposes of consistency, DEP is used throughout these comments to refer to both Duke Energy Progress and Progress Energy Carolinas.

[2] In the 2012 IRP, DEP noted that the process of developing the IRP was begun before the completion of the Duke/Progress merger, and that both PEC and DEC prepared their 2012 IRP's separately. 2012 IRP at 3.

[3] Nucor's failure to directly address any issues raised by the IRP in these comments should not be construed as agreement therewith.

II. COMMENTS

A. Nucor's Comments from Docket No. 2012-8-E Remain Relevant to DEP's 2013 IRP and Are Incorporated Herein by Reference

Last year, Nucor filed comments on DEP's 2012 IRP in Docket No. 2012-8-E. In those comments, we offered several general observations about the IRP review process before the Commission, and about certain features of the IRP. Those comments are briefly summarized below:

- Since the IRP is a planning document based on assumptions and forecasts that will change over time, IRP proceedings should continue to be primarily informational. If the Commission issues an order on the IRP, the Commission should limit its order to determining whether DEP provided the information required to be included in the IRP, without specifically approving any aspect of the IRP, and in particular, the choice of specific supply-side or demand-side resources or programs discussed in the IRP.

- The IRP details significant changes in DEP's generation resource mix, driven by PEC's plans to retire substantial coal-fired generation and build new natural gas-fired generation, and by the Duke/Progress merger. In light of these significant system changes, we recommend that the Commission apply appropriate scrutiny and regulatory oversight to DEP's resource decisions and associated costs in the appropriate rate-related proceedings.

- DEP's efforts to acquire renewable energy to meet North Carolina statutory requirements are detailed in the IRP. Since South Carolina has no statutory renewable portfolio requirement, the Commission should apply appropriate scrutiny and regulatory oversight to these resources in the appropriate rate-related proceedings to the extent DEP seeks to recover the costs related to these resources from South Carolina ratepayers.

- The reserve margin target is an important component of the IRP that should be reassessed on a periodic basis by the utility. In the case of DEP, the reserve margin should be reassessed in light of the Duke/Progress merger to determine whether the two operating companies can utilize their large size and combined resources to reduce their individual reserve requirements.

- The load forecast in the IRP should appropriately reflect the benefits of the EE/DSM program portfolio, as well as the effects of rate designs such as curtailable and time-of-use rates, in reducing DEP's firm peak demand. By reducing peak demand, DEP can avoid or defer the need for a proportional

amount of new generation, plus the reserves associated with that avoided capacity.

- DEP should continue to make reasonable EE/DSM programs available through the mechanism approved by the Commission in Docket No. 2008-251-E. In accordance with the Commission's order in that case, DEP should continue to recover its costs of such programs under DEP's EE/DSM rider and large commercial and industrial customers should retain the option to opt-out of the rider, in recognition that such customers already have a strong incentive to implement their own EE and DSM measures if they have the ability to do so.

These observations and recommendations continue to be relevant and applicable to DEP's IRP under consideration in this case. Therefore, we incorporate our comments in Docket No. 2012-8-E by reference herein, and have included those comments in this filing as Attachment 1. Nucor offers additional comments on DEP's 2013 IRP below.

B. Additional General Observations on 2013 DEP IRP

1. The Joint Planning Scenario demonstrates the possible effects of DEP and DEC jointly planning their systems, and DEP should continue to evaluate this scenario in future IRPs and carefully consider joint planning with DEC to the degree it results in lower costs to DEP customers

One of the most significant changes in this year's IRP as compared to the 2012 IRP is the inclusion of a Joint Planning Scenario intended to demonstrate the impact of capacity sharing between DEP and DEC. Although DEP and DEC have been jointly dispatching their generation under the Joint Dispatch Agreement since the completion of the Duke/Progress merger, the two utilities have not engaged in joint planning and acquisition of resources. Nevertheless, the inclusion of the Joint Planning Scenario is useful because it provides a snapshot of the possible impacts on the system and the costs to customers if DEP and DEC were to engage in joint planning.

According to DEP, the Joint Planning Scenario is constructed by combining the future load obligations of DEP and DEC and combining the existing and projected

resources from DEP's and DEC's independent Base Case plans.[4] Rather than maintaining individual reserve margins for the two utilities, the Joint Planning Scenario ensures that the combined system maintains adequate reserves in the aggregate.[5] This scenario, as developed by DEP, results in the delay and modification of generation resources needed to serve DEP's projected load, specifically:

- a one-year delay (from 2017 to 2018) in the need for a new 680 MW combined cycle ("CC") unit;
- a two-year delay (from 2019 to 2021) in the need for a new 843 MW CC unit;
- a two-year delay (from 2019 to 2021) in the need for a second 843 MW CC unit, and the replacement of that projected resource with a new 403 MW combustion turbine ("CT") unit;
- a one-year delay (from 2022 to 2023) in the need for a new 403 MW CT unit; and
- the deferral of the need for a new 403 MW CT unit from 2027 to sometime outside the IRP study period.[6]

The IRP explains that, in addition to deferring the need for new generation over the 2014-2028 planning horizon, the Joint Planning Scenario also results in a lower overall reserve margin. The annual reserve margins over the planning horizon averaged 16% in the Joint Planning Scenario, compared to 17.6% for the Combined Base Case Scenario.[7]

The Joint Planning Scenario suggests that joint capacity planning by DEP and DEC could produce significant benefits. Of course, this proposition should be fully tested before joint planning is actually implemented. The Joint Planning Scenario provides important additional information and analysis, and we recommend that DEP continue to evaluate this scenario in future IRP reports. However, DEP and DEC cannot currently

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[4] IRP at 8.

[5] *Id.*

[6] *Id.* at 35.

[7] *Id.* at 45.

engage in joint planning and, as DEP recognizes, additional regulatory approvals would be necessary for the utilities to plan their systems as a combined system.[8] DEP and DEC should carefully and thoroughly examine all of the implications of joint planning and present such information to the Commission for its review. If joint planning is approved and a jointly-planned resource is eventually built or procured, the Commission should carefully evaluate the prudence of the costs and the proper allocation of cost responsibility to DEP and DEC in the appropriate rate-related proceedings. Most importantly, DEP's goal should be the same under joint planning as it is today when DEP is planning its system as a stand-alone utility – to plan the system to ensure the availability of economical and reliable electric service for DEP customers into the future.

2. DEP's load forecast should accurately reflect the full benefits provided by DEP's EE and DSM programs, as well as the effects of curtailable/interruptible and time-of-use rates

DEP explains that it continues to expand its portfolio of EE and DSM programs, offering customers more ways to take control of their energy use and save money.[9] DEP states that EE and DSM programs, 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, equating to over 1,000 MW of new EE, DSM, and renewable resources, or the equivalent of a large baseload generation facility.[10]

Nucor supports the continued development of cost-effective DSM and EE programs, along with the continuation and improvement of rate designs that provide similar reliability and capacity-avoidance benefits, such as curtailable/interruptible rates and time-of-use rates. Dispatchable demand response – that is, a DSM program or curtailable/interruptible rate under which a customer is required to interrupt or curtail its load when called upon by the utility – is particularly beneficial in terms of reducing firm peak demand for planning purposes and avoiding the need for new generation capacity. In addition, such resources can be designed to provide powerful tools to

[8] *Id.* at 8.

[9] *Id.* at 4.

[10] *Id.*

address system reliability emergencies, whenever they occur. These types of programs and rates avoid both the need for new capacity, as well as the reserves that would have been required to serve the curtailable/interruptible load had that load been firm.

Nucor notes that in the load forecast contained in the 2013 IRP, at least some demand response on DEP's system is counted as a supply resource.[11] This appears to be a change in methodology from the 2012 IRP, where the load forecast appeared to reflect demand response as a reduction to firm peak load.[12] With regard to dispatchable demand response such as curtailable rates, including this demand response as a reduction to firm peak load ensures that the load study will reflect the avoidance of reserves that would have been necessary if the curtailable/interruptible load were firm.[13] It is unclear whether this benefit is similarly reflected in treating demand response as a supply resource, as DEP does in the 2013 IRP. DEP does not indicate whether its supply resource value has been increased to reflect avoided reserves. As a result, we prefer the clarity of the approach utilized by DEP in the past, where firm peak load is reduced. Going forward, DEP should ensure that whatever methodology is used to adjust the load forecast for the affects of demand response, the full benefit of demand response (including avoided reserves) is accurately reflected in the studies and accounted for in DEP's resource planning.

III. CONCLUSION

Nucor respectfully requests that the Commission take these comments into consideration in evaluating DEP's 2013 IRP.

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[11] *Id*. at 29-30.

[12] 2012 IRP at 5-6; 26-27; Appendix E at 15-16.

[13] Dispatchable demand response generally permits the utility to curtail the load where the utility has insufficient capacity to meet it and maintain reliable service to firm loads. As a result, the utility does not plan its system to meet curtailable loads at peak, thereby permitting the utility to avoid acquiring capacity both to meet the load and to provide the reserve margin it would have required if the load had been firm. To illustrate, if a 100 MW load is removed from system peak for planning purposes because it is curtailable, the utility avoids 115 MW of capacity if the utility is using a 15% reserve margin.

Respectfully submitted,

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Dated: January 31, 2014

ATTACHMENT 1

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2012-8-E

IN THE MATTER OF:	)	
	)	**COMMENTS OF**
Progress Energy Carolinas, Inc.'s	)	**NUCOR STEEL –**
Integrated Resource Plan (IRP)	)	**SOUTH CAROLINA**
	)	

Pursuant to South Carolina Public Service Commission Order Nos. 2012-95, 2012-895, and 2013-34, Nucor Steel-South Carolina ("Nucor"), a Division of Nucor Corporation, hereby submits the following comments on Progress Energy Carolinas, Inc.'s ("PEC") 2012 Integrated Resource Plan ("IRP").

I. INTRODUCTION

This proceeding addresses PEC's 2012 IRP, which is the document filed periodically by PEC with this Commission providing an overview of its evolving plans to supply sufficient electric capacity and energy to meet its expected customer needs. The IRP reflects PEC's current long-range forecasts of its expected load, capital costs, and fuel costs, as well as projected changes in demand and supply-side resources to serve its expected load. Even though the IRP is based only on forecasts, assumptions and currently available information and will, by necessity, change in the future, IRPs are of particular interest to customers like Nucor, for whom electric energy is a major cost of doing business. IRPs provide some high level insight into a utility's planning process and strategy, as well as other factors that could ultimately affect the long-term cost of electric service to customers.

In these comments, we offer some recommendations on the Commission's IRP review process in this proceeding, as well as some observations about PEC's IRP. Given the nature of the IRP and this proceeding, the complexity of resource planning and the limited information available.at this point, our comments are necessarily general, brief and limited. We reserve the right to provide additional comments if necessary and

appropriate and to take any other positions as this proceeding continues. Moreover, our failure to address anything in the IRP or any issues raised by the IRP in these comments should not be construed as agreement therewith.

II. SUMMARY OF COMMENTS AND RECOMMENDATIONS

Nucor's primary recommendation on the IRP review process can be summarized as follows:

- As a planning document, the load forecasts and resource projections contained in PEC's IRP are subject to and will change over time; this is particularly true due to the recent Duke/Progress merger. Consistent with Commission precedent, this IRP proceeding is not the place to approve PEC's forecasts or plans or to determine the reasonableness of PEC's planned resources or its expenditures on such resources. To conduct a detailed review and assessment of the IRP and the information contained in it would require, at a minimum, a far more extensive process than is contemplated in this proceeding. As a result, we recommend that the Commission clarify that PEC's IRP proceedings continue to be primarily informational. If the Commission issues any order on the PEC IRP, we recommend that the Commission simply determine whether PEC has provided the information required by statute to be included in the IRP, without approving (or disapproving) any aspect of the IRP, and in particular, the choice of specific supply-side or demand-side resources or programs discussed in the IRP.

Nucor offers the following additional observations and recommendations regarding the PEC IRP:

- The IRP demonstrates that significant changes to the generating resource mix for PEC's system have been and will be occurring in the near term after a long period of relative stability. These changes appear to be driven in large part by PEC's decisions to retire substantial coal-fired generation, build new natural gas-fired generation, and to merge with Duke. These changes could have significant impacts on the cost of electric service to PEC's customers, and we recommend that the Commission apply appropriate scrutiny and regulatory oversight to PEC's resource decisions and associated costs in the appropriate rate-related proceedings.

- The IRP discusses "Renewable Energy Requirements" in the context of North Carolina mandates to acquire renewable energy. Unlike North Carolina, there is no renewable energy portfolio requirement in South Carolina. The costs of renewables often exceed the costs of other viable, more cost

effective resource alternatives. As with other aspects of the IRP, we do not recommend that the Commission evaluate these resources and associated costs in this proceeding, particularly since PEC apparently has no option under North Carolina law but to acquire these resources. However, we do recommend that the Commission apply appropriate scrutiny and regulatory oversight to these resources and costs in the appropriate rate-related proceedings to the degree PEC seeks to recover the costs related to these resources from South Carolina customers.

- The IRP discusses the analysis of PEC's reserve margin target conducted in response to an order by the North Carolina Utilities Commission. According to the IRP, PEC has adopted a minimum target reserve margin and target range. Establishing a reasonable reserve margin target is important for planning and generally should be reassessed periodically by the utility. Once PEC has been more fully integrated with Duke, a reassessment will be important to determine if the two operating companies can utilize their larger size and combined resources to reduce their individual reserve requirements. As with other aspects of the IRP, we do not recommend that the Commission make any findings on the appropriate reserve margin for PEC in this proceeding.

- The load forecast for the IRP should appropriately reflect the benefits of PEC's demand side management ("DSM") and energy efficiency ("EE") program portfolio, including the positive effects of rate designs such as curtailable and time-of-use rates, in reducing PEC's firm peak demand. It appears, at least based on a limited review of the information in the IRP, that the PEC load forecast meets this objective. By reducing peak demand, as shown in the IRP, PEC can avoid or defer the need for a proportional amount of new capacity, as well as the reserves associated with that avoided capacity.

- PEC's DSM/EE programs should remain subject to Commission review and oversight and PEC should continue to make available reasonable and appropriate DSM/EE programs to South Carolina customers who wish to participate in such programs through the DSM/EE mechanism approved by the Commission in Docket No. 2008-251-E. In accordance with the Commission's Order in Docket No. 2008-251-E, PEC should continue to recover its costs of such programs under PEC's DSM/EE rider and large commercial and industrial customers appropriately should retain the option to opt-out of PEC's DSM/EE rider, in recognition that such customers already have a strong incentive to implement their own DSM and EE measures if they have the ability to do so.

III. COMMENTS

A. Overview and Purpose of the IRP Process

As the Commission has stated, the "IRP process is an important planning tool for the Companies and the Commission."[1] South Carolina utilities must prepare and submit IRPs every three years and must update plans each year.[2] As defined under S.C. Code Ann. § 58-37-10, an IRP must include:

- The utility's demand and energy forecast for at least a 15-year period;
- The utility's program for meeting the requirements shown in its forecast in an economic and reliable manner, including both demand-side and supply-side options;
- A brief description and summary cost-benefit analysis, if available, of each option which was considered, including those not selected;
- The utility's assumptions and conclusions with respect to the effect of the plan on the cost and reliability of energy service; and
- A description of the external environmental and economic consequences of the plan to the extent practicable.

The statute does not establish a review or approval process for IRPs, implying that these filings are informational only.

The Commission's requirements for IRP filings and its procedures for reviewing IRPs have evolved over the years. In 1991, the Commission adopted IRP filing and reporting procedures, including detailed requirements for the development and composition of IRP filings.[3] In Order No. 1998-502, the Commission adopted a less prescriptive approach, replacing the detailed procedures and requirements contained in Appendix A of Order No. 91-1002 with a more general requirement that utilities provide information specified in S.C. Code Ann. § 58-37-10. The Commission further stated that the Commission may require additional information in IRPs so that parties may

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[1] Order No. 2012-95.

[2] S.C. Code Ann. § 58-37-40(A).

[3] *See* Order No. 91-1002, Appendix A.

reasonably understand the required information. Last year, in Order No. 2012-95, the Commission clarified certain procedural aspects related to the Commission's review of IRPs. First, the Commission clarified that the IRP process will constitute a proceeding under South Carolina law. Second, the Commission clarified that parties may intervene and file comments in IRP proceedings. Third, the Commission clarified that, going forward, it would determine whether a utility's IRP meets the requirements set forth in Order No. 1998-502.

While the requirements and procedures pertaining to IRPs in South Carolina have evolved over time, the fundamental nature and purpose of IRPs has stayed the same. As noted above, IRPs are the outline of the utility's current plan to meet its forecasted capacity and energy needs and reflect forecasts and assumptions made at a point in time and, therefore, by definition they are imprecise and subject to change. For example, the accuracy of a load forecast in a given IRP can be affected by numerous factors, such as the state of the economy. These forecasts get less and less accurate in the out years of the demand forecast. At the same time, one need only to look at the shale gas phenomenon to know that unforeseen circumstances can dramatically change the economics of various generation resources. It is clear that the load forecasts contained in an IRP, and the planned resource mix to meet that projected load, are not set in stone.

IRP proceedings should not be converted into a forum to micro-manage the utility's planning process – the utility must bear the primary responsibility for planning its own system in a reliable and cost effective manner, subject to a review of the reasonableness of the utility's investment and expenditures and resulting rates by the Commission. In light of the statutory requirements for IRPs and the Commission's previous orders on integrated resource planning, we recommend that the Commission clarify that IRP proceedings continue to be primarily informational, and that the Commission will use this proceeding to determine whether PEC has provided the information required by S.C. Code Ann. § 58-37-10 and Order No. 2012-95, without ruling on specific aspects or the long-term efficacy of the plan or approving (or

disapproving) the choice of specific supply-side or demand-side resources or programs discussed in the IRP. The Commission should be careful not to do anything in the IRP process that could be construed as tying its hands to fully evaluate specific resource decisions in the appropriate rate-related proceedings.

B. Observations on Certain Specific Issues in PEC's IRP

1. The IRP demonstrates that significant changes are occurring to the PEC generating system that will likely have cost implications to be considered in future rate-related proceedings

One of the most obvious conclusions that can be drawn from PEC's IRP is that PEC's generating system has entered a period of potentially significant change, after a long period of relative stability. These changes could have significant effects on the cost and nature of electric service to PEC's customers in the coming years.

For example, the IRP indicates that the Duke/Progress merger will result in changes to how PEC plans its system. PEC notes that the process of developing the IRP was begun before the completion of the Duke/Progress merger, and that both PEC and DEC prepared their IRPs separately.[4] Accordingly, PEC developed its IRP using its own input assumptions, analytic tools, and methods. As can be expected, and as PEC recognizes, in the coming years PEC and DEC will engage in a more coordinated planning process which will reflect the effects of coordinated assumptions and analytic approaches between PEC and DEC.[5] This coordinated approach will surely produce results different from those contained in PEC's current IRP (which again confirms the appropriateness of treating PEC's IRP as a non-binding forecast and planning document that is expected to change over time). Although coordination of effort is a laudable objective, it also underscores the need to ensure that PEC and DEC ultimately each take appropriate responsibility for their individual resource needs and that the costs of resources are appropriately allocated between PEC and DEC.

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[4] IRP at 3.

[5] *Id.*

The IRP also discusses significant changes that are being made to PEC's generation portfolio. PEC explains that it has retired three coal units at its Lee and Sutton facilities and has built natural gas combined cycle units in their place.[6] PEC also plans to retire its five remaining North Carolina un-scrubbed coal units at the Weatherspoon and Cape Fear sites and its one remaining un-scrubbed coal plant in South Carolina, Robinson Unit 1.[7] PEC explains that as a result of the coal plant retirements and the new natural gas generation, PEC will have replaced approximately 1,620 MW of un-scrubbed coal generation with approximately 1,545 MW of natural gas-fired generation.[8] Looking further out, PEC's IRP projects the addition of new combined cycle, combustion turbine, and nuclear generation, but no new coal-fired generation.[9]

The impacts of the Duke/Progress merger and the plant retirements and additions, for the most part, have not yet been specifically reflected in PEC's South Carolina rates (aside from the joint dispatch savings riders that were implemented by PEC following the close of the merger). As discussed above, this IRP proceeding is not the proper forum to rule on the specific resource decisions PEC has made or will make in the future. The prudence and reasonableness of PEC's resource decisions and the approval of the inclusion of costs of new resources in rates should be addressed in other proceedings, such as proceedings to review proposed rates and fuel costs. Nevertheless, it should be recognized that the changes discussed in the IRP will have potentially significant impacts on customers, and PEC's costs and resource decisions should be subject to detailed scrutiny and regulatory oversight in the appropriate rate-related proceedings.

The IRP also addresses "Renewable Energy Requirements." While there is no South Carolina portfolio requirement for renewable energy, PEC recites its compliance efforts with mandates written into North Carolina law in 2007 for North Carolina electric

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[6] *Id.*

[7] *Id.*

[8] *Id.* at 3-4.

[9] *Id.* at 25.

utilities to acquire renewable energy. While PEC must meet its statutory compliance requirements in North Carolina, it should be recognized that the costs of renewables often exceed the costs of other viable, more cost effective resource alternatives. As a result, any proposal to recover costs related to these resources should be carefully evaluated to determine if the costs are reasonable for recovery in South Carolina rates and how they should best be recovered.

Finally, the IRP discusses PEC's new planning reserve margin minimum target and target range. Establishing a reasonable reserve margin target is important for system planning. Although PEC recently commissioned an analysis of this issue in compliance with an order by the North Carolina Utilities Commission, we believe that the reserve margin should be reassessed again once PEC has been more fully integrated into Duke. Together, the two operating companies may be able to utilize their larger size and combined resources to reduce their individual reserve requirements. As with other IRP issues, we do not recommend that the Commission make any findings on the appropriate reserve margin for PEC in this proceeding.

2. The IRP highlights the benefits provided by demand-side resources such as peak demand reduction and energy efficiency

PEC explains that since 2008, it has been developing and implementing DSM and EE programs in North Carolina and South Carolina aimed at helping customers reduce their electricity usage.[10] According to the IRP, PEC's DSM and EE programs account for approximately 20% of the expected energy growth and 25% of the expected demand growth over the 2013 through 2027 study period.[11] By the end of the IRP's 15-year planning horizon, PEC projects that its DSM/EE portfolio of programs will provide over 1,400 MW of peak load reduction and over 3.18 billion kWh in energy savings.[12]

Nucor has consistently supported the promotion of demand side management and energy efficiency through reasonable and cost-effective DSM and EE program

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[10] *Id.* at 4.

[11] *Id.*

[12] *Id.*

options for customers who wish to take advantage of them, as well as achieving similar results through proper price signals incorporated in rate designs such as curtailable/interruptible and time-of-use rates. The effects of demand response (that is, reduction of firm peak demand, whether due to DSM programs or rate design), in particular, directly reduce PEC's firm peak load (which is the basis for PEC's capacity planning), as the load forecast included in the IRP appears to appropriately recognize.[13] By reducing firm peak load, demand response helps to avoid or defer the need for PEC to add new capacity, as well as the reserve margin associated with that avoided capacity. Some demand response activities can provide other system benefits as well.

The mechanism for PEC to provide DSM and EE program options targeted at producing the significant energy and demand savings projected in the IRP is already in place, with PEC's EE/PDR portfolio and rider having been approved in 2009 in Docket No. 2008-251-E. In that case, a partial stipulation signed by several parties (including PEC and Nucor) described in detail the cost recovery mechanism for EE/PDR program portfolio costs and program incentives, as well as PEC's annual filing requirements associated with the EE/PDR rider. The stipulation includes a large customer opt out provision.[14] After a contested evidentiary hearing, the Commission approved the stipulation.[15] Importantly, in approving the large customer opt-out, the Commission concluded based on the evidence that large commercial and industrial customers have a strong incentive to implement DSM/EE measures regardless of PEC's DSM/EE portfolio, and that it is unreasonable to require such customers to pay for PEC's programs unless they specifically choose to participate.[16]

In the IRP, PEC expresses its strong commitment to DSM and EE.[17] We support PEC continuing to make reasonable, robust and cost-effective DSM and EE programs available, subject to review of such programs and appropriate cost-recovery under the

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[13] *Id.* at 5-6; Appendix E at 15-16.

[14] Docket No. 2008-251-E, Stipulation, Exhibit 1 at 8.

[15] *See* Order No. 2009-373.

[16] *Id.* at 10-11.

[17] IRP at 19.

mechanism approved in Docket No. 2008-251-E, as well as continuing to offer existing and additional future rate designs established to provide the appropriate price signals to reduce firm peak demand. In the future, PEC should continue to recognize the value of these DSM/EE portfolio programs (as well as other existing rate design mechanisms such as curtailable and time-of-use rates), in lowering PEC's peak demand.

IV. CONCLUSION

Nucor respectfully requests that the Commission take these comments related to PEC's 2012 IRP into consideration.

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Dated: January 25, 2013

BEFORE THE
PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2012-8-E

In the Matter of:	)	
	)	
Progress Energy Carolinas, Inc.'s	)	**CERTIFICATE OF SERVICE**
Integrated Resource Plan (IRP)	)	
	)	

This is to certify that the foregoing document was served upon the following parties at the addresses set forth by first-class mail, telefax or Federal Express on this the 25th day of January, 2013:

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BEFORE THE
PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2013-8-E

In the Matter of:	)	
	)	
Duke Energy Progress, Inc.'s	)	**CERTIFICATE OF SERVICE**
Integrated Resource Plan (IRP)	)	
	)	

This is to certify that the foregoing document was served upon the following parties at the addresses set forth by first-class mail, telefax or Federal Express on this the 31th day of January, 2014:

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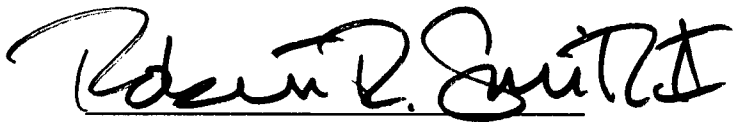

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