# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 111

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Rulemaking Proceeding to Consider	)	ORDER ADOPTING AMENDMENTS
Revisions to Commission Rule R8-60	)	TO COMMISSION RULE R8-60
on Integrated Resource Planning	)	

BY THE COMMISSION: General Statute 62-110.1(c) and G.S. 62-2(a)(3a) set forth certain policies and requirements for integrated resource planning (IRP) in North Carolina. The Commission implements G.S. 62-110.1(c) and G.S. 62-2(a)(3a) through the provisions of Commission Rule R8-60. By order issued on October 19, 2006, in Docket No. E-100, Subs 103, 110, and 111, the Commission opened a rulemaking proceeding "to consider revisions in the IRP process provided in Commission Rule R8-60." On November 27, 2006, the Commission issued an order requesting comments and reply comments on proposed revisions to Rule R8-60. Based upon the consensus reached among the parties and the reasonableness of the parties' proposed revisions, on July 11, 2007, the Commission issued its Order Revising Integrated Resource Planning Rules that adopted the current Rule R8-60 covering the reporting requirements for both the biennial IRP reports and the annual update reports. In summary, the revised rule establishes different IRP reporting requirements for even-numbered years and odd-numbered years. Beginning in 2008, and every two years thereafter, the electric utilities are required to file a biennial report that includes comprehensive IRP information. Beginning in 2009, and every two years thereafter, the electric utilities are required to file an annual report that updates the information contained in their last biennial report. Pursuant to Rule R8-60(j), the procedure for intervention, comments, reply comments and hearing requests is the same for biennial and annual reports, except that initial comments are due within 150 days after the filing of biennial reports, but only 60 days after the filing of annual reports. Subsection (j) further requires that one or more public witness hearings shall be scheduled by the Commission.

In the Commission's 2013 IRP proceeding, in Docket No. E-100, Sub 137, several parties filed comments regarding the annual IRP reports and procedures.

In its April 11, 2014 comments, the Public Staff noted that despite the Commission's efforts to keep the IRP process within the established schedules the annual IRP process has typically taken more than a year to complete. In addition, the Public Staff stated that the utilities have indicated that in order for Commission

<sup>&</sup>lt;sup>1</sup> The October 19, 2006 order was prompted by recommendations made by a workgroup that was created by the Commission in connection with the 2005 IRP proceedings in Docket No. E-100, Sub 103.

directives to be fully considered in the utilities' next IRPs they need to receive the inputs from the Commission in late spring or early summer prior to the next IRP filing deadline. Further, the Public Staff opined that the complexity of issues and the sheer volume of information to be considered have resulted in a process that is sometimes disjointed and reactive, rather than constructive and deliberate. Therefore, the Public Staff believes that it may be appropriate to consider some changes to the IRP process to make it more robust and meaningful. Included among the changes considered by the Public Staff is a biennial process with less extensive information required, but with more stakeholder involvement in the development of the inputs and scenarios to be used. In addition, comments and public hearings on the annual update reports could be required only at the discretion of the Commission.

The Public Staff recommended that the Commission request comments from the electric utilities and other parties on potential changes to the IRP process that may assist in making the process more robust and effective for all of the parties involved.

According to Duke Energy Carolinas, LLC, and Duke Energy Progress, Inc. (collectively, Duke) in their joint reply comments filed on May 23, 2014, the IRP process has expanded in scope over time through incremental annual IRP rulings, along with a growing number of special interest group intervenors participating in the IRP process. Duke states that most of these intervenors focus only on issues of importance to their members or stakeholders. However, Duke notes that these intervenors lack the obligation to provide reliable power delivery and the obligation for least cost planning on behalf of all Duke's customers that the IRP planning process requires. In addition, Duke maintains that many of the individual issues now being raised by intervenors in the IRP dockets have their own focused regulatory proceedings. For example, the IRP clearly has overlap with energy efficiency, REPS, fuel, CPCN, avoided cost and rate case proceedings. However, the IRP was never intended to supplant or supersede these more focused proceedings. Duke further contends that several of the recommendations expressed by intervenors in their IRP comments are the same recommendations made within the context of the more focused proceedings. Thus, this moves the IRP process away from its main focus of long-term planning toward more of a shorter term operational focus. In conclusion, Duke states that it would be supportive of working toward productive revisions to the annual update process.

Dominion North Carolina Power (DNCP), in its May 23, 2014 reply comments, states that it would welcome the opportunity to comment on the IRP process with an eye towards streamlining the annual updates to make them less burdensome. DNCP notes that its IRP process is ongoing and is designed to meet DNCP's biennial resource planning responsibilities in both Virginia and North Carolina. DNCP states that its IRP filing in Virginia is due on September 1 of each odd-numbered year. Thus, a streamlined update proceeding in North Carolina while DNCP is engaged in a full proceeding in Virginia would help DNCP maximize and conserve its planning resources.

Regarding stakeholder participation in the development of the utilities' IRPs, DNCP states that it does not believe a "North Carolina-wide" stakeholder process is

necessary or would benefit each of the utilities in developing their IRPs. In addition, DNCP notes that its development of an IRP is a distinct process from Duke's planning process. However, DNCP does not oppose allowing up front input into its IRP process and has had a stakeholder review process in place in Virginia for several years. DNCP states that the Public Staff, Southern Environmental Law Center, Sierra Club and others routinely participate in its Virginia stakeholder review process and that this forum could be opened to other interested parties from North Carolina as well.

In its June 30, 2014 Order Approving Integrated Resource Plan Annual Update Reports and REPS Compliance Plans (2013 IRP Order), the Commission noted these issues and stated that it would open a future docket to consider ideas for streamlining the annual update reporting process

On September 29, 2014, the Commission issued an Order Requesting Comments Regarding Rule R8-60 Amendments in this docket. The Order, among other things, requested comments on possible changes to the procedures used by the Commission in its review of the electric utilities' annual updates of their IRPs filed in odd-numbered years. In particular, the Order included four specific questions on which the Commission requested comments.

- (1) Whether the Public Staff should be the only party expressly allowed to file comments and recommendations about the annual reports?
- (2) Whether no public witness or evidentiary hearing should be scheduled unless the same is deemed necessary by the Commission and scheduled on the Commission's initiative?
- (3) Whether there are categories of information or particular subjects that are not necessary for inclusion in the annual reports?
- (4) Whether there are procedures or methods that should be adopted to achieve more stakeholder involvement in the annual reports prior to the reports being filed with the Commission?

Pursuant to the Order, initial comments were filed by Duke and DNCP (collectively, utilities); the Public Staff; North Carolina Sustainable Energy Association (NCSEA); and the Southern Alliance for Clean Energy, the Sierra Club, and South Carolina Coastal Conservation League (collectively, SELC intervenors). Reply comments were filed by the electric utilities.

In summary, the comments reflected a general consensus among the parties in their responses to the Commission's first three questions regarding (1) parties who should be expressly allowed to comment on the utilities' annual reports; (2) whether a finding of necessity should be required before a public witness and/or expert witness hearing is scheduled; and (3) the categories of information that are not necessary for inclusion in the update reports. On the other hand, there appeared to be a fundamental difference between the views of NCSEA and the SELC intervenors' and those of the utilities

regarding the parameters of a stakeholder process involving all parties in the formulation of the IRPs.

At the conclusion of the Public Staff's comments, the Public Staff recommended that the Commission establish an IRP working group to develop (1) a proposal for specific revisions to Rule R8-60 in regard to the content of the IRP updates, and (2) a plan for the creation of an integrated resource planning stakeholder process for DEC and DEP, and (3) any proposed changes to the existing DNCP integrated resource planning stakeholder process. Further, the Public Staff recommended that the working group be required to file a report with the Commission within 60 days of the issuance of the Commission's order establishing the group, with the report to include the recommendations of the majority of the parties, but also to include any differing positions. Finally, the Public Staff stated that it was willing to initiate and lead this IRP working group.

On January 30, 2015, the Commission issued an Order requesting that the Public Staff convene an IRP working group and that the working group file a report with the Commission within 60 days of the issuance of the Order.

On March 30, 2015, the Public Staff filed a motion requesting that the date for filing the working group's initial report be extended to May 29, 2015. On March 31, 2015, the Commission issued an Order granting the requested extension of time.

On May 29, 2015, the Public Staff filed a Report of the IRP Working Group (Report). The Public Staff states that the working group met on April 10, 2015, with representatives of the Carolina Industrial Group for Fair Utility Rates I, II, and III (CIGFUR), the Carolina Utility Customers Association, Inc. (CUCA), DNCP, DEC, DEP, the North Carolina Electric Membership Corporation, the North Carolina Sustainable Energy Association (NCSEA), the North Carolina Waste Awareness and Reduction Network, the SELC intervenors, and the Public Staff.

The Public Staff states that the parties discussed (1) revisions to Rule R8-60 in regard to the content of the IRP updates, (2) the creation of an integrated resource planning stakeholder process for DEC and DEP, and (3) any proposed changes to the existing DNCP integrated resource planning stakeholder process. The parties were given an opportunity to provide their positions on each issue and any proposed changes to Rule R8-60. However, the parties were not able to reach consensus on each issue.

The following is a summary of the three main topics covered by the Report, including a summary of the positions of the parties.

### **REVISIONS TO RULE R8-60**

#### Public Staff

The Public Staff proposed revisions to Commission Rule R8-60 with regard to the content of the IRP update reports. The Public Staff's proposed rule revisions were

subsequently filed as Exhibit A to the Report. The purpose of the rule revisions is to clarify the filing requirements and reduce the work of the Commission and all parties in update years, while maintaining the ability of the Commission and other parties to monitor and review the utilities' IRP process, short-term action plans, and load forecasts. Under the Public Staff's proposal, in update years the utilities would file an updated forecast, a summary of significant amendments or revisions to its most recently filed biennial report, a short-term action plan, and a REPS compliance plan. In addition, the utilities would file data and tables for the planning horizon that (1) provide the information required by Rule R8-60(i)(1) regarding forecasts of load, supply-side resources, and demand-side resources; (2) provide the information required by Rule R8-60(i)(2) regarding generating facilities; (3) show existing, designated (including uprates), and non-traditional (DSM and renewables) resources and any resource gap; (4) show cumulative resource additions necessary to meet load obligation and reserve margins; and (5) show projections of load, capacity, and reserves for both the summer and winter periods. However, the data and tables would not be accompanied by the narrative explanation as contained in the biennial report.

The Public Staff states that this information should give the Public Staff sufficient information to allow it to monitor the utilities' forecasting, planning, and reserves in update years. Requiring the utilities to provide the data they generally provide in their IRPs but not the narrative description should allow the utilities to reduce their workload to some extent.<sup>2</sup> While the Public Staff would still review the update reports to ensure that they meet the requirements of the rule, the Public Staff and other parties would not file comments on the update reports. As a result, no reply comments would be filed by the utilities or intervenors. However, intervenors would have the right to request leave to file comments or to ask for a hearing should the information contained in the update reports merit further Commission attention. In addition, the Public Staff notes that the Commission always retains the right to request comments, further information, or to schedule an evidentiary hearing. Finally, the Commission would continue to allow the public to file statements of position on update reports, just as it does on biennial reports.

Within 60 days after the filing of the update reports or 60 days after September 1, whichever is later, the Public Staff would review the utilities' update reports and make a filing with the Commission indicating whether each utility had complied with the rule. The Public Staff's filing would not include substantive comments. However, substantive comments by the Public Staff on the REPS compliance plans would follow the same schedule allowed for REPS compliance plans filed with biennial IRP reports. While public witness hearings would continue to be held during update years, comments on the update reports would be received or hearings to receive expert testimony would be scheduled only at the Commission's discretion. Finally, each utility would be required to schedule a meeting with stakeholders to review its biennial or update report by November 1 of each year.

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<sup>&</sup>lt;sup>2</sup> The Public Staff understands that DNCP will continue to submit a full IRP as it is required to do so annually in Virginia. DNCP would be allowed to continue this practice under the Public Staff's proposed rule change.

# CIGFUR

CIGFUR supports the Public Staff's proposed revisions to Rule R8-60.

# **CUCA**

CUCA has no objections to the rule changes proposed by the Public Staff. CUCA believes that the Public Staff's proposed rule changes will help to clarify the rule as it applies to the filing of the biennial IRPs and the update reports.

#### Utilities

Duke supports the Public Staff's recommended revisions to Rule R8-60 presented in Exhibit A to the Report. Consistent with Duke's initial comments, Duke concurs with the Public Staff's recommendations to streamline the update year process. The Public Staff's proposed update year filing requirements and procedure will reduce the IRP workload during the update year for all parties, while continuing to provide the Public Staff, other interested parties and the Commission sufficient information to monitor the utilities' forecasting, planning, and reserves during update years.

DNCP also supports the proposed revisions to Rule R8-60 presented in Exhibit A of the Report. Accordingly, DNCP withdraws its recommended rule changes set forth in Attachment A of its December 8, 2014 initial comments in this proceeding. DNCP believes that the Public Staff's recommended revisions to Rule R8-60 will achieve the Commission's original intent in initiating this proceeding of "streamlin[ing] the annual update reporting process so that it does not simply become another biennial proceeding with a different name." Order Requesting Comments Regarding Rule R8-60 Amendments, at 3. Further, DNCP opines that the proposed revisions maintain flexibility between the utilities' annual update filings, so that DNCP can continue to file a systemwide IRP in the North Carolina update year. Notably, legislation recently enacted in Virginia now requires DNCP to file its IRP in Virginia annually and modifies the timing of the Virginia IRP filing to July 1, 2015, and May 1 annually beginning in 2016. The Public Staff's proposed rule revisions allow DNCP the flexibility to file its IRP contemporaneously in both jurisdictions, while maintaining the existing timeline for Duke to file by September 1, as well as maintaining the current timeline allowed for Public Staff and other interested parties to review and comment on all the utilities' IRP filings. Finally, DNCP supports the proposed revisions extending the time allowed for reply comments during the biennial proceedings from 14 days to 60 days, which should eliminate the need for requests for extensions of time in the future.

#### NCSEA

NCSEA does not object to the Public Staff's proposed revisions to Rule R8-60.

## SELC Intervenors

The SELC intervenors agree with the Public Staff's proposal regarding the content of the utility IRP updates. However, they do not agree with the proposal that intervenors not be allowed to file comments on the IRP updates unless granted leave by

the Commission, or unless the Commission requests comments. The SELC intervenors submit that the Commission's procedures regarding IRP updates can be streamlined without foreclosing the opportunity for interested parties to comment on them. Moreover, the IRP updates may include important information that is relevant to major resource decisions, such as new unit certifications. Accordingly, the SELC intervenors believe that parties should be allowed to file comments on the IRP updates, and the utilities should be allowed to file reply comments. However, they would not oppose an expedited schedule for the filing of comments and reply comments.

# CREATION OF AN INTEGRATED RESOURCE PLANNING STAKEHOLDER PROCESS FOR DEC AND DEP

# Public Staff

As provided in section (m) of its proposed revision to Commission Rule R8-60, the Public Staff proposes that the utilities be required to schedule a meeting of interested IRP stakeholders by November 1 of each year. At this meeting, the utilities would review the contents of their biennial reports or update reports with the stakeholders, answer stakeholder questions, and consider stakeholder input. The Public Staff proposes that the utilities cover the following areas during these meetings: any changes to methodologies, assumptions that are major drivers of the plan, or substantial changes since the last biennial or update report; scenarios and portfolios; resulting plans, base plan, and selected plan; generation mix under various plans; short-term action plan and changes from prior year's short-term action plan; forecasts of renewables and DSM/EE; and assumptions regarding future regulations and their impacts.

In the IRP working group, the parties discussed the merits of having a third party facilitator versus having the utilities lead the meetings. Some parties believed that a third party facilitator would allow a more open exchange of information, but questions were raised as to who would pay for the facilitator. The Public Staff has participated in DNCP's IRP stakeholder process, which is led by DNCP, and has found it to be effective and informational. While DNCP led the discussion, parties were given an opportunity to ask questions and provide input. As the IRP is the plan of the utility and the utility personnel has the information about the plan, the Public Staff feels it is appropriate for the utility to have some control over this meeting. Thus, the Public Staff proposes that the utilities would convene and lead the meetings, as well as receive stakeholder questions and consider stakeholder input.

The Public Staff states that if the Commission adopts this proposal and requires DEC and DEP to convene IRP stakeholder meetings and DNCP to continue its current IRP stakeholder process, then it would be appropriate for the Commission to review the effectiveness of the IRP stakeholder process after a couple of years. The Public Staff recommends that the Commission seek comments on the effectiveness of these stakeholder meetings in intervenors' comments and the utilities' reply comments on the 2016 biennial IRP reports. By that time, stakeholder meetings following the filing of the 2015 IRP update report and the 2016 biennial report should have occurred and parties should be able to comment on whether these meetings improve the IRP process.

# CIGFUR

CIGFUR supports the Public Staff's proposal for stakeholder meetings.

# **CUCA**

CUCA has no objection to the stakeholder process as outlined by the Public Staff. CUCA believes that it will be beneficial for CUCA and the other parties to see the IRP as created by the utilities before commenting.

#### Duke

Duke supports the Public Staff's recommended approach to annual stakeholder review meetings on DEC's and DEP's IRPs. As previously stated in Duke's comments, DEC and DEP are agreeable to convening an annual IRP review meeting similar to the meeting DNCP has held on its IRP in Virginia. During the IRP working group meetings, the Public Staff and other parties discussed the organization of the DNCP IRP stakeholder meeting as well as other topics in an effort to refine the stakeholder meeting proposed to be held by DEC and DEP. Duke agrees with the Public Staff's recommended topics to be covered during the stakeholder meetings. Duke believes these topics will provide stakeholders with a good overview of the key drivers, planning assumptions and resource planning outcomes presented in DEC's and DEP's IRPs.

In addition, Duke does not oppose the Public Staff's recommendation that interested parties may comment on the effectiveness of the stakeholder meeting process during the 2016 biennial IRP proceeding. As stated in Duke's comments, the annual stakeholder meeting should be a vehicle to inform interested stakeholders about the utilities' IRPs, to answer questions, and to receive stakeholder input that can be considered by the utilities in developing future IRPs. Ultimately, however, the IRP process remains the responsibility of the utilities that have the obligation to provide reliable power and implement least-cost resource planning for their North Carolina customers. Duke agrees with the Public Staff that the current DNCP stakeholder process provides a good model that allows stakeholder review and feedback on the current IRP, which can be considered by the utilities in future resource planning, but does not cede any future resource planning to the stakeholders.

Finally, Duke does not agree that a third party facilitator will benefit the stakeholder review process. As stated in Duke's reply comments, the SELC intervenors' proposal for an "independent referee" that would report to the Commission on the stakeholder process represents an unnecessary expense, presumably to be funded by the companies and their customers, and an administrative burden without any clear benefit. DEC and DEP are committed to providing the Public Staff and other stakeholders with a constructive and informative IRP review process. Duke believes that concerns with the process can more appropriately be raised directly with the Commission in future biennial review proceedings, rather than through a report by a third party.

#### NCSEA

In its comments, NCSEA recommended that the Commission create a defined procedure for front-end engagement using the North Carolina Transmission Planning Collaborative/Transmission Advisory Group (NCTPC/TAG) as a model. NCSEA stated that such front-end engagement in the development of the utilities' biennial IRPs could reduce, if not eliminate, the current intensity of the tail-end engagement.

NCSEA contends that the stakeholder process proposed by the Public Staff does not give NCSEA or other non-governmental parties a sufficient front-end opportunity to engage with the utilities as they develop biennial IRPs. Instead, the revisions proposed by the Public Staff would require the utilities to review the contents of their respective IRP filings with stakeholders, answer stakeholder questions, and consider stakeholder input. The revisions proposed by the Public Staff do not utilize front-end stakeholder input in the limited way that the NCTPC/TAG process accepts proposed modelling scenarios for study from stakeholders at the beginning of each year and then selects up to two scenarios for study that it deems meritorious. Instead, under the Public Staff's proposal the utilities need only listen to stakeholder input, and may choose in their sole discretion to ignore suggestions.

The Public Staff noted that in response to NCSEA's analogy with the NCTPC/TAG process the utilities pointed out that developing IRPs is a year-round endeavor for the utilities. However, the Public Staff states that the development of transmission plans also is a year-round endeavor. In sum, the Public Staff states that the year-round nature of a planning process should not be used as a basis for diminishing non-utility stakeholder participation in the process.

NCSEA recognizes that the utilities are statutorily required to develop IRPs and that the decision of which scenario will be the base case scenario in an IRP lies with the utilities. During the working group's discussions, there appeared to be consensus among the utilities and the Public Staff that the proposed process would not necessarily diminish stakeholders' opportunity for constructive participation. Given such assurances, NCSEA will not stand in the way of implementation of this process, but NCSEA does ask, at a minimum, that implementation of the stakeholder process be made subject to review in the future.

#### SELC Intervenors

The SELC intervenors do not agree with the Public Staff's proposal for a single stakeholder meeting to be held after the DEC and DEP IRPs are filed. As discussed in their comments, the SELC intervenors believe that enhanced opportunity for up-front involvement by interested parties in the development of the biennial IRPs would help to make the overall IRP procedures more robust and constructive. A single, post-filing meeting would not achieve this objective. Further, the stakeholder engagement process regarding DEC's and DEP's IRPs should include the following key steps:

The Commission would retain a third party facilitator;

- DEC and DEP would share methodology and model inputs with stakeholders and the facilitator prior to development of the IRPs, and stakeholders would have the opportunity to provide feedback to DEC and DEP;
- DEC and DEP would share draft scenarios and sensitivities with stakeholders and the facilitator, and stakeholders would have the opportunity to provide feedback to DEC and DEP; and
- DEC and DEP would provide an overview of the results of their capacity expansion and production cost modeling and address questions or comments from stakeholders. This step is similar to the post-filing meeting proposed by the Public Staff.

If the Commission elects to require a single, post-filing meeting, however, the SELC intervenors agree that the topics proposed by the Public Staff would be appropriate topics for the meeting.

# CHANGES TO THE EXISTING DNCP INTEGRATED RESOURCE PLANNING STAKEHOLDER PROCESS

## Public Staff

The Public Staff does not propose any changes to DNCP's current process. The Public Staff believes that DNCP generally covers the list of topics recommended for the DEC and DEP stakeholder meetings, and would request that DNCP continue to review these topics during its stakeholder meetings.

# CIGFUR

CIGFUR supports the Public Staff's position.

#### CUCA

CUCA believes that the current DNCP process allows all stakeholders to have appropriate input. Therefore, CUCA agrees with the Public Staff that no changes are needed to the current DNCP process.

#### DNCP

DNCP concurs with the Public Staff's recommendation that its existing stakeholder review process (SRP) should continue in its current form. DNCP confirms that the topics proposed for DEC and DEP to cover in their stakeholder process are currently addressed in DNCP's SRP, and DNCP commits to continue to cover these topics during each annual SRP meeting. Finally, for the reasons stated by the Public Staff as well as the reasons set forth in DNCP's comments and reply comments, DNCP opposes the recommendation that a third party SRP facilitator be used. DNCP agrees with the Public Staff that its current utility-led SRP process appropriately accommodates interested parties by recognizing that the IRP is a utility-driven resource planning obligation, while ensuring reasonable opportunities for stakeholder questions and input during the process.

# NCSEA

DNCP's SRP in Virginia does not provide formal front-end stakeholder input as requested in NCSEA's comments. However, there appears to be consensus among the utilities and the Public Staff that the proposed process would not necessarily diminish stakeholders' opportunity for constructive participation. Given such assurances, NCSEA will not stand in the way of implementation of this process, but NCSEA does ask, at a minimum, that the DNCP stakeholder process be made subject to review in the future.

# SELC Intervenors

The SELC Intervenors do not propose any changes to DNCP's SRP.

# Discussion

The Commission appreciates the work of the Public Staff in convening the IRP working group and filing the working group Report, as well as the participation in this effort by all the parties.

In the 2013 IRP Order, the Commission discussed the concerns expressed by the parties about the odd-year update IRP process and stated:

The Commission understands the time and complexity concerns that the parties have with the current IRP planning process. Between the time extension requests and the increasing complexity of the issues raised during the proceedings, it makes for drawn out IRP timelines. The Commission agrees that some modifications might be warranted, especially to these odd-year annual update proceedings. For this reason, the Commission intends to open a future docket which will request comments and reply comments on the specific issues of what might be done to streamline the annual update reporting process so that it does not simply become another biennial proceeding with a different name.

## 2013 IRP Order, at 32.

The main purpose of the annual IRP proceeding is planning. G.S. 62-110.1(c) requires the Commission to "develop, publicize, and keep current an analysis of the long-range needs for expansion of facilities for the generation of electricity in North Carolina, including its estimate of the probable future growth of the use of electricity." In State ex rel. Utils. Comm'n v. North Carolina Electric Membership Corporation, 105 N.C. App. 136, 141, 412 S.E.2d 166, 170 (1992), the Court of Appeals discussed the nature and scope of the Commission's IRP proceedings. The Court described the IRP process as being akin to a legislative hearing in which the Commission gathers facts and opinions that will assist the Commission and the utilities to make informed decisions on specific projects at a later time. On the other hand, it is not an appropriate proceeding for the Commission to use in issuing "directives which fundamentally alter a given

utility's operations." With regard to the Commission's authority to issue specific directives, the Court cited the availability of the Commission's certificate of public convenience and necessity (CPCN) proceedings and complaint proceedings. <u>Id.</u>, at 144, 412 S.E.2d at 173.

The Commission has two main goals in designing and implementing the IRP process: (1) to create a meaningful and efficient planning process for the utilities, and (2) to include a fair opportunity for interested parties to participate. In that context, the primary IRP planning tools are a 15-year forecast of the state's electric needs and various analyses of how the utilities might best meet those needs at the lowest cost. When the Commission amended Rule R8-60 in 2007 to change to the odd-year IRP updates, the Commission's purpose was to implement the "keep current an analysis" requirement of G.S. 62-110.1(c), while also preserving the effectiveness of the annual process as a planning tool. The Commission continues to believe that the 15-year planning horizon is an appropriate time span for the utilities' planning purposes. Nonetheless, the Commission also recognizes that there usually are not substantial changes in the electric usage forecasts and the least-cost means of meeting customers' needs from one year to the next. Therefore, alternating the utilities' filing of full IRPs with updated IRPs is an appropriate means of meeting the first goal of creating a meaningful and efficient planning process.

With regard to the second goal, a fair opportunity for interested parties to participate, the odd-year updates present a particular challenge that requires the Commission to balance the need for meaningful participation by all parties with the objective of having a streamlined IRP procedure. Within the working group, the two main issues on party participation are whether Rule R8-60 should automatically allow the filing of comments and reply comments, and whether the stakeholder meetings should be scheduled such that stakeholders can provide input prior to the utilities finalizing and filing their IRPs.

With respect to comments and reply comments on the updated IRPs, the Commission concludes that the appropriate balance is struck by allowing parties to request leave of the Commission to file comments. As noted previously, a main premise for using odd-year updated IRPs is the lack of substantial changes in the electric usage forecasts and the least-cost means of meeting customers' needs from one year to the next. However, if there are significant changes in odd year forecasts or available resource options, then the Commission will welcome a motion explaining those changes and requesting to make comments on them. In addition, the Commission notes that pursuant to Commission Rule R8-60(j), an intervenor may file an IRP of its own with respect to any utility. If an intervenor chooses to propose an alternative IRP, the intervenor's IRP should conform to the information and analytic requirements of Rule R8-60(c) – (j). The Public Staff's proposed amendments would eliminate this option with regard to the update IRPs. However, the Commission concludes that this option should remain available in all IRP proceedings and, therefore, will include it in amended Rule R8-60(l).

With respect to the annual IRP stakeholder meetings, NCSEA and the SELC intervenors expressed the need for an advance or front-end opportunity to provide input that will shape the utilities' IRPs, rather than merely an after-the-fact meeting that will not change the utilities' IRPs. However, the Commission views the annual IRP stakeholder meetings proposed by the Public Staff as both a tail-end and front-end opportunity for stakeholders. For example, the November 2015 IRP stakeholder meetings will provide stakeholders an opportunity to critique the 2015 IRP updates, and provide a front-end opportunity for stakeholders to get in on the ground floor of the utilities' 2016 IRP filings. Indeed, if a stakeholder has a proposed analysis or modeling change it can submit its proposal to the utility at the 2015 stakeholder meeting and request that the utility include the proposed analysis or modeling in the utility's 2016 IRP. If the utility refuses this request, the stakeholder could file a motion with the Commission requesting an Order from the Commission.

With regard to review of the REPS compliance plans that accompany the update reports, the proposed rule would allow the Public Staff and other intervenors 150 days to file comments on the REPS compliance plans, the same time period allowed for comments on the biennial reports. However, the Commission is concerned that five months is too long and would unduly slow the review of the update reports and the issuance of the Commission's final order. Therefore, the Commission will change the proposed time period for comments on the REPS compliance plans from 150 days to 60 days, the same 60 day period allowed to the Public Staff and intervenors for filing alternative update reports.

Finally, for the purpose of clarity and certainty with regard to the scheduling of the annual stakeholder meetings the Commission will revise proposed section (m) of the amended rule to provide that on or before November 30 of each year the utilities will hold a stakeholder meeting.

After careful consideration, the Commission concludes that the process recommended by the Public Staff and concurred with by most of the working group participants is reasonable and strikes the appropriate balance between meaningful participation by all parties and streamlining the odd-year IRP update procedure.

## Conclusion

Based on the foregoing and the record, the Commission finds good cause to approve the Public Staff's proposed amendments to Commission Rule R8-60, with the three modifications noted above. The amended portion of the Rule, in strike-through and underlined version, is attached to this Order as Attachment A, and in final version as Attachment B.

## IT IS, THEREFORE, ORDERED as follows:

1. That Commission Rule R8-60 shall be, and is hereby, amended in part as set forth in Attachment B to this Order.

2. That the amendments to Commission Rule R8-60 shall be effective and applicable to the integrated resource plan filed by Dominion North Carolina Power on July 1, 2015, in Docket No. E-100, Sub 141, and to integrated resource plans filed on and after the date of this Order.

ISSUED BY ORDER OF THE COMMISSION.

This the <u>20<sup>th</sup></u> day of July, 2015.

NORTH CAROLINA UTILITIES COMMISSION

Jackie Cox, Deputy Clerk

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- (h) Filings.
  - (1) By September 1, 2008, and every two years thereafter, each utility subject to this rule shall file with the Commission its then current integrated resource plan, together with all information required by subsection (i) of this rule. This biennial report shall cover the next succeeding two-year period.
  - (2) By September 1 of each year in which a biennial report is not required to be filed, an annual update report shall be filed with the Commission containing an updated 15-year forecast of the items described in subparagraph (c)(1), as well as a summary of any significant amendments or revisions to the most recently filed biennial report, including amendments or revisions to the type and size of resources identified, as applicable.
  - (3) Each biennial and annual <u>update</u> report filed shall be accompanied by a short-term action plan that discusses those specific actions currently being taken by the utility to implement the activities chosen as appropriate per the applicable biennial and annual update reports.
  - (4) Each biennial and annual <u>update</u> report shall include the utility's REPS compliance plan pursuant to Rule R8-67(b).
  - (5) If a utility considers certain information in its biennial or annual update report to be proprietary, confidential, and within the scope of G.S. 132-1.2, the utility may designate the information as "confidential" and file it under seal.
- (i) Contents of <u>Biennial</u> Reports. Each utility shall include in each biennial report, revised as applicable in each annual report, the following:
  - (1) Forecasts of Load, Supply-Side Resources, and Demand-Side Resources.— The forecasts filed by each utility as part of its biennial report shall include descriptions of the methods, models, and assumptions used by the utility to prepare its peak load (MW) and energy sales (MWh) forecasts and the variables used in the models. In both the biennial and annual reports, the forecasts filed by each utility shall include, at a minimum, the following:
    - (i) The most recent ten-year history and a forecast of customers by each customer class, the most recent ten-year history and a forecast of energy sales (kMWh) by each customer class, and the most recent ten-year history and a forecast of the utility's summer and winter peak load (MW);
    - (ii) A tabulation of the utility's forecast for at least a 15-year period, including peak loads for summer and winter seasons of each year, annual energy forecasts, reserve margins, and load duration curves, with and without projected supply- or demand-side resource additions. The tabulation shall also indicate the projected effects of demand response and energy efficiency programs and activities on the forecasted annual energy and peak loads on an annual basis for a 15-year period, and these effects also may be reported as an equivalent generation capacity impact; and

- (iii) Where future supply-side resources are required, a description of the type of capacity/resource (<u>MW rating, fuel source</u>, base, intermediate, or peaking) that the utility proposes to use to address the forecasted need.
- (2) Generating Facilities. Each utility shall provide the following data for its existing and planned electric generating facilities (including planned additions and retirements, but excluding cogeneration and small power production):
  - (i) Existing Generation. The utility shall provide a list of existing units in service, with the information specified below for each listed unit. The information shall be provided for a 15-year period beginning with the year of filing:
    - a. Type of fuel(s) used;
    - b. Type of unit (e.g., base, intermediate, or peaking);
    - c. Location of each existing unit;
    - d. A list of units to be retired from service with location, capacity and expected date of retirement from the system;
    - e. A list of units for which there are specific plans for life extension, refurbishment or upgrading. The reporting utility shall also provide the expected (or actual) date removed from service, general location, capacity rating upon return to service, expected return to service date, and a general description of work to be performed; and
    - f. Other changes to existing generating units that are expected to increase or decrease generation capability of the unit in question by an amount that is plus or minus 10%, or 10 MW, whichever is greater.
  - (ii) Planned Generation Additions. Each utility shall provide a list of planned generation additions, the rationale as to why each listed generation addition was selected, and a 15-year projection of the following for each listed addition:
    - a. Type of fuel(s) used;
    - b. Type of unit (e.g. <u>MW rating</u>, baseload, intermediate, peaking);
    - c. Location of each planned unit to the extent such location has been determined: and
    - d. Summaries of the analyses supporting any new generation additions included in its 15-year forecast, including its designation as base, intermediate, or peaking capacity.
  - (iii) Non-Utility Generation. Each utility shall provide a separate and updated list of all non-utility electric generating facilities in its service areas, including customer-owned and stand-by generating facilities. This list shall include the facility name, location, primary fuel type, and capacity (including its designation as base, intermediate, or peaking capacity). The utility shall also indicate which facilities are included in its total supply of resources. If any of

this information is readily accessible in documents already filed with the Commission, the utility may incorporate by reference the document or documents in its report, so long as the utility provides the docket number and the date of filing.

- (3) Reserve Margins. The utility shall provide a calculation and analysis of its winter and summer peak reserve margins over the projected 15-year period. To the extent the margins produced in a given year differ from target reserve margins by plus or minus 3%, the utility shall explain the reasons for the difference.
- (4) Wholesale Contracts for the Purchase and Sale of Power.
  - (i) The utility shall provide a list of firm wholesale purchased power contracts reflected in the biennial report, including the primary fuel type, capacity (including its designation as base, intermediate, or peaking capacity), location, expiration date, and volume of purchases actually made since the last biennial report for each contract.
  - (ii) The utility shall discuss the results of any Request for Proposals (RFP) for purchased power it has issued since its last biennial report. This discussion shall include a description of each RFP, the number of entities responding to the RFP, the number of proposals received, the terms of the proposals, and an explanation of why the proposals were accepted or rejected.
  - (iii) The utility shall include a list of the wholesale power sales contracts for the sale of capacity or firm energy for which the utility has committed to sell power during the planning horizon, the identity of each wholesale entity to which the utility has committed itself to sell power during the planning horizon, the number of megawatts (MW) on an annual basis for each contract, the length of each contract, and the type of each contract (e.g., native load priority, firm, etc.).
- (5) Transmission Facilities. Each utility shall include a list of transmission lines and other associated facilities (161 kV or over) which are under construction or for which there are specific plans to be constructed during the planning horizon, including the capacity and voltage levels, location, and schedules for completion and operation. The utility shall also include a discussion of the adequacy of its transmission system (161 kV and above).
- (6) Demand-Side Management. Each utility shall provide the results of its overall assessment of existing and potential demand-side management programs, including a descriptive summary of each analysis performed or used by the utility in the assessment. The utility also shall provide general information on any changes to the methods and assumptions used in the assessment since its last biennial report.
  - (i) For demand-side programs available at the time of the report, the utility shall provide the following information for each resource: the type of resource (demand response or energy efficiency); the capacity and energy available in the program; number of customers

- enrolled in each program; the number of times the utility has called upon the resource; and, where applicable, the capacity reduction realized each time since the previous biennial report. The utility shall also list any demand-side resource it has discontinued since its previous biennial report and the reasons for that discontinuance.
- (ii) For demand-side management programs it proposes to implement within the biennium for which the report is filed, the utility shall provide the following information for each resource: the type of resource (demand response and energy efficiency); a description of the new program and the target customer segment; the capacity and energy expected to be available from the program; projected customer acceptance; the date the program will be launched; and the rationale as to why the program was selected.
- (iii) For programs evaluated but rejected the utility shall provide the following information for each resource considered: the type of resource (demand response or energy efficiency); a description of the program and the target customer segment; the capacity and energy available from the program; projected customer acceptance; and reasons for the program's rejection.
- (iv) For consumer education programs the utility shall provide a comprehensive list of all such programs the utility currently provides to its customers, or proposes to implement within the biennium for which the report is filed, including a description of the program, the target customer segment, and the utility's promotion of the education program. The utility shall also provide a list of any educational program it has discontinued since its last biennial report and the reasons for discontinuance.
- (7) Assessment of Alternative Supply-Side Energy Resources. The utility shall include its current overall assessment of existing and potential alternative supply-side energy resources, including a descriptive summary of each analysis performed or used by the utility in the assessment. The utility shall also provide general information on any changes to the methods and assumptions used in the assessment since its most recent biennial or-annual update report.
  - (i) For the currently operational or potential future alternative supply-side energy resources included in each utility's plan, the utility shall provide information on the capacity and energy actually available or projected to be available, as applicable, from the resource. The utility shall also provide this information for any actual or potential alternative supply-side energy resources that have been discontinued from its plan since its last biennial report and the reasons for that discontinuance.
  - (ii) For alternative supply-side energy resources evaluated but rejected, the utility shall provide the following information for each resource considered: a description of the resource; the potential

capacity and energy associated with the resource; and the reasons for the rejection of the resource.

- (8) Evaluation of Resource Options. Each utility shall provide a description and a summary of the results of its analyses of potential resource options and combinations of resource options performed by it pursuant to subsection (g) of this rule to determine its integrated resource plan.
- (9) Levelized Busbar Costs. Each utility shall provide information on levelized busbar costs for various generation technologies.
- (10) Smart Grid Impacts. Each utility shall provide information regarding the impacts of its smart grid deployment plan on the overall IRP.

For purposes of this requirement, the term "smart" in smart grid shall be understood to mean, but is not limited to, a system having the ability to receive, process, and send information and/or data — essentially establishing a two-way communication protocol.

For purposes of this requirement, smart grid technologies that are implemented in a smart grid deployment plan may include those that: (1) utilize digital information and controls technology to improve the reliability, security and efficiency of an electric utility's distribution or transmission system; (2) optimize grid operations dynamically; (3) improve the operational integration of distributed and/or intermittent generation sources, energy storage, demand response, demand-side resources and energy efficiency; (4) provide utility operators with data concerning the operations and status of the distribution and/or transmission system, as well as automating some operations; and/or (5) provide customers with usage information.

The information provided shall include:

- (a) A description of the technology installed and for which installation is scheduled to begin in the next five years and the resulting and projected net impacts from installation of that technology, including, if applicable, the potential demand (MW) and energy (MWh) savings resulting from the described technology.
- (b) A comparison to "gross" MW and MWh without installation of the described smart grid technology.
- (c) A description of MW and MWh impacts on a system, North Carolina retail jurisdictional, and North Carolina retail customer class basis, including proposed plans for measurement and verification of customer impacts or actual measurement and verification of customer impacts.
- (j) Contents of Update Reports. In addition to the information required by sections (h)(2)-(4) of this rule, each utility shall include in its update report, data and tables that provide the following data for the planning horizon: (1) the information required by sections (i)(1) and (2) of this rule, including the utility's load forecast adjusted for the impacts of any new energy efficiency programs.

existing generating capacity with planned additions, uprates, derates, and retirements, planned purchase contracts, undesignated future resources identified by type of generation and MW rating, renewable capacity, demand-side management capacity, and any resource gap; (2) cumulative resource additions necessary to meet load obligation and reserve margins; and (3) projections of load, capacity, and reserves for both the summer and winter periods. A total system IRP may be filed in lieu of an update report for purposes of compliance with this section.

- (j)(k) Review of Biennial Reports.- Within 150 days after the later of either September 1 or the filing of each utility's biennial report and within 60 days after the filing of each utility's annual report of amendments or revisions, the Public Staff or any other intervenor may file an integrated resource plan or report of its own as to any utility or may file an evaluation of or comments on the reports filed by the utilities, or both. The Public Staff or any intervenor may identify any issue that it believes should be the subject of an evidentiary hearing. Within 60 44 days after the filing of initial comments, the parties may file reply comments addressing any substantive or procedural issue raised by any other party. A hearing to address issues raised by the Public Staff or other intervenors may be scheduled at the discretion of the Commission. The scope of any such hearing shall be limited to such issues as identified by the Commission. One or more hearings to receive testimony from the public, as required by law, shall be set at a time and place designated by the Commission.
- (I) Review of Update Reports. Within 60 days after the filing of each utility's update report required by section (j) of this rule, the Public Staff or any other intervenor may file an update report of its own as to any utility. Further, within the same time period the Public Staff shall report to the Commission whether each utility's update report meets the requirements of this rule. Intervenors may request leave from the Commission to file comments. Comments will be received or expert witness hearings held on the update reports only if the Commission deems it necessary. The scope of any comments or expert witness hearing shall be limited to issues identified by the Commission. One or more hearings to receive testimony from the public, as required by law, shall be set at a time and place designated by the Commission.
- (m) By November 30 of each year, each utility individually or jointly shall hold a meeting to review its biennial or update report with interested parties.

# (h) Filings.

- (1) By September 1, 2008, and every two years thereafter, each utility subject to this rule shall file with the Commission its then current integrated resource plan, together with all information required by subsection (i) of this rule. This biennial report shall cover the next succeeding two-year period.
- (2) By September 1 of each year in which a biennial report is not required to be filed, an update report shall be filed with the Commission containing an updated 15-year forecast of the items described in subparagraph (c)(1), as well as a summary of any significant amendments or revisions to the most recently filed biennial report, including amendments or revisions to the type and size of resources identified, as applicable.
- (3) Each biennial and update report filed shall be accompanied by a shortterm action plan that discusses those specific actions currently being taken by the utility to implement the activities chosen as appropriate per the applicable biennial and update reports.
- (4) Each biennial and update report shall include the utility's REPS compliance plan pursuant to Rule R8-67(b).
- (5) If a utility considers certain information in its biennial or update report to be proprietary, confidential, and within the scope of G.S. 132-1.2, the utility may designate the information as "confidential" and file it under seal.
- (i) Contents of Biennial Reports. Each utility shall include in each biennial report the following:
  - (1) Forecasts of Load, Supply-Side Resources, and Demand-Side Resources. The forecasts filed by each utility as part of its biennial report shall include descriptions of the methods, models, and assumptions used by the utility to prepare its peak load (MW) and energy sales (MWh) forecasts and the variables used in the models. In the biennial reports the forecasts filed by each utility shall include, at a minimum, the following:
    - (i) The most recent ten-year history and a forecast of customers by each customer class, the most recent ten-year history and a forecast of energy sales (MWh) by each customer class, and the most recent ten-year history and a forecast of the utility's summer and winter peak load (MW);
    - (ii) A tabulation of the utility's forecast for at least a 15-year period, including peak loads for summer and winter seasons of each year, annual energy forecasts, reserve margins, and load duration curves, with and without projected supply or demand-side resource additions. The tabulation shall also indicate the projected effects of demand response and energy efficiency programs and activities on the forecasted annual energy and peak loads on an annual basis for a 15-year period, and these effects also may be reported as an equivalent generation capacity impact; and

- (iii) Where future supply-side resources are required, a description of the type of capacity/resource (MW rating, fuel source, base, intermediate, or peaking) that the utility proposes to use to address the forecasted need.
- (2) Generating Facilities. Each utility shall provide the following data for its existing and planned electric generating facilities (including planned additions and retirements, but excluding cogeneration and small power production):
  - (i) Existing Generation. The utility shall provide a list of existing units in service, with the information specified below for each listed unit. The information shall be provided for a 15-year period beginning with the year of filing:
    - a. Type of fuel(s) used;
    - b. Type of unit (e.g., base, intermediate, or peaking);
    - c. Location of each existing unit;
    - d. A list of units to be retired from service with location, capacity and expected date of retirement from the system;
    - e. A list of units for which there are specific plans for life extension, refurbishment or upgrading. The reporting utility shall also provide the expected (or actual) date removed from service, general location, capacity rating upon return to service, expected return to service date, and a general description of work to be performed; and
    - f. Other changes to existing generating units that are expected to increase or decrease generation capability of the unit in question by an amount that is plus or minus 10%, or 10 MW, whichever is greater.
  - (ii) Planned Generation Additions. Each utility shall provide a list of planned generation additions, the rationale as to why each listed generation addition was selected, and a 15-year projection of the following for each listed addition:
    - a. Type of fuel(s) used;
    - b. Type of unit (e.g. MW rating, baseload, intermediate, peaking);
    - c. Location of each planned unit to the extent such location has been determined: and
    - d. Summaries of the analyses supporting any new generation additions included in its 15-year forecast, including its designation as base, intermediate, or peaking capacity.
  - (iii) Non-Utility Generation. Each utility shall provide a separate and updated list of all non-utility electric generating facilities in its service areas, including customer-owned and stand-by generating facilities. This list shall include the facility name, location, primary fuel type, and capacity (including its designation as base, intermediate, or peaking capacity). The utility shall also indicate which facilities are included in its total supply of resources. If any of

this information is readily accessible in documents already filed with the Commission, the utility may incorporate by reference the document or documents in its report, so long as the utility provides the docket number and the date of filing.

- (3) Reserve Margins. The utility shall provide a calculation and analysis of its winter and summer peak reserve margins over the projected 15-year period. To the extent the margins produced in a given year differ from target reserve margins by plus or minus 3%, the utility shall explain the reasons for the difference.
- (4) Wholesale Contracts for the Purchase and Sale of Power.
  - (i) The utility shall provide a list of firm wholesale purchased power contracts reflected in the biennial report, including the primary fuel type, capacity (including its designation as base, intermediate, or peaking capacity), location, expiration date, and volume of purchases actually made since the last biennial report for each contract.
  - (ii) The utility shall discuss the results of any Request for Proposals (RFP) for purchased power it has issued since its last biennial report. This discussion shall include a description of each RFP, the number of entities responding to the RFP, the number of proposals received, the terms of the proposals, and an explanation of why the proposals were accepted or rejected.
  - (iii) The utility shall include a list of the wholesale power sales contracts for the sale of capacity or firm energy for which the utility has committed to sell power during the planning horizon, the identity of each wholesale entity to which the utility has committed itself to sell power during the planning horizon, the number of megawatts (MW) on an annual basis for each contract, the length of each contract, and the type of each contract (e.g., native load priority, firm, etc.).
- (5) Transmission Facilities. Each utility shall include a list of transmission lines and other associated facilities (161 kV or over) which are under construction or for which there are specific plans to be constructed during the planning horizon, including the capacity and voltage levels, location, and schedules for completion and operation. The utility shall also include a discussion of the adequacy of its transmission system (161 kV and above).
- (6) Demand-Side Management. Each utility shall provide the results of its overall assessment of existing and potential demand-side management programs, including a descriptive summary of each analysis performed or used by the utility in the assessment. The utility also shall provide general information on any changes to the methods and assumptions used in the assessment since its last biennial report.
  - (i) For demand-side programs available at the time of the report, the utility shall provide the following information for each resource: the type of resource (demand response or energy efficiency); the capacity and energy available in the program; number of customers

- enrolled in each program; the number of times the utility has called upon the resource; and, where applicable, the capacity reduction realized each time since the previous biennial report. The utility shall also list any demand-side resource it has discontinued since its previous biennial report and the reasons for that discontinuance.
- (ii) For demand-side management programs it proposes to implement within the biennium for which the report is filed, the utility shall provide the following information for each resource: the type of resource (demand response and energy efficiency); a description of the new program and the target customer segment; the capacity and energy expected to be available from the program; projected customer acceptance; the date the program will be launched; and the rationale as to why the program was selected.
- (iii) For programs evaluated but rejected the utility shall provide the following information for each resource considered: the type of resource (demand response or energy efficiency); a description of the program and the target customer segment; the capacity and energy available from the program; projected customer acceptance; and reasons for the program's rejection.
- (iv) For consumer education programs the utility shall provide a comprehensive list of all such programs the utility currently provides to its customers, or proposes to implement within the biennium for which the report is filed, including a description of the program, the target customer segment, and the utility's promotion of the education program. The utility shall also provide a list of any educational program it has discontinued since its last biennial report and the reasons for discontinuance.
- (7) Assessment of Alternative Supply-Side Energy Resources. The utility shall include its current overall assessment of existing and potential alternative supply-side energy resources, including a descriptive summary of each analysis performed or used by the utility in the assessment. The utility shall also provide general information on any changes to the methods and assumptions used in the assessment since its most recent biennial or update report.
  - (i) For the currently operational or potential future alternative supply-side energy resources included in each utility's plan, the utility shall provide information on the capacity and energy actually available or projected to be available, as applicable, from the resource. The utility shall also provide this information for any actual or potential alternative supply-side energy resources that have been discontinued from its plan since its last biennial report and the reasons for that discontinuance.
  - (ii) For alternative supply-side energy resources evaluated but rejected, the utility shall provide the following information for each resource considered: a description of the resource; the potential

capacity and energy associated with the resource; and the reasons for the rejection of the resource.

- (8) Evaluation of Resource Options. Each utility shall provide a description and a summary of the results of its analyses of potential resource options and combinations of resource options performed by it pursuant to subsection (g) of this rule to determine its integrated resource plan.
- (9) Levelized Busbar Costs. Each utility shall provide information on levelized busbar costs for various generation technologies.
- (10) Smart Grid Impacts. Each utility shall provide information regarding the impacts of its smart grid deployment plan on the overall IRP. For purposes of this requirement, the term "smart" in smart grid shall be understood to mean, but is not limited to, a system having the ability to receive, process, and send information and/or data essentially establishing a two-way communication protocol.

For purposes of this requirement, smart grid technologies that are implemented in a smart grid deployment plan may include those that: (1) utilize digital information and controls technology to improve the reliability, security and efficiency of an electric utility's distribution or transmission system; (2) optimize grid operations dynamically; (3) improve the operational integration of distributed and/or intermittent generation sources, energy storage, demand response, demand-side resources and energy efficiency; (4) provide utility operators with data concerning the operations and status of the distribution and/or transmission system, as well as automating some operations; and/or (5) provide customers with usage information.

The information provided shall include:

- (a) A description of the technology installed and for which installation is scheduled to begin in the next five years and the resulting and projected net impacts from installation of that technology, including, if applicable, the potential demand (MW) and energy (MWh) savings resulting from the described technology.
- (b) A comparison to "gross" MW and MWh without installation of the described smart grid technology.
- (c) A description of MW and MWh impacts on a system, North Carolina retail jurisdictional, and North Carolina retail customer class basis, including proposed plans for measurement and verification of customer impacts or actual measurement and verification of customer impacts.
- (j) Contents of Update Reports. In addition to the information required by sections (h)(2)-(4) of this rule, each utility shall include in its update report data and tables that provide the following data for the planning horizon: (1) the information required by sections (i)(1) and (2) of this rule, including the utility's load forecast adjusted for the impacts of any new energy efficiency programs, existing generating capacity with planned additions, uprates, derates, and retirements, planned purchase contracts, undesignated future resources identified by type of generation and MW rating, renewable capacity, demand-side management capacity, and any resource gap;

- (2) cumulative resource additions necessary to meet load obligation and reserve margins; and (3) projections of load, capacity, and reserves for both\_the summer and winter periods. A total system IRP may be filed in lieu of an update report for purposes of compliance with this section.
- (k) Review of Biennial Reports. Within 150 days after the later of either September 1 or the filing of each utility's biennial report, the Public Staff or any other intervenor may file an integrated resource plan or report of its own as to any utility or may file an evaluation of or comments on the reports filed by the utilities, or both. The Public Staff or any intervenor may identify any issue that it believes should be the subject of an evidentiary hearing. Within 60 days after the filing of initial comments, the parties may file reply comments addressing any substantive or procedural issue raised by any other party. A hearing to address issues raised by the Public Staff or other intervenors may be scheduled at the discretion of the Commission. The scope of any such hearing shall be limited to such issues as identified by the Commission. One or more hearings to receive testimony from the public, as required by law, shall be set at a time and place designated by the Commission.
- (I) Review of Update Reports. Within 60 days after the filing of each utility's update report required by section (j) of this rule, the Public Staff or any other intervenor may file an update report of its own as to any utility. Further, within the same time period the Public Staff shall report to the Commission whether each utility's update report meets the requirements of this rule. Intervenors may request leave from the Commission to file comments. Comments will be received or expert witness hearings held on the update reports only if the Commission deems it necessary. The scope of any comments or expert witness hearing shall be limited to issues identified by the Commission. One or more hearings to receive testimony from the public, as required by law, shall be set at a time and place designated by the Commission.
- (m) By November 30 of each year, each utility individually or jointly shall hold a meeting to review its biennial or update report with interested parties.