

Docket No. 36498

In Re: Georgia Power Company's 2013 Integrated Resource Plan and Application for Decertification of Plant Branch Units 3 and 4, Plant McManus Units 1 and 2, Plant Kraft Units 1-4, Plant Yates Units 1-5, Plant Boulevard Units 2 and 3, and Plant Bowen Unit 6

Docket No. 36499

In Re: Georgia Power Company's Application for the Certification of Amended Demand Side Management Plan

FINAL ORDER

Record submitted: June 28, 2013

Decided: July 11, 2013

APPEARANCES:

On behalf of the Georgia Public Service Commission Public Interest Advocacy Staff:

JEFFREY C. STAIR, ESQ.
DANIEL WALSH, ESQ.
ROBIN COHEN, ESQ.

On behalf of Georgia Power Company:

KEVIN C. GREENE, ESQ.
BRANDON MARZO, ESQ.
JACK JIRAK, ESQ.
STEVE HEWITSON, ESQ.

On behalf of Association for Fairness in Ratemaking:

DAN MOORE

On behalf of Georgia Association of Manufacturers:

CHARLES B. JONES, III, ESQ.

On behalf of Georgia Industrial Group:

RANDALL QUINTRELL, ESQ.

On behalf of Georgia Solar Energy Industries Association, Inc.:

NEWTON M. GALLOWAY, ESQ.

TERRI M. LYNDALL, ESQ.

J. CHADWICK TORRI, ESQ.

On behalf of Georgia Solar Utilities, Inc.:

SCOTT THOMASSON, ESQ.

On behalf of Georgia Watch:

ROBERT B. BAKER, JR., ESQ.

On behalf of Sierra Club and Coosa River Basin Initiative:

ASHTEN BAILEY, ESQ.

ROBERT UKEILEY, ESQ.

On behalf of Resource Supply Management:

JIM CLARKSON

On behalf of Southern Alliance for Clean Energy:

KURT EBERSBACH, ESQ.

JILL TAUBER, ESQ.

On behalf of Wal-Mart Stores East and Sam's East:

ALAN R. JENKINS, ESQ.

BY THE COMMISSION:

I. STATEMENT OF PROCEEDINGS

On January 31, 2013, Georgia Power Company (“Georgia Power” or the “Company”) submitted to the Georgia Public Service Commission (“Commission”) its 2013 Integrated Resource Plan and Application for Decertification of Plant Branch Units 3 and 4, Plant McManus Units 1 and 2, Plant Kraft Units 1-4, Plant Yates Units 1-5, Plant Boulevard Units 2 and 3, and Plant Bowen Unit 6 (“IRP” or “Plan”) for approval pursuant to O.C.G.A. § 46-3A-1 through 11 (“IRP Act” or “Act”) and its Application for the Certification of Amended Demand Side Management Plan (“DSM Application”). On February 7, 2013, the Commission approved its Procedural and Scheduling Order in both dockets setting forth the dates for filing of testimony and briefs, as well as the date for a hearing in this matter. These proceedings were declared to be contested cases as the term is defined in O.C.G.A. § 50-13-13 and were also held to encompass complex litigation pursuant to O.C.G.A. § 9-11-33(a). Briefs and/or proposed orders were required to be filed in both dockets on June 28, 2013.

In accordance with O.C.G.A. § 46-3A-5(c), the Commission established fees for review of the IRP within sixty days of the filing of the applications. On May 19, 2013, the Commission concluded that \$192,597.00 was the appropriate fee for the Company’s IRP and DSM Application.

Pursuant to the Procedural and Scheduling Order, on March 19, 2013, Georgia Power pre-filed the direct testimony of the panel of Kyle C. Leach, Garey C. Rozier, Larry T. Legg and Larry S. Monroe in Docket No. 36498. Also, on March 19, 2013, in Docket No. 36499, the Company submitted separate pre-filed testimony of Mr. Legg. On April 24 and 25, 2013, the Commission held a hearing in both dockets to consider the Company’s pre-filed testimony.

On May 10, 2013, Public Interest Advocacy Staff (“PIA Staff”) and intervenors pre-filed direct testimony. In Docket No. 36498, PIA Staff pre-filed the direct testimony of Ralph C. Smith, Charles W. King, the panel of Randall J. Falkenberg and Philip M. Hayet, the panel of John W. Chiles, Brian D. Smith, Paul Wielgus and John W. Hutts and the panel of Jamie C. Barber, Richard F. Spellman and John L. Kaduk. In Docket No. 36499, PIA Staff pre-filed the joint testimony of Ms. Barber, Mr. Spellman and Shemetha Jones.

In Docket No. 36498, Georgia Solar Energy Industries Association (“GSEIA”) filed the direct testimony of Karl R. Rabago, Georgia Solar Utilities, Inc. (“GaSU”) filed the direct testimony of Robert E. Green, the Sierra Club and the Coosa River Basin Initiative (“Sierra Club”) filed the direct testimony of Dr. Thomas Power, and the Southern Alliance for Clean Energy (“SACE”) filed the direct testimony John D. Wilson, George W. Evans and Natalie A. Mims. In Docket No. 36499, Walmart Stores East, LP and Sam's East, Inc. (“Walmart”) filed the direct testimony of Kenneth Baker, and the Association for Fairness in Ratemaking (“AFFIRM”) filed the direct testimony of Dan Moore. In addition, the pre-filed testimony of Ms. Mims on behalf of SACE and Mr. Green on behalf of GaSU submitted in Docket No. 36499 was identical to the pre-filed testimony these respective parties submitted in Docket No. 36498. The Commission held a hearing on the PIA Staff and Intervenor pre-filed testimony on May 21, 22 and 30, 2013.

On June 7, 2013, Georgia Power pre-filed the rebuttal testimony of the panel of Messrs. Leach, Rozier and Legg and Ms. Alison Brown. The Commission held a hearing on the Company's rebuttal testimony on June 18 and 19, 2013.

In addition to hearing the testimony of witnesses testifying on behalf of parties intervening in these proceedings, the Commission also heard from over thirty public witnesses who offered individual comments to the wide range of issues before the Commission. Though such statements are not evidence in this proceeding, the Commission acknowledges that the issues and positions presented by the Company and other parties, as well as this Commission's final decisions on those issues do have an impact upon the citizens of Georgia.

Subsequent to the hearing on the Company's rebuttal testimony, the PIA Staff and the Company entered into a Stipulation designed to resolve the issues that were raised in these dockets (the "Stipulation"). A copy of the Stipulation is attached to this Final Order as Exhibit A and incorporated herein by this reference.

The parties filed their briefs and proposed orders on June 28, 2013, and the Commission decided the matter at a specially scheduled Administrative Session on July 11, 2013. In doing so, the Commission hereby adopts in this Final Order, with modifications and further directives, the IRP filed by Georgia Power. In doing so, the Commission sets forth in this Final Order further direction to Georgia Power for further reporting and analysis to be performed and provided to the Commission prior to or in conjunction with its next IRP filing, amendment or application for de-certification. .

II. JURISDICTION AND AUTHORITY

Georgia Power is a public electric utility serving retail customers within the State of Georgia. Georgia Power is one of the retail operating companies of which the Southern Company system is comprised. This Commission has jurisdiction over Georgia Power's IRP and DSM Application pursuant to O.C.G.A. § 46-2-20, 46-2-21, and 46-2-23 generally, and the IRP Act in particular.

The IRP Act requires the Company to file an Integrated Resource Plan at least every three years.¹ Georgia Power Company's obligation with respect to the information that is filed is set forth pursuant to criteria identified in the Commission's IRP Rules. A "plan" is defined in the Act as an Integrated Resource Plan that contains the utility's electric demand and energy forecast for at least a 20-year period; program for meeting the requirements shown in its forecast in an economical and reliable manner; the analysis of all capacity resource options, including both demand-side and supply-side options; and the assumptions used and conclusions reached with respect to the effect of each capacity resource option on the future cost and reliability of electric service. The Plan also must:

- (A) Contain the size and type of facilities which are expected to be owned or operated in whole or in part by such utility and the construction of which is expected to commence during the ensuing ten years or such longer period as

¹ O.C.G.A. § 46-3A-2.

the Commission deems necessary and shall identify all existing facilities intended to be removed from service during such period or upon completion of such construction;

- (B) Contain practical alternatives to the fuel type and method of generation of the proposed electric generating facilities and set forth in detail the reasons for selecting the fuel type and method of generation;
- (C) Contain a statement of the estimated impact of proposed and alternative generating plants on the environment and the means by which potential adverse impacts will be avoided or minimized;
- (D) Indicate, in detail, the projected demand for electric energy for a 20-year period and the basis for determining the projected demand;
- (E) Describe the utility's relationship to other utilities in regional associations, power pools, and networks;
- (F) Identify and describe all major research projects and programs which will continue or commence in the succeeding three years and set forth the reasons for selecting specific areas of research;
- (G) Identify and describe existing and planned programs and policies to discourage inefficient and excessive power use; and
- (H) Provide any other information as may be required by the Commission.²

The Commission is required under O.C.G.A. § 46-3A-2 to make determinations as to the adequacy of the IRP and to ensure that the utility's Plan has appropriately addressed numerous matters. There must be a determination that the forecasted requirements contained in the Plan are based on substantially accurate data and an adequate method of forecasting.³ The Commission must also find that the Plan identifies and takes into account any present and projected reductions in the demand for energy that may result from measures to improve energy efficiency in the industrial, commercial, residential, and energy-producing sectors of the state.⁴

Further, the Commission must determine whether the Plan adequately demonstrates the economic, environmental, and other benefits to the state and to customers of the utilities, associated with the following possible measures and sources of supply:

- (A) Improvements in energy efficiency;
- (B) Pooling of power;
- (C) Purchases of power from neighboring states;
- (D) Facilities that operate on alternative sources of energy;

² O.C.G.A. § 46-3A-1(7).

³ O.C.G.A. § 46-3A-2(b)(1).

⁴ O.C.G.A. § 46-3A-2(b)(2).

- (E) Facilities that operate on the principle of cogeneration or hydro-generation; and
- (F) Other generation facilities and demand-side options.⁵

After hearings have been conducted on a Plan, the Commission may approve the IRP; approve it subject to stated conditions; approve it with modifications; approve it in part and reject it in part; reject the Plan as filed; or provide an alternate Plan, upon determining that this is in the public interest.⁶

An electric utility is entitled to recover the approved or actual cost, whichever is less, of any certificated demand-side capacity option in rates, along with an additional sum.⁷ In determining the additional sum, the Commission “shall consider lost revenues, if any, changed risks, and an equitable sharing of benefits between the utility and its retail customers.”⁸

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

To ensure that the competing interests of all parties were properly considered, the Commission has carefully analyzed all evidence of record including the testimony given and the various exhibits entered by all the parties. As set forth hereinafter, the Commission makes findings of fact and conclusions of law based on the evidentiary record created.

A. Supply Side

The Stipulation between PIA Staff and Georgia Power addresses the supply side issues in this case. For the reasons set forth below, the Commission finds that resolution of the supply side issues as set forth in the Stipulation is in the public interest.

To ensure that the competing interests of all parties were properly considered, the Commission has carefully analyzed all evidence of record including the testimony given and the various exhibits entered by all the parties. As set forth hereinafter, the Commission makes findings of fact and conclusions of law based on the evidentiary record created.

1. The Company’s 2013 IRP and Application for Decertification are approved as amended by the Stipulation between PIA Staff and Georgia Power.

The Stipulation between PIA Staff and Georgia Power (“the Company”) provides that, except as amended therein, Georgia Power Company’s 2013 IRP and Application for Decertification should be approved. The PIA Staff conducted a thorough review of the Georgia

⁵ O.C.G.A. § 46-3A-2 (b)(3).

⁶ GPSC Utility Rule 515-3-4-.01(2).

⁷ O.C.G.A. § 46-3A-9

⁸ *Id.*

Power filings. Those areas where PIA Staff identified concerns about Georgia Power's process or results are largely addressed in the Stipulation by making amendments to the IRP as filed by Georgia Power. Although the Stipulation does not represent the litigation position of Georgia Power, the PIA Staff or any other party to this proceeding, the Stipulation is lawful, reasonable and supported by the record.

The Stipulation includes twenty-one (21) paragraphs related to the supply side issues in the Company's IRP. This Final Order will address each paragraph.

2. The requests to decertify and retire Plant Branch Units 3 and 4, Plant Boulevard Units 2 and 3, Plant Kraft Units 1-4, Plant McManus Units 1-2, and Plant Yates Units 1-5 are approved.

In Paragraph 2 of the Stipulation, PIA Staff and Georgia Power agree that Plant Branch Units 3 and 4, Plant Boulevard Units 2 and 3, Plant Kraft Units 1-4, Plant McManus Units 1-2, and Plant Yates Units 1-5 shall be decertified and retired as provided for in the Decertification Application.

The Company witness panel of Kyle C. Leach, Garey C. Rozier, Larry T. Legg and Larry S. Monroe testified that the Company explored all feasible options for compliance with the current and anticipated environmental rules, comparing the projected value of continued operation of the units to the value of replacement generation. (Direct Testimony of Leach, Rozier, Legg and Monroe, p. 21) (hereinafter "Leach Direct"). After review of the results, the Company determined that it would be most economical to decertify the above-listed units. (Leach Direct, pp. 22-25; Tr. 98-99).

PIA Staff presented the panel of Randall Falkenberg and Philip Hayet to evaluate Georgia Power's proposals. This panel noted a number of significant concerns with Georgia Power's assumptions and modeling techniques. (Direct Testimony of Falkenberg and Hayet, pp. 7-8). The PIA Staff panel conducted its own independent analysis of the units to determine the best cost options for ratepayers. *Id.* at 8. Although PIA Staff disagreed with some of the assumptions and modeling techniques used by the Company, PIA Staff reached the same conclusion as the Company with regard to decertifying these units. *Id.* at 7-9.

Decertification of these Units has not been contested by any party and the Commission finds it reasonable as a matter of fact to approve decertification and retirement of the Units identified in Paragraph 2 of the Stipulation.

The Commission finds that approval of Paragraph 2 of the Supply Side portion of the Stipulation is in the public interest.

3. The Company's MATS compliance plan for Plant Bowen Units 1-4, Plant Wansley Units 1 and 2, Plant Scherer Units 1-3, and Plant Hammond Units 1-4 is approved.

Paragraph 3 of the Stipulation provides for approval of the U.S. Environmental Protection Agency's Mercury and Air Toxics Standards ("MATS") compliance plans and the continued operation of Plant Bowen Units 1-4, Plant Wansley Units 1 and 2, Plant Scherer Units 1-3, and Plant Hammond Units 1-4. The Leach Direct panel testified that the Company notified the

Commission in Docket No. 34218, that it would not need baghouses at these units in order to meet the requirements of the MATS rule. (Leach Direct, p. 11; Tr. 98-99). Due to the changes from the proposed MATS rule to the final rule, MATS compliance could be achieved by installing more cost effective control methods. *Id.* at 12, and 14. The Panel listed specific environmental controls which will be installed at each unit. *Id.* at 15.

With regard to the above-listed units, the PIA Staff witness panel of Falkenberg and Hayet again disagreed with some of the methodology used by the Company. (Falkenberg/Hayet Direct, pp. 7-9). However, after performing an independent analysis, they agreed with the Company's conclusions with regard to the environmental and economic impact of the MATS compliance plan for these units. *Id.* at 27-28, 30-31.

The MATS compliance plan for these units has not been contested by any party. The Commission finds as a matter of fact that it is reasonable to approve the Company's MATS compliance plan for Plant Bowen Units 1-4, Plant Wansley Units 1 and 2, Plant Scherer Units 1-3, and Plant Hammond Units 1-4.

The Commission finds that approval of Paragraph 3 of the Supply Side portion of the Stipulation is in the public interest.

4. The fuel switch at Plant Yates Units 6 and 7 and Plant McIntosh Unit 1 is approved.

In Paragraph 4 of the Stipulation, the PIA Staff and the Company provide for approval of the fuel switch at Plant Yates Units 6 and 7 from coal to natural gas. It also provides for approval of a switch at Plant McIntosh Unit 1 from bituminous coal to Powder River basin ("PRB") coal.

The Leach Direct panel testified that, due to the changing environmental standards, it is no longer cost-effective for Plant Yates Units 6 and 7 to burn coal. After consideration of the options with regard to this unit, the Company, without objection from PIA Staff, found that the most cost-effective option for customers is to switch Plant Yates Units 6 and 7 to burn natural gas as the primary fuel. (Leach Direct, p. 14, Falkenberg/Hayet Direct p. 8).

The Company Panel of Leach, Rozier, Legg and Brown (hereinafter "Leach Rebuttal") expressed its confidence in the Company's ability to provide for sufficient natural gas supply and testified with regard to the Company's processes in obtaining natural gas and their extensive experience in managing the fuel supply for its gas-fired resources. (Leach Rebuttal pp. 16-17). PIA Staff raised some concern, however, with the availability of natural gas at the Yates site. (Direct Testimony of Chiles, Smith, Wielgus & Hutts, pp. 20-23). PIA Staff recommended updates from the Company with regard to the status of natural gas availability with plans to address the uncertainties. *Id.* at 23. In Paragraph 7 of the Stipulation, Georgia Power and PIA Staff agreed that the Company will provide semi-annual updates with regard to the status of the natural gas delivery outlook and fuel supply plans until the fuel switch of the units are completed. If necessary the Company will include in its report any corrective action or contingency plans with regard to fuel supply.

As to Plant McIntosh, approval of the fuel switch from bituminous coal to PRB coal has been requested by the Company and agreed to by PIA Staff. (Falkenberg/Hayet Direct, p.

31). Concerns were raised by various parties with regard to the fuel price forecasts projected by the Company and used by them in their economic analysis. Tr. 378-400. After review of the forecasts, PIA Staff witness Wielgus testified that he had “no major concern” with regard to the forecasts and called them a “legitimate estimate” of the future price of PRB coal. Tr. 724. Further, PIA Staff witness Falkenberg testified that he utilized the Company’s coal price forecasts in his own analysis, and concluded that the switch to PRB coal at Plant McIntosh Unit 1 was the preferred course. (Tr. 884). Consequently, the Company’s analysis of PRB coal prices is supported by Staff witnesses. (Tr. 724; Tr. 884). Therefore, the Commission finds as a matter of fact that it is reasonable to adopt the Company’s estimates with regard to the projected prices of PRB coal and the availability of natural gas at Plant Yates Units 6 and 7, with associated reporting, and to approve the fuel switches at both Plant Yates 6 and 7 and Plant McIntosh Unit 1.

No intervenor has offered any alternative economic analysis with respect to Plant McIntosh Unit 1. However, the Sierra Club’s witness Dr. Thomas Power criticized the Company’s long-term forecast of PRB coal prices. (Tr. 1291). Dr. Power’s analysis, however, relied on a price forecast for PRB coal that the forecaster admitted was high by virtue of assuming large increases in production without considering counterbalancing efficiency improvements from new technologies in the mining process. (Tr. 1328-29). The Sierra Club also states that retirement of this unit will reduce the Company’s significant excess capacity, thus saving ratepayers’ money. (Tr. 731-747).

The Leach Rebuttal testimony supported the reasonableness of the Company’s forecasts and compared the consistency of its forecasts with other credible forecasts. (Tr. 1973). The Company’s forecasts specifically take into consideration the changing environmental requirements—especially those due to MATS—and the supply curves of each coal-producing region. (Tr. 1973). Contrary to what Dr. Power assumes, the Company’s analysis concludes that the environmental regulations will not cause a significant increase in the demand for PRB coal and, thus, the mine mouth price of PRB coal will remain steady.

The Commission finds that approval of Paragraph 4 of the Supply Side portion of the Stipulation is in the public interest.

5. The conversion of Plant Gaston Units 1-4 to natural gas is approved.

Georgia Power proposed to convert Plant Gaston Units 1-4 to natural gas as its primary fuel. (Direct, p. 14). Paragraph 5 of the Stipulation between Georgia Power and PIA Staff provides as follows:

The Company’s analysis of the fuel switch of Gaston Units 1-4 to burn natural gas demonstrated economic benefits for customers. The PIA Staff’s analysis indicated that retirement of Gaston would be more economic than gas conversion, but the PIA Staff’s analysis reflected only a small difference in the economic results between retirement and gas conversion. In light of the economic results for the conversion of Plant Gaston to natural gas the Parties to the stipulation agree that it is reasonable for the Commission to approve the conversion in order to maintain this capacity as protection against any unforeseen contingencies. Therefore, the fuel switch of Gaston Units 1-4 to burn natural gas is approved.

The Commission finds adoption of this paragraph of the Stipulation to be reasonable.

Although PIA Staff witnesses Falkenberg and Hayet testified that retirement is a slightly more economic option, they explained that it would be reasonable to approve the conversion in order to maintain this capacity as protection against unforeseen contingencies. (Falkenberg/Hayet Direct, p. 45). The PIA Staff's testimony also noted that the cost of continued operation of the plant is very low. *Id.* If gas prices remain low, it is possible that Plant Gaston may be dispatched before some of the coal plants. *Id.* In addition, the PIA Staff noted that unexpected contingencies such as unexpected load growth or a delay in the return to service of Plant Bowen may support the continued operation of Plant Gaston. *Id.* PIA Staff also noted that the Commission could pursue certain policies that would make Plant Gaston less economic. *Id.* While the Commission is mindful of this fact, it determines that approval of the gas conversion best serves ratepayer interests. Whereas the Commission cannot exercise control over such factors as gas costs or load growth, it can consider the impact on the cost-effectiveness of Plant Gaston when determining whether to approve additional resources.

Georgia Watch, the Sierra Club and SACE argued that the Commission should reject the conversion of Plant Gaston to natural gas and rather should decertify the plant, or the Company's purchase of power from the Gaston units. The Commission rejects these recommendations and finds instead that Plant Gaston Units 1-4 will provide protection against unforeseen contingencies such as unexpected plant unavailability as well as higher than expected load growth. (Tr. 1969). The units may also take advantage of low natural gas prices. (*Id.*). In addition, even under PIA Staff's economic analysis, there is virtually no risk to customers. (*Id.*). For all these reasons, the Commission should allow the Company to retain this known and reliable generating resource as is specified in the Stipulation.

The Commission finds that approval of Paragraph 5 of the Supply Side portion of the Stipulation is in the public interest.

6. The measures taken for MATS Compliance are approved and discussion of compliance and Operation and Maintenance ("O&M") Expense.

Paragraph 6 of the Stipulation provides for approval of the measures taken to comply with the existing government-imposed environmental mandates necessary for the Company to implement its environmental compliance plan in Technical Appendix Volume 2, Summary of Capital Expenditures, Closures, and O&M Expenses filed as part of the 2013 IRP. It also provides for the Company to file a reconciliation report showing how the above-referenced costs reconcile with the per-unit costs detailed in Table A.1 in the Unit Retirement Study. The Commission will review the costs associated with these measures in the company's next base rate case.

Except as discussed with regard to the fuel switch at Plant Yates Units 6 and 7 and Plant McIntosh Unit 1, no objections were raised with regard to the measures proposed by the Company to comply with government imposed environmental mandates.

PIA Staff witness Ralph Smith testified that any decision on approval of costs associated with specified transmission, renewable costs, and capital O&M costs related to governmental

imposed environmental mandates should be considered in a rate case and not in this proceeding. (Smith Direct, pp. 6-7). The Leach Rebuttal panel testified that while the Company's IRP filing includes a request for Commission approval of such costs, the Company would be willing to engage in further discussions with Commission Staff on deferring consideration of these costs to a rate case. (Leach Rebuttal, p 54).

The Commission finds, as a matter of fact, the measures proposed by the Company to comply with existing government imposed environmental regulation are reasonable, and are approved. The Commission also finds it reasonable to address the costs associated with MATS compliance and O&M costs related to governmental-imposed environmental mandates in the Company's next base rate case. In a rate case proceeding, the Commission will have the opportunity to consider ratemaking issues in a comprehensive manner as opposed to taking up cost recovery issues on a piecemeal basis.

The Commission finds that approval of Paragraph 6 of the Supply Side portion of the Stipulation is in the public interest.

7. The Company shall provide semi-annual updates on the status of natural gas delivery and fuel supply for Plant Yates Units 6 and 7 and Plant Gaston Units 1-4 until the fuel switch is complete.

Paragraph 7 of the Stipulation states that the Company will provide the Commission with semi-annual updates on the status of natural gas delivery and fuel supply for Plant Yates Units 6 and 7 and Plant Gaston Units 1-4 until the fuel switch is complete. The updates shall include corrective or contingency plans, if necessary, for these units and reporting will begin in October, 2013.

As discussed in Paragraph 5, PIA Staff raised concerns regarding the availability of natural gas at the Yates site. Specifically, PIA Staff focused on the fact that the Company did not have any firm contracts for gas delivery on the only pipeline to serve these converted units. (Chiles, p. 21). Moreover, Georgia Power does not have any gas backup at or to these sites. *Id.* Finally, the pipeline owner confirmed that their pipeline is fully subscribed in Georgia. *Id.*

In contrast, the Company expressed confidence in its ability to provide sufficient gas supply to run the effected units. (Leach Rebuttal pp. 16-17). Georgia Power and PIA Staff agreed that the Company will provide semi-annual updates with regard to the status of the natural gas delivery outlook and fuel supply plans until the fuel switch of the units are completed. If necessary the Company will include in its report any corrective action or contingency plans with regard to fuel supply.

The Commission finds it reasonable to require semi-annual reports with regard to the availability of natural gas delivery and supply while the work is being done at these units to convert them to burn natural gas. In order to properly fulfill its duty regarding ongoing feasibility assessments to ensure continued operation of these units remains in the best interest of the Company's ratepayers, the Commission needs all relevant information regarding the availability of natural gas at Plant Yates Units 6 and 7 and Plant Gaston Units 1-4.

The Commission finds that approval of Paragraph 7 of the Supply Side portion of the Stipulation is in the public interest.

8. The change in the decertification date for Plant Branch Unit 1 from December 31, 2013 to April 16, 2015 is approved.

Paragraph 8 of the Stipulation provides for the approval of the postponement of the decertification and retirement of Plant Branch Unit 1 from December 31, 2013 to April 16, 2015. In the Final Order in Docket No. 34218, the Commission approved the decertification of Plant Branch Unit 1 to occur on December 31, 2013. However, the Company requests that the decertification date be postponed to April 16, 2015 to coincide with the retirement dates for Plant Branch Units 3 and 4 so that Plant Branch Unit 1 may be used to provide necessary startup steam for these other two units. (Leach Direct, pp. 22-23).

The Commission finds that the postponement of the decertification and retirement date of Plant Branch Unit 1 to April 16, 2015 is reasonable. The record reflects that using Plant Branch Unit 1 to provide startup steam for the continued operation of Units 3 and 4 is economic and improves reliability. *Id.* at 22.

The Commission finds that approval of Paragraph 8 of the Supply Side portion of the Stipulation is in the public interest.

9. Within six months of the Final Order in this proceeding, the Company and Staff shall work collaboratively to resolve modeling issues.

Paragraph 9 of the Stipulation provides for the Company and PIA Staff to begin to work collaboratively to address retirement study modeling issues and transmission planning issues. Such work shall begin within six (6) months of the Final Order in this proceeding. The goal of the parties is to resolve these modeling issues no later than six (6) months prior to the Company's 2016 IRP filing.

The PIA Staff witness panel of Chiles, Smith, Wielgus and Hutts criticized the Company's retirement modeling process primarily because it did not use a consistent set of assumptions for all the models to develop the IRP. (Chiles Direct, p. 9). The panel explained that:

For the Resource Mix Study, the Company used Strategist to produce its Reference Case and all scenario and sensitivity cases. For the Unit Retirement Study, the Company used the PROSYM model as well as an Excel spreadsheet model, GENVAL, to analyze the feasibility of continued operation of its coal-fired generating units.

Id. Furthermore, the assumed retirement dates for Plant McManus Units 1 and 2, Plant Kraft Units 1-4 and Plant Boulevard Units 2 and 3 for purposes of preparing the Resource Mix Study do not match the requested decertification dates for these units. *Id.* at 11. Correcting for these discrepancies impacts the forecasted system reserve margin. *Id.* at 12. Although the impact on the 2013 IRP is not substantial because the Company is long in its reserves in the short-term, inconsistent modeling could have a more significant impact on ratepayers in future IRPs. *Id.* at 14.

On transmission, PIA Staff witnesses testified that “the Georgia Power Transmission Plan has been developed through the Georgia Integrated Transmission System (“ITS”) process, and is not consistent with other assumptions made in the Georgia Power 2013 IRP.” (Chiles Direct, p. 3). The results of the 2013 IRP did not flow into the transmission plan. *Id.* at 6.

While the Leach Rebuttal Panel testified that it was confident in its modeling process based on years of experience analyzing generation decisions using these same processes and models, the Panel acknowledged also that the approach taken by PIA Staff was appropriate. The Panel also acknowledged that using the same assumptions across all models is optimal, although they also argued that it is not always necessary when it would have no substantial impact on the results. (Leach Rebuttal, pp. 9-12).

The Commission finds that Paragraph 9 of the Stipulation provides for a reasonable compromise. The Commission finds that the modeling and planning processes involved in an IRP have a significant impact on ratepayers; therefore, it is imperative that the parties work together to ensure that these processes are sound.

The Commission finds that approval of Paragraph 9 of the Supply Side portion of the Stipulation is in the public interest.

10. Repairs on Plant Bowen Units 1 and 2.

Subsequent to the filing of this IRP, the Company’s Plant Bowen Units 1-4 experienced a malfunction and subsequent explosion causing significant damage. The Company was able to repair Units 3 and 4 and those units were brought back into service in May. Units 1 and 2 have not yet been brought back online. Stipulation Paragraph 10 provides that the Company will continue to keep the Commission informed of all known costs associated with bringing Units 1 and 2 back online. In addition, prior to beginning any further environmental upgrade work, the Company shall provide an economic analysis providing that any decision to repair, upgrade, or continue to operate one or both units is economical.

Due to the timing of the incident involving these Units, an economic analysis of the feasibility to repair and upgrade these Units was not provided. The PIA Staff panel of Falkenberg and Hayet requested that the Company notify the Commission of any expected changes to the costs of bringing the Plant Bowen Units 1-4 back online, and to update the Commission in the Company’s rebuttal testimony. (Falkenberg/Hayet Direct, p. 9). The Company advised that they determined that repairing the units and returning them to service is the best economic option for customers. (Leach Rebuttal p. 19).

Accordingly, because full information is not available with regard to the status or costs of repairing Plant Bowen Units 1 and 2, the Commission finds that it is reasonable for the Company to keep this Commission updated on the costs and status of the repairs on Plant Bowen Units 1 and 2 and to provide an economic analysis with regard to the decision to repair, upgrade or continue to operate the units. The Commission needs all relevant information with regard to the repair of these units in order to provide oversight and direction to the Company to ensure continued operation of these units is in the best interest of its ratepayers.

The Commission finds that approval of Paragraph 10 of the Supply Side portion of the Stipulation is in the public interest.

11. The Company shall submit quarterly compliance reports.

Paragraph 11 of the Stipulation provides for the Company to provide quarterly compliance reports with regard to the environmental controls, switches and conversions it will be implementing. Specifically, the Company shall provide reports with regard to the environmental controls installations at Plant Bowen Units 1-4, Plant Wansley Units 1 and 2, Plant Scherer Units 1-3, and Plant Hammond Units 1-4. The Company shall also provide quarterly reports concerning the status of the natural gas conversions for Plant Yates Units 6 and 7 and Plant Gaston Units 1-4, as well as the fuel switch to Powder River Basin coal for Plant McIntosh Unit 1. These reports shall be similar to the Monthly Baghouse Monitoring Reports filed in Docket 34218.

In light of the Commission's prior order in Docket 34218, the Commission finds it reasonable to require similar reports with regard to the work being done at these units to bring them into compliance with government mandated environmental rules. In order to properly and completely fulfill duties regarding ongoing monitoring and feasibility assessments to ensure continued operation of these units remains in the best interest of the Company's ratepayers, the Commission needs all relevant information regarding the progress of the environmental upgrades.

The Commission finds that approval of Paragraph 11 of the Supply Side portion of the Stipulation is in the public interest.

12. The Deferral of Issues for Consideration until the Rate Case.

Paragraph 12 of the Stipulation provides that the regulatory accounting issues relevant to the gain on Plant Bowen Unit 6 as well as the net book values of Plant Branch Units 3 and 4 and Plant Boulevard Units 2 and 3 as of their respective retirement dates shall be deferred for consideration until the Company's 2013 rate case. This deferral for consideration would apply as well to any unusable Materials and Supplies inventory balance for each Retirement Unit. Similarly, the Stipulation defers to the rate case the regulatory treatment of environmental Construction Work in Progress from Plant Branch Units 3 and 4 and Plant Yates Units 6 and 7 to Georgia Power's 2013 rate case. For each category, the Stipulation clearly states that nothing in the paragraph takes away any argument that any stipulating party may have in the rate case. Therefore, the parties may argue that either category of costs should be recovered during any time period, including calendar year 2013 or a future year.

The timing of recovery may ultimately impact ratepayers. Currently and in the recent past, Georgia Power has operated under three-year accounting orders with earnings bands and provisions for what occurs if earnings exceed the top of the band or fall below the bottom of the band. If the Company recognizes costs while it is sufficiently above the bottom of the band so that it will still be earning within the band after such recognition, then those costs may have a different impact on the Company's earnings than if the costs were deferred for recovery in a future period.

Georgia Watch argued that the Commission should not authorize the conversion of "unusable material and supplies" and nonperforming plants to regulatory assets, and then permit accelerated cost recovery.

The Commission finds and concludes that the Stipulation merely defers for consideration until the rate case the regulatory accounting issues set forth in Paragraph 12. The Commission finds that the parties have effectively preserved their arguments on these issues. Finally, the Commission finds that these issues are more appropriately addressed in a rate case.

The Commission finds that approval of Paragraph 12 of the Supply Side portion of the Stipulation is in the public interest.

13. Cost of Removal Balances shall be considered in the 2013 Rate Case.

Similarly, Stipulation Paragraph 13 also defers for consideration until Georgia Power's 2013 base rate case the issue of any over or under-recovered cost of removal balances for each of the Retirement Units. At that time the costs will be addressed and the Commission shall determine whether such costs shall be recognized in the calendar year 2013 or over a future period to be determined. The Stipulation also clearly states that nothing in the paragraph takes away any argument that any stipulating party may have in the rate case. Therefore, the parties may argue that these costs should be recovered during any time period, including calendar year 2013 or a future year.

PIA Staff Witness Charles King and the Leach Rebuttal Panel disagreed on whether the Company's Unit Dismantlement Study provided for dismantlement to "greenfield" or "brownfield" status and the effect this distinction would have on the costs of dismantlement. (Leach Rebuttal, p. 55). PIA Staff witness Ralph Smith testified that costs of removal, along with other associated costs should be considered in context along with the Company's earnings and other deferrals. (Smith Direct, p. 4)

The Stipulation defers consideration of these and other issues with regard to dismantlement and costs of removal to the 2013 rate case. For the reasons stated above in the discussion of the accounting issues included in Paragraph 12, the Commission finds that it is more appropriate to address the cost of removal in the context of the 2013 rate case proceeding than in the IRP. The Commission further finds that the parties have effectively preserved their arguments on these issues.

The Commission finds that approval of Paragraph 13 of the Supply Side portion of the Stipulation is in the public interest.

14. Recovery of fuel related costs incurred in connection with the termination or amendment of any fuel transportation contracts associated with the Retirement Units shall be addressed in the Company's next fuel case following the date of termination or amendment and recovered over a period to be determined by the Commission.

Paragraph 14 of the Stipulation merely defers to the Company's next fuel case the issue of recovery of a particular type of fuel-related costs. The costs at issue in Paragraph 14 are those incurred in connection with the termination or amendment of any fuel transportation contracts associated with the Retirement Units. Paragraph 14 further specifies that the period of time that such costs should be recovered will be determined by the Commission.

The Company's fuel cost recovery rider is governed by O.C.G.A. § 46-2-26. It is reasonable and consistent with applicable law and prior Commission practice to defer to the Company's next fuel case this issue concerning the recovery of fuel related costs.

The Commission finds that approval of Paragraph 14 of the Supply Side portion of the Stipulation is in the public interest.

15. The Commission shall determine the appropriate rate base treatment in the 2013 rate case for transmission and substation Plant Held For Future Use whose utilization dates fall outside the ten-year planning horizon.

PIA Staff witness, Ralph Smith, testified about transmission and substation projects that the Company did not include in its 2013 IRP, even though these projects had been included in prior IRP proceedings. In response to PIA Staff discovery, Georgia Power explained that the projects were no longer in the Company's ten year planning horizon, as a result of changing assumptions on economic growth and generation resources. (Smith Direct, p. 24). A meaningful amount of property falls into this category. As Smith explained,

The Company has approximately \$68.4 million of transmission land which is not being currently used to provide utility service, and for which the potential future use falls outside of the Company's transmission planning horizon. Similarly, Georgia Power has approximately \$6.4 million of substation project land which is not being used currently to provide utility service, and for which the potential future use falls outside of the Company's transmission planning horizon.

Id. Some of the land parcels in the Plant Held for Future Use ("PHFFU") account are not scheduled to be useful in the provision of electric service to Georgia Power consumers until the year 2030 or later. *Id.* at 29. Holding property in this account for an extremely long period of time may adversely impact ratepayers because they pay a rate of return on the land in addition to the land acquisition expense, even though it is not being used and is not part of the utility's ten year plan. *Id.*

PIA Staff recommended that the Commission evaluate in a rate case the appropriate balance between ratepayers and shareholders for land purchases by Georgia Power for use in the distant future, including purchases that fall outside of its ten-year transmission planning horizon. This recommendation was essentially incorporated into the parties' Stipulation.

The Commission approves the provisions of Paragraph 15. The Commission will examine this issue in the Company's 2013 rate case. That proceeding will provide the parties with the opportunity to fully vet the ratemaking and policy issues that pertain to this account. No party opposed this recommendation.

The Commission finds that approval of Paragraph 15 of the Supply Side portion of the Stipulation is in the public interest.

16. The Company will reduce residential and total system peak demand by seventy-five percent of the amounts presented in Exhibit STF-JWH-3.

Paragraph 16 of the Stipulation sets forth the Company's agreement to reduce its residential and total system peak demand to address the transition between the results of the Company's short-term and long-term forecasts. The PIA Staff panel of Chiles, Smith, Wielgus and Hutts testified that the Company's peak demand forecast was reasonable with the exception of the high increase in 2016. (Direct Testimony, p. 26). This high increase impacts the remainder of the Georgia Power forecast. PIA Staff explained that:

The Company used the short-term residential forecasting model to allocate energy on a monthly basis for 2012-2015. To allocate annual energy to monthly amounts for 2016-2032, the Company applied the allocation factors derived from the short-term forecast to the annual energy projections developed in the long-term forecast.

Id. (footnotes omitted). Georgia Power used the average peaking data for the years in its short-term forecast. *Id.* at 27. PIA Staff advocated relying upon year 2015 alone, instead of the four year average, because years 2012 through 2015 experienced a downward trend in peak energy sales. *Id.* This adjustment addresses not only the significant increase in peak demand in 2016, but also its cascading effect on the years in the long-term forecast. PIA Staff witness John Hutts presented the results of PIA Staff's adjustments in STF-JWH-3 (Staff Exhibit 15).

The Commission approves this provision of the Stipulation. The Commission finds as a matter of fact that the Company's own analysis reflects a downward trend in peak energy sales from years 2012 through 2015. It is more reasonable to recognize this trend by basing the forecast on the final year, as opposed to simply taking a four year average that obscures the recent trend. Given the peak demand forecast is driven by peak energy sales, the Commission finds the demand reduction provided in this provision to be appropriate as it restates the peak demand forecast to more accurately reflect recent reduction of peak energy sales.

The Commission finds that approval of Paragraph 16 of the Supply Side portion of the Stipulation is in the public interest.

17. In the development of future Budget Energy and Load forecasts of average energy consumption per customer, the Company will evaluate models that include average income measures as well as models that include total income measures and will choose the model that has the best balance of theoretical and statistical properties.

Paragraph 17 of the Stipulation relates to the development of future Budget Energy and Load forecasts of average energy consumption per customer. The Company used total income as a variable to measure average use per customer. The PIA Staff panel of Chiles, Smith, Wielgus and Hutts testified that either average income or median household income would be a more appropriate variable for the residential average energy use model. (Direct Testimony, p. 25). Paragraph 17 incorporates PIA Staff's recommendation.

The Commission approves Paragraph 17. In doing so, the Commission finds as a matter of fact that either average income or median household income is a more appropriate variable than is total income for use in modeling the average energy use.. Total income would be an

appropriate variable to measure total class sales. (Direct Testimony, p. 25). However, an increase in total income does not necessarily have a correlation to average use per customer.

The Commission finds that approval of Paragraph 17 of the Supply Side portion of the Stipulation is in the public interest.

18. Georgia Power will initiate the 241 Battery Storage Demonstration project and the solar tracking demonstration project.

Georgia Power has agreed to initiate the 241 Battery Storage Demonstration project and the solar tracking demonstration project. In approving this component of the Stipulation, the Commission approves the Company incurring the capital costs for these projects as presented in Technical Appendix Volume 2, Selected Supporting Information. The Commission does not approve recovery of such costs at this time.

The 241 battery storage demonstration project seeks to install a battery storage system to complement a solar panel demonstration system at the Company's headquarters building in Atlanta, Georgia. (Tr. 1031). Based on the testimony of PIA Staff Witnesses Barber, Spellman, and Kaduk, the Commission finds that this project will provide Georgia Power with experience installing, maintaining and operating emerging renewable technologies. (Tr. 1032).

The Commission finds that the solar tracking demonstration project would provide the Company with the opportunity to compare the various fixed and tracking technology configurations. (Leach Rebuttal, p. 31). For these reasons, the Commission approves Paragraph 18 of the Stipulation.

As an amendment to the Stipulation as it relates to the Commission's policy decisions relative to wind generation the Commission approves the proposed wind demonstration projects that were proposed in the Company's Plan. Consideration must be given to projects which have a meaningful economic impact on the Georgia economy and the involvement of Georgia research universities. The Commission finds that approval of amended Paragraph 18 of the Supply Side portion of the Stipulation is in the public interest.

19. Any utility scale solar power should be procured by the Company through a Commission monitored competitive Request For Proposals process to ensure that customers receive the benefit of the least cost solar resources.

The Stipulation recognizes as a policy issue for the Commission whether additional solar resources should be included in this IRP. However, in the event that the Commission directs the inclusion of additional solar resources, the Stipulation specifies that utility scale solar power should be procured through a Request for Proposal process monitored by the Commission.

The Georgia Solar Energy Industries Association ("GSEIA") recommended that the Commission: (1) direct the Company to undertake market solicitations to facilitate the development of the maximum amount of distributed solar at this time to be implemented by means of competitive bidding; (2) initiate a separate proceeding for the development and evaluation of the Value of Solar to be conducted in 2014 or 2015, but concluded in advance of the Company's next IRP in 2016; and (3) reject the Company's proposal for a "back-up" tariff in this proceeding. Georgia Power Company acknowledged that the proper proceeding for

consideration of a back-up tariff is in its 2013 rate case. Therefore, no decision on that portion of GSEIA's recommendation is needed. Regarding GSEIA recommendation (2) initiate a separate proceeding for the development and evaluation of the Value of Solar to be conducted in 2014 or 2015, but concluded in advance of the Company's next IRP in 2016, the Commission declines to order such at this time.

Georgia Solar Utilities, Inc. ("GaSU") argued that the Plan failed to satisfy the requirements of the IRP Act and the Commission's Rules in failing to properly evaluate and plan for solar resources in its long-term modeling and analysis. In its brief GaSU recommended that the Commission modify the Plan by taking the following measures in its Final Order:

- (1) Modify the Plan to include additional development of 500 MW of new solar energy resources, and to direct that all such resources shall be procured and placed in commercial operation before January 1, 2017;
- (2) Direct Georgia Power to identify planned capacity and energy resources in its Plan and previous IRPs that could be feasibly altered or abandoned to allow for additional development of solar energy resources without upward rate pressure, including planned biomass capacity for Plant Mitchell Unit 3, reconsideration of the previously planned QF biomass capacity reallocated for the ASI, abandoning the 90 MW renewable self-build proposals approved in the 2007 IRP, and expanding customers' opportunities to purchase solar energy through the Green Energy program;
- (3) Direct Georgia Power to redesign its existing RFP process for utility-scale solar resources used in the ASI and in future solicitations, to raise the caps on resource size and cumulative bidder resources to 100 MW or more, or to eliminate such caps altogether, consistent with longstanding RFP procedures approved by this Commission for new supply-side resources;
- (4) Direct Georgia Power to redesign its existing RFP process for utility-scale solar resources used in the ASI and in future solicitations, to allow for bidders to offer resources for terms longer than 20 years, including PPAs of 30 years or more, life of the unit agreements and other procurement structures;
- (5) Direct Georgia Power to propose an immediate solicitation process for up to 90 MW of uncapped solar resources to substitute for the three 30 MW renewable self-build projects approved in the 2007 IRP, which should target long-term procurement approaches that can provide similar benefits to customers as self-build projects would have supplied;
- (6) Re-open Docket No. 16573 to consider reforms to Georgia Power's Green Energy program that encourage additional development of new solar resources without upward rate pressure, including the addition of a 100 percent solar energy option to the program; and
- (7) Direct Georgia Power to pay the costs of an independent study of long-term potential for expanding and integrating solar energy resources and other renewable energy resources within Georgia Power's service territory, which shall include recommendations for better integrating solar and renewable resources into the Company's modeling and planning processes used to prepare future IRPs.

The Commission finds GaSU's recommendation numbered 2 and 4 through 7 without merit and they are denied. However, recommendations number 1 and 3 are consistent with a motion sponsored by Commissioner McDonald and adopted, with modifications, by the Commission.

As a matter of energy policy, the Commission determines that it is appropriate to expand Georgia Power's generation portfolio by the addition of 525 MW of new solar generation. Two hundred sixty (260) MW shall be brought online in 2015 and the remaining two hundred sixty-five (265) MW by 2016. The RFP process to procure this solar energy will generally follow the current ASI protocols and be an expansion of that program. The new solar resources will be composed of 100 MW Distributed Generation ("DG") and 425 MW Utility Scale. Commission Staff may propose modifications to the current ASI protocols for the Commission consideration, but there will not be a MW limit placed on each developer.

For the DG portion of the new solar, parties shall be able to use both fixed tilt and tracking solar technologies and the pricing paid for the energy shall be reflective of the technology used. The Utility Scale solar will be procured through an RFP process similar to the one approved for the Utility Scale ASI program.

The Commission finds that an RFP is the most effective way to identify the best cost solar resources. The RFP will be open to all bidders (including the Southern Company and its subsidiaries) and consider any and all financial structures. Consideration must be given to projects which have a meaningful economic impact on the Georgia economy, even consideration of projects which propose to use assets owned by Georgia Power.

Georgia Power Company shall use an independent monitor/evaluator to administer the utility scale procurement process (as provided by Commission rules).

No bid shall be accepted which exceeds Georgia Power's projected levelized avoided cost for the term of the purchase power agreement. Such avoided costs will be established and announced by Georgia Power and reviewed by the Commission prior to the RFP process. In establishing the avoided cost, Georgia Power shall use the most recently available information so as to ensure that the additional solar shall not put any upward pressure on rates.

In order to secure the least cost reliable resources for ratepayers, the procurement process should invite qualified bidders and then evaluate the individual bids fairly. Those basic principles are applicable to the acquisition of any additional solar resources.

The Commission finds that approval of Paragraph 19, as amended, of the Supply Side portion of the Stipulation is in the public interest.

20. Related to certain components of the Stipulation specified below, Georgia Power will pay for reasonably necessary expert assistance to the Commission Staff in an amount not to exceed \$200,000 annually.

Georgia Power agreed to fund reasonably necessary review by the Commission Staff of the following paragraphs of the Stipulation as it relates to the Supply Side: 6, 7, 9, 10, 11, 19. These paragraphs, respectively, involve the implementation of the Company's environmental compliance, the status of the natural gas delivery outlook for Plant Gaston Units 1-4 and Plant Yates Units 6 and 7, retirement study modeling issues and transmission planning issues,

environmental controls installations, the status of natural gas conversions at Yates and Gaston units, the fuel switch to PRB Coal for McIntosh Unit 1, and the procurement of additional solar resources through an RFP process.

Under the Stipulation, Georgia Power shall be entitled to recover the full amount of any costs charged to the utility pursuant to this paragraph. The Commission finds that it is reasonable for the Company to recover for this expense given that it is used and useful in the provision of utility service. The Commission further finds that the \$200,000 is a modest amount for monitoring given the breadth and significance of the matters contained in the paragraphs that involve a monitoring function for the Commission Staff. Ratepayers will likely recognize benefits from the monitoring that exceed the cost.

The Commission finds that approval of Paragraph 20 of the Supply Side portion of the Stipulation is in the public interest.

21. When filing the 2016 IRP or any update to the IRP prior to the 2016 IRP, Georgia Power will provide the Commission Staff with working copies of all models used in the development of that IRP.

Georgia Power agreed to provide the Commission Staff with working copies of all models used in the development of its next IRP or IRP update. The Company further agreed that each model will be configured to replicate inputs used to derive results incorporated in its base case scenario. Finally, the Company and the PIA Staff agreed that the submission will be made within ten (10) days of the IRP or IRP update filing.

The Commission finds that this information will assist Commission Staff in conducting a more comprehensive review. Because there is a six month statutory deadline in IRPs, it is important that the Stipulation details that the submission must be made within ten (10) days of the filing of the IRP or IRP update. This provision represents a positive step towards comprehensive review of the Company's IRP-related proposals.

The Commission finds that approval of Paragraph 21 of the Supply Side portion of the Stipulation is in the public interest.

B. Demand Side Management

The Stipulation between PIA Staff and Georgia Power also addresses the demand side issues in this case. For the reasons set forth below, the Commission finds that resolution of the demand side issues as set forth in the Stipulation is in the public interest.

The Stipulation includes sixteen (16) paragraphs related to the DSM issues in the Company's IRP and DSM Application. This Final Order will address each paragraph.

1. The Company's Residential Water Heating Program Is Decertified, the Certificates for the Residential Lighting and Appliance, Residential New Homes, and the Commercial Customer Incentive Programs Is Amended, the New Small Business Commercial DSM Program Is Certified, and the Company's DSM Plan, as Amended by the Stipulation, Is Approved.

In Paragraph 1 of the DSM portion of the Stipulation, PIA Staff and Georgia Power agreed that the Company's 2013 DSM Plan Application, as amended by this Stipulation, should be approved. PIA Staff and Georgia Power further agreed in Paragraph 2 of the DSM portion of the Stipulation, that the Company's Residential Water Heating Program should be decertified while the Certificates for the Residential Lighting and Appliance, Residential New Homes, and the Commercial Custom Incentive Program should be certified. In his testimony in Docket No. 36499, Company witness Legg estimated that the Company's energy efficiency programs will result, on average, in approximately 68 MW of peak demand reductions and 317 GWh of energy reductions annually at the customers' meters for 2014-2016 based upon the projected implementation levels. (Tr. 497) In both Docket Nos. 36498 and 36499, the PIA Staff presented a witness panel that discussed modifications to the Company's proposed programs. In the IRP, PIA Staff pre-filed the joint testimony of Barber, Spellman, and Kaduk. In response to the Company's DSM Application, PIA Staff pre-filed the joint testimony of Barber, Spellman and Jones.

The Company requested the decertification of the Residential Water Heating Program in order to incorporate program measures into the existing EarthCents® Home Energy Improvement Program. Decertification of the Residential Water Heating Program will allow for more efficient delivery of service. (Tr. 505) In addition, the water heater measure is already included in Home Energy Improvement Program. (Tr. 506) Decertification of the Residential Water Heating Program and elimination of this program as a standalone program is also consistent with the Process and Impact Evaluation Final Report for Georgia Power 2011 DSM Programs, also referred to as the Evaluation, Measurement and Verification Report ("EM&V Report") which was filed at the Commission on December 28, 2012.

The Company also requested that the Certificates for the Residential Lighting and Appliance, Residential New Homes, and the Commercial Custom Incentive Programs be amended. The Residential Lighting and Appliance Program promotes the purchase and installation of energy efficient lighting, lighting fixtures and appliances through customer education, retailer partnerships/training, promotional giveaways of high efficiency lights, and customer incentives. The Company requested approval to separate the lighting portion of the program from the appliance portion of the program and create two separate programs: EarthCents® Residential Lighting and EarthCents® Residential Appliance. (Tr. 496) The amendment to the Certificate for the Residential Lighting and Appliance Program will allow the

Company to optimize program operations, marketing and outreach efforts, and the performance of each program. (Tr. 1799)

The rationale for the Company's request for an amendment to the Certificate for the Residential New Homes program was to expand the program to include not only the performance pathway but also rebates for select individual measures. (Tr. 496) The renamed EarthCents® Residential New Homes Program focuses on a whole-house approach to improving the energy efficiency of new homes, promoting the installation of energy efficient measures in new home construction, and improving the performance of participating homes to at least 15 percent above the current Georgia State Energy Code at the time the home is built. Amendment of the Certificate for the Residential New Homes program will also promote individual measures such as high efficiency electric heating and cooling equipment as well as heat pump water heaters. In addition to promoting these individual measures, the amendment will allow participants to focus on a whole house approach to improve the efficiency of their home to at least 15 percent above the current Georgia State Energy code. (Tr. 1802)

The Company requested an amendment to the Certificate for the Commercial Custom Incentive Program to incorporate additional non-lighting measures. The renamed EarthCents® Commercial Custom Incentive Program provides a platform for comprehensive energy efficiency projects in larger facilities that go beyond single measures and common efficiency practices. (Tr. 497) Amendment to the Certificate for the Commercial Custom Incentive Program will provide the Company's customers a platform for comprehensive energy efficiency projects in larger facilities that go beyond single measures and common efficiency practices. (Tr. 1802)

The Company has also requested that the Commission certify the EarthCents® Commercial Small Business Program. The EarthCents® Commercial Small Business Program promotes the purchase of eligible high-efficiency equipment installed at qualifying customer facilities, and is designed to reach a customer segment that is more difficult to reach than a typical commercial customer. (Tr. 1804) The EarthCents® Commercial Small Business Program specifically targets small businesses that are historically under-represented in energy efficiency program participation rates due to factors such as lack of access to capital, insufficient time and/or resources to investigate and review energy efficiency improvements, and leased rather than owner-occupied facilities. (Tr. 495)

Georgia Power, on rebuttal, countered that SACE's recommended "Enhanced" DSM portfolio would increase spending on energy efficiency significantly beyond the spending levels contained in the plan recommended by either the Company or PIA Staff. (Tr. 1363; Tr. 1367; Tr. 1502). More specifically, SACE proposed spending five times more on energy efficiency over ten years than the Company proposed spending but claims that its Ratepayer Impact Measure ("RIM") test results are only slightly higher than the Company's calculated RIM test results for its plan. (Tr. 1364; SACE-JDW-3). The Company argued that the primary factor that influences SACE's calculation of the RIM test are the unfounded and unprecedented adjustments that Mr. Wilson makes to the Company's calculation of avoided costs and lost revenues, which dramatically and artificially increase avoided costs and decrease lost revenues (avoided costs and lost revenues are key components in determining the RIM and Total Resource Cost ("TRC") test results of a particular energy efficiency program or suite of programs). (Tr. 1379-1380; Tr. 1395-98; Tr. 1999-2001). PIA Staff thoroughly reviewed the Company's filing and did not raise any concerns with the manner in which the Company calculated its lost revenues and

avoided costs. When such adjustments were removed, the RIM test results worsen significantly, which means that SACE's proposed slate of DSM programs would significantly increase rates for all customers and would not be in line with this Commission's policies

The Commission finds as a matter of fact that the Residential Water Heating Program should be decertified, the Certificates for the Residential Lighting and Appliance, Residential New Homes, and the Commercial Custom Incentive Programs should be amended, and that the New Small Business Commercial DSM Program should be certified. The Commission finds that it is in the public interest to approve Paragraphs 1 and 2 of the DSM portion of the Stipulation.

2. The Company Shall Increase the Projected MWh and MW Savings for the Period 2014 to 2016 for Its Proposed Energy Efficiency Programs by Increasing the Participation Projection by 10 Percent for All Programs Except the CFL Giveaway Program, the Company's Proposed Budgets for Previously Certified DSM Program Costs and Other Associated DSM Activities, as Amended, are Hereby Approved.

The Company requested approval of the DSM program budgets, and costs associated with certain other DSM activities. The budgets and costs for the Company's DSM programs are set forth in Appendix C-1 and C-2 in the Application filed by the Company in Docket No. 36499. The PIA Staff testified that the Company's application of four adjustment factors resulted in a significant reduction in the amount of cost effective energy efficiency savings that could have been included in the Company's DSM Plan. (Tr. 991) Specifically, PIA Staff testified that the Company scaled down the 12 year achievable potential to 10 year impacts to align with the timeline of the Company's 10 year IRP plan; adjusted the achievable potential savings in the potential study for program economics, applied another adjustment factor to revise projected program participation based on "current participation trends and/or program evaluation results; reduced participation estimates in 34 out of 111 cases, but only increased the participation adjustment factor 13 times; and applied another adjustment factor to account for the effect of incentives paid to program participants on future program participation. (Tr. 990-991) The application of these adjustment factors left a significant amount of unrealized achievable potential energy efficiency savings, identified in the Company's potential study unrealized, which resulted in annual incremental kWh savings (as a percent of the Company's annual kWh sales) far below the savings achieved on average by the top twenty energy efficiency electric utilities in the United States. (Tr. 993) In addition, Company witness Legg testified that the Company did not use rigorous mathematical or engineering models in the development of these adjustment factors. (Tr. 539)

The Stipulation accommodates the concerns raised by PIA Staff by increasing the projected MWh and MW savings for the Company's proposed energy efficiency programs by increasing the participation projection by 10 percent for all programs (with the exception of the CFL giveaway program) for the period 2014 to 2016. (Stipulation, DSM Portion, ¶ 4). Pursuant to the Stipulation, within 60 days of the Commission issuing a Final Order approving the Stipulation, the Company and Commission Staff shall meet to finalize the revised DSM portfolio and DSM budgets for 2014 to 2016 which includes the projection of a 10 percent increase in participation. *Id.*

The Commission finds as a matter of fact that increasing the projected MWh and MW savings for the Company's proposed energy efficiency programs by increasing the participation projection by 10 percent for all programs (with the exception of the CFL giveaway program) enhances the cost-effectiveness of the programs. The increase in participation projection by 10 percent results in dollar savings to ratepayers, based upon the Total Resource Cost ("TRC") over the three year period 2014-2016 of \$58 million. (Tr. 1150) The MWh energy savings from PIA Staff's proposed DSM plan are approximately 10 percent higher than the energy savings proposed by the Company for the years 2014, 2015 and 2016. (Tr. 994) In addition to providing an additional \$58 million in TRC savings to the Company's ratepayers, the PIA Staff's proposed plan has lower rate impacts and has a higher benefit/cost ratio than the Company's DSM plan, using the TRC and Rate Impact Measure ("RIM") tests. *Id.* Indeed, as the PIA Staff testified, the TRC and RIM benefit/cost ratios for PIA Staff's revised DSM portfolio for plan years 2014, 2015 and 2016 are higher than what was proposed by the Company's DSM plan. *Id.* Considering the results of the TRC and RIM tests discussed above, the record reflects that the Company's proposed programs, as modified by PIA Staff, will result in significant ratepayer savings. The Commission finds that approval of Paragraphs 3 and 4 of the DSM portion of the Stipulation is in the public interest.

3. The Additional Sum Provided For In The Stipulation Strikes The Appropriate Balance Between Providing Georgia Power With An Adequate Incentive And Protecting Ratepayers.

Georgia Power is entitled to recover in rates "the approved or actual cost, whichever is less, of any certificated demand-side capacity option . . . along with an additional sum as determined by the commission to encourage the development of such resources." O.C.G.A. § 46-3A-9. In setting the additional sum, the Commission "shall consider lost revenues, if any, changed risks, and an equitable sharing of benefits between the utility and its retail customers." *Id.*

The initial recommendations of the parties regarding the appropriate additional sum were differed significantly. The Company proposed an additional sum equal to 10 percent of the verified gross energy savings of the net benefits from the Program Administrator Test (Tr. 499). The Company proposed that the Additional Sum amount included in the Company's tariffs initially be based on avoided costs, projected program costs and participation levels that are approved in the 2013 IRP, and would subsequently be trued up based on actual participation levels. The Company proposed that the regulatory treatment for the Additional Sum amounts collected would be handled in the same manner as the Additional Sum amounts collected since the Company's 2010 DSM Application. *Id.* PIA Staff proposed that the Company collect an Additional Sum equal to seven percent of the actual net benefits based on net energy savings from the Program Administrator Test, the same methodology that was approved in the 2010 DSM Certification but with a reduction in the percentage that the Company is to collect from ten to seven percent. Once the Additional Sum amount calculated exceeds the annual program costs, PIA Staff proposed that the Additional Sum percentage be reduced to 3.5 percent of the actual net benefits based on net energy savings from the Program Administrator Test. (Tr. 1014) PIA Staff further proposed that the Additional Sum included in the DSM tariffs be initially based on avoided costs, projected program costs and participation levels that are approved in the IRP proceeding, and subsequently trued-up based on actual participation levels, actual costs, and updated evaluation results for the net kWh and kW savings. *Id.*

The Stipulation provides that the Company will receive an Additional Sum of 8.5 percent of the NPV of the actual net benefits of verified net kWh savings as determined by the Program Administrator test from the certified DSM programs, with no cap. If however, following the annual determination of verified net kWh savings, the annual incremental kWh savings is less than 50 percent of that initially projected, the Additional Sum shall be 0.5 percent for demand response measures and 3 percent for energy efficiency measures. Also, if Additional Sum exceeds program costs, the portion of Additional Sum that exceeds the program cost shall be calculated based on 4 percent of actual net benefits of verified net kWh savings as determined by the Program Administrator test from these certified DSM programs. (Stipulation, DSM Portion, ¶ 9). The Stipulation further provides that the Company will update all data relating to actual program participation, as well as the actual energy savings and actual program costs when calculating the Company's Additional Sum for 2014 and future years. *Id.*

SACE recommended the Commission adopt its alternative mechanism for Additional Sum incentive. Accordingly, it was the only proposal that ties a financial incentive to performance tiers, thereby encouraging the successful, cost-effective delivery of energy efficiency. It was also the only proposal that did not allow the incentive to exceed program costs. Specially, SACE recommended a performance-based structure in which the Company recovers between 8 and 28 percent of the net present value of the program costs based on the amount of energy savings it achieves, as presented in SACE witness Mim's testimony and shown in Table 1. (Tr. 1521). The Commission rejects SACE request.

Georgia Watch recommended that the Commission adopt PIA Staff's original recommendation for an additional sum of 7 percent of the actual net benefits based on net energy savings from the Program Administrator Test. The Commission rejects this recommendation.

The Commission concludes as a matter of law that it is required to approve an Additional Sum. O.C.G.A. § 46-3A-9. The Commission further concludes that the purpose of the Additional Sum is to encourage the development of cost-effective demand side programs. *Id.* Finally, the Commission concludes that in determining the amount of the Additional Sum, it must consider lost revenues, if any, changed risks, and an equitable sharing of benefits between the utility and its retail customers. *Id.*

The Commission finds that the Additional Sum set forth in the Stipulation represents a reasonable compromise of the parties' positions and an equitable sharing of the benefits between the utility and its customers. The 8.5 percent is less than the Company requested. However, the record, in particular the testimony of the PIA Staff's panel of Ms. Barber and Messrs. Kaduk and Spellman, reflects that an Additional Sum of 8.5 percent is adequate to provide the Company with an incentive to implement cost-effective demand side programs. The inclusion in the Stipulation of a benchmark below which the Company receives a reduced Additional Sum percentage is consistent with the statutory goal of encouraging the Company to develop cost effective demand side programs. The agreement upon a reduced percentage for that portion of the Additional Sum that exceeds program costs also constitutes an equitable sharing of the benefits.

The Commission finds that approval of Paragraph 9 of the DSM portion of the Stipulation is in the public interest.

4. Continuation of the Demand Side Management Working Group and the Nine Step DSM Planning Process Is Reasonable.

The PIA Staff and Georgia Power have agreed that the nine step process and the Demand Side Management Working Group (“DSMWG”) will continue in its present form and will be utilized to evaluate DSM programs for the 2016 IRP. The Nine Step process will be renamed the “DSM Program Planning Approach.” (Stipulation, DSM Portion, ¶ 8)

The Commission finds that continuation of the DSMWG is reasonable. PIA Staff testified that it received positive feedback from DSMWG members on how well the meetings were conducted in preparation for the 2013 IRP. (Tr. 996) PIA Staff took note of the concerns that some of the members had in the past about the meetings and actively took steps to ensure that the meetings going forward would be successful in achieving its purpose. DSMWG members felt that their concerns were taken seriously by the Company and many felt that the Company was more cooperative than they had been in the past. *Id.* In addition, PIA Staff noted the significant improvements to the DSMWG that have been achieved since the 2010 IRP proceeding. (Tr. 996-997) Among the improvements noted by PIA Staff were the fact that expectations for the DSMWG were discussed; meeting agendas were prepared with input from DSMWG members; at each DSMWG meeting, a Georgia Power representative gave a presentation on the IRP Status timeline, which helped members track the Company’s progress in the nine step process; and a selected group of DSMWG members participated in the Program Concepts meeting at which DSMWG members input was used to help determine the programs and measures that would be evaluated by the Company. *Id.*

The Company proposed that the Nine Step process be modified. Specifically, the Company proposed the elimination of Step Two of the process, which requires the Company to utilize a technical and economic potential study for Georgia Power’s service territory to assist in targeting DSM programs in the areas where the highest market potential exists, and elimination of Step Five, which requires the Company to collect and share customer data and feedback with the DSMWG. The Company also proposed elimination of the requirement in Step Six to specify the manner in which active and passive DSM programs are evaluated for cost effectiveness. (Tr. 998) PIA Staff recommended that the Nine Step process remain in its current form, other than a slight modification to Step five. (Tr. 1004)

The Commission finds that continuation of the Nine Step process, and the renaming of the Nine Step process to “DSM Program Planning Approach” is reasonable. With respect to Step Two, PIA Staff testified that there are numerous reasons why it is essential to develop a fresh study with each IRP, including the fact that as time progresses, new energy efficiency technologies become commercially available; manufacturers continue to improve the baseline energy efficiency level of existing technologies thus impacting estimates of energy savings potential; costs of many energy efficiency technologies decrease over time; energy savings potential estimates need to be updated to account for changes in Federal and State laws relating to energy efficiency standards for equipment and buildings; and the Company’s estimates of energy savings potential need to be updated to reflect the results of the Company’s on-going impact evaluations of its programs. (Tr. 998-999)

With respect to Step Five, although the Company is collecting customer feedback on its current DSM programs during the program evaluation process, it is beneficial for the Company to share the results of this program evaluation research along with other market assessment,

market baseline, and appliance saturation research with the DSMWG members. (Tr. 1001-1002) The sharing of customer research information was helpful for Commission Staff and other DSMWG members to assess the success of the programs and to understand the energy usage and building characteristics of various market segments. (Tr. 1002)

Step Six should also be continued in its current form. Step Six is important in that it describes exactly how the Company will conduct its economic screening analyses for energy efficiency and demand response programs. Second, this Step requires the Company to provide an explanation to DSMWG members why it did not analyze a program suggested by a member of the group. This requirement was included in the Nine Step process at a time when the Company did not provide such explanations to members of the DSMWG. This step clearly identifies the cost effectiveness tests that the Company will calculate. Finally, Step Six requires the Company to share the results of the economic screening with members of the DSMWG by a specific date.

For these reasons, the Commission finds that approval of Paragraph 8 of the DSM portion of the Stipulation is in the public interest.

5. The Company's DSM Revenues and Expenses Shall Be Trued Up On an Annual Basis.

Paragraph 12 of the DSM portion of the Stipulation provides that the Company's DSM revenues and expenses will be trued-up on an annual basis to ensure that revenues collected from the Company's customers for DSM-related activities are spent on DSM-related activities. The costs for DSM-related activities will be based on calendar year budgeted expenditures and adjusted annually. Differences between actual and forecasted costs, once approved by this Commission, would be trued-up by adjusting the DSM tariff for the next annual period. The rider will be adjusted January 1st of each year. The Company and Commission Staff will meet within 60 days of the Commission issuing a Final Order approving the Stipulation to finalize the calculation methodology for the true-up. (Stipulation, DSM Portion, ¶ 12)

Currently, there is not a Commission-approved true-up mechanism to reconcile the monies collected through the respective DSM Tariffs and the associated costs spent on the energy efficiency programs and DSM related activities. (Tr. 1809) In fact, it was determined that the Company had not spent the entire amount collected from the DSM Tariffs on DSM related activities. As part of an informal agreement between PIA Staff and the Company, the Company agreed to spend any remaining unspent amounts for years 2011 and 2012 on DSM related activities. (Tr. 1810)

The Company proposed a true-up mechanism in this proceeding. However, the Company's proposed true-up proposal only pertains to program participation numbers as it applies to the calculation of the Company's Additional Sum. The Company's proposal did not address the truing up of DSM-related revenues and expenses. *Id.* While PIA Staff agreed that the actual participation as proposed by the Company, as well as actual energy savings and actual program costs should be trued-up when calculating the Company's Additional Sum, PIA Staff also recommended that the Company's DSM revenues and expenses be trued up. (Tr. 1810-1811) PIA Staff's proposed true-up mechanism will ensure that revenues collected by the Company for DSM-related activities are spent on DSM related activities. Without such a mechanism, it is likely that ratepayers may be confronted with situations similar to those that

occurred in 2011 when the Company did not spend the entire amount collected from the DSM Tariffs on DSM-related activities.

For these reasons, the Commission finds that approval of Paragraph 12 of the DSM portion of the Stipulation is in the public interest.

6. The Company Shall Provide the Commission Staff with Proposed Changes to the DSM Program Plan Prior to the Implementation of Those Changes.

In its DSM Application, the Company agreed that it would notify Commission Staff of any changes the Company plans to make to its DSM program. (Tr. 1807) The Company further agreed that it would comply with the requirements of the Commission's IRP Rules to notify the Commission of any modifications to any program that require an amendment, and would work with the Commission Staff on data detail and notification timing as soon as practical and will provide the agreed upon data. (Tr. 1808) In order to ensure that the Company is reallocating program dollars in order to reach all available energy efficiency opportunities not just the ones that are the easiest to obtain, PIA Staff recommended that the Commission require the Company to provide such proposed program plan changes to Commission Staff for Staff's review and approval before the changes are implemented. *Id.*

Paragraph 10 of the DSM portion of the Stipulation provides that the Company shall provide the Commission Staff with proposed changes to the DSM program plan prior to the implementation of those changes, and that the Company and the Commission Staff will work together to determine which program changes require Staff approval in advance of implementation. The Commission recognizes that there are factors outside of the Company's control, such as the economy, that impact the participation in a particular program that would warrant changes to the DSM program plans and would not require a certificate amendment. In those circumstances in which a certificate amendment is not required by Commission Rule, it is reasonable to require the Company to provide any proposed changes to the Company's DSM programs to Commission Staff for Staff's review and approval before the changes are implemented. Such notification, and subsequent review by Staff, will ensure that the Company is reallocating program dollars in order to reach all available energy efficiency opportunities not just the ones that are the easiest to obtain.

The Commission finds that approval of Paragraph 10 of the DSM portion of the Stipulation is in the public interest.

7. The Company Shall Submit a Report to the Commission Detailing How the Company Can Utilize Each of the Company's Demand Response Programs to Save Money for its Customers.

The Company acknowledged that it had not operated many of its demand response programs during peak load hours since August 9, 2007, raising the concern that the Company had not been fully utilizing its existing demand response programs to save money for its customers. (Tr. 995) To address this concern, Paragraph 5 of the DSM portion of the Stipulation provides that the Company will submit a report to the Commission within six months of the Final Order approving the Stipulation on how the Company can utilize each of the Company's demand response programs to save money for its customers.

It is important for the Commission and the Company's ratepayers to be assured that the Company is fully utilizing all components of its DSM programs. The Commission finds that approval of Paragraph 5 of the DSM portion of the Stipulation is in the public interest.

8. Commercial Customers Shall Not Be Allowed to Opt Out of the DSM-C Tariff.

Walmart Stores East, LP and Sam's East, Inc. witness Kenneth Baker proposed that commercial customers who are actively pursuing or have recently pursued energy efficiency or DSM measures on their own should be allowed to opt-out of the DSM-C tariff where 1) the customer certifies that the customer's DSM program reductions for the included facilities meet or exceed Georgia Power's approved commercial DSM programs; and 2) the customer has a minimum consumption of 1 million kWh annually *or*, for customers with multiple facilities, a minimum aggregated consumption of 15 million kWh annually. (Tr. 1745)

Additionally, AFFIRM requested an opt-out of the DSM-C rider and Resource Supply Management in its Brief argued, without any citation to supporting testimony, that the Company's DSM programs should be abolished.

Participation in Georgia Power's Commercial DSM programs is open to all customers. The Commercial DSM portfolio is designed to offer all commercial customers incentives to use energy more efficiently. Any changes to customer eligibility will necessitate significant changes to program plans and any opt-outs will shift program costs to customers who are unable to opt-out. Paragraph 16 of the DSM portion of the Stipulation provides that it is not appropriate to allow commercial customers to opt out of the DSM-C tariff.

The Commission finds that approval of Paragraph 16 of the DSM portion of the Stipulation is in the public interest.

9. The Company Shall Provide the Commission with Detailed Evaluation Plans for Each of the Approved DSM Programs Within 120 Days of Issuance of this Final Order.

The Stipulation provides that the Company will provide the Commission with detailed evaluation plans for each of the approved DSM programs within 120 days of the Commission's Final Order approving the Stipulation. These evaluation plans shall include all evaluation plan information required by the Commission's IRP rule. If necessary, the Company may request, and Commission Staff may unilaterally grant, additional time to complete the detailed evaluation plans for each of the approved DSM programs. In the event that Commission Staff does not agree that additional time should be provided to the Company, the Company may make a request to the Commission for additional time to complete the detailed evaluation plans and this matter will be resolved by the Commission. (Stipulation, DSM Portion, ¶ 11)

Program evaluations document and measure the effects of a program and determine whether the program met its goals with respect to being a reliable energy resource. In addition, evaluations help to better explain why those effects occurred and identify ways to improve current programs and select future programs. (Tr. 1811) Additionally, Commission Rule 515-3-4-.09 requires that the Company file a summary process and load impact evaluation plan concurrently with the development of the programs. *Id.* While the Company did not file final program evaluations as part of its DSM Application, in response to a PIA Staff Data Request the

Company stated that it would prepare detailed evaluation plans for the final program designs that are approved by the Commission in the Final Order in this proceeding. The Commission finds that it is reasonable to require the Company to provide the Commission with detailed evaluation plans for each of the approved DSM programs within 120 days of the Commission's Final Order approving the Stipulation.

The Commission finds that approval of Paragraph 11 of the DSM portion of the Stipulation is in the public interest.

10. The Company Shall Provide the Commission an Analysis of the Long Term Percentage Rate Impacts of its Certified Demand Side Programs as Part of Future IRP Filings, and Include the Power Credit Program in the Benefit Cost Analysis of the Company's Portfolio of DSM Programs.

In response to a PIA Staff Data Request, the Company detailed the long term rate impacts of the proposed energy efficiency programs included in the Company's DSM Application. The long term rate impacts of the programs are minimal, meaning that over the long-term, the Company's electric rates with the proposed energy efficiency programs would be only slightly higher than the Company's electric rates without these programs. (Tr. 988) However, the Company did not include its Power Credit program when calculating the long term rate impacts of the proposed energy efficiency programs. (Tr. 989) As the Power Credit program is expected to put downward pressure on electric rates, inclusion of this program in the overall rate impact analysis of the Company's portfolio of demand side programs would reduce rate impacts because the RIM test for this program is above 1.0. *Id.*

The Commission finds that the provisions of the Stipulation that require the Company to provide the Commission with an analysis of the long term percentage rate impacts of its certified demand-side programs as part of future IRP filings, and to include the Power Credit program in the benefit cost analysis of the Company's portfolio of DSM programs are reasonable. The Commission finds that it is important to understand the long term percentage rate impact of future certified demand-side programs when making decisions regarding future utility spending on such certified programs in an IRP docket. It is not sufficient for the Commission to simply be presented with the dollar rate impacts of future certified programs, as the dollar level of rate impacts alone does not provide any context for the Commission to understand the significance of these rate impacts as compared to the total Company annual revenue requirements. Also, because the Commission's policy is that energy efficiency is a priority resource, the Commission needs to know and understand the long term percentage rate impacts of future certified programs as compared to the percentage rate impacts of other generation, transmission and distribution resources.

The Commission finds that approval of Paragraphs 6 and 7 of the DSM portion of the Stipulation is in the public interest.

11. The Company and Commission Staff Will Continue to Work Collaboratively to Address Concerns Related to the EM&V Report.

The EM&V Report filed by the Company is a means of evaluating the Company's DSM programs and their activity to determine the impacts of the programs, to determine the appropriate energy savings for a given measure, to determine if the programs are being marketed

effectively and to determine if improvements can be made to the programs over time. (Tr. 2365) The EM&V Report filed by the Company covered the seven programs certified by the Commission in the 2010 IRP proceeding, but did not include an evaluation for the Power Credit Program. The EM&V Report covered activities for the 2011 program year. (Tr. 1812)

The PIA Staff testified that there are several evaluation and energy savings results and assumptions in the EM&V Report that the Company utilized in its proposed program plans. The PIA Staff testified that while it met with the Company to address questions that Commission Staff had during its review of the EM&V Report, and had previously addressed some of its concerns regarding the report it was unable to complete its review of the EM&V Report. *Id.* As such, PIA Staff recommended that the Commission Staff be permitted to address its concerns related to the EM&V Report outside of this docket. The Commission finds that the EM&V Report is important to the Company's overall program planning and the calculation of verified energy savings, and that it is reasonable to allow the Company and Commission Staff to continue to work collaboratively to address any concerns related to the EM&V Report for Georgia Power's 2011 Programs.

The Resolution of Outstanding Issues, adopted by the Commission in Docket No. 31082, provides in part that after the filing of the initial program impact evaluation, EM&V Reports will be completed on a two-year cycle unless program impact evaluation details warrant a longer or shorter interval between impact evaluations. In addition, the Company may request a waiver from the Commission from the impact evaluation deadline if the Company determines that customer participation in the particular program does not warrant a full impact evaluation. (Tr. 1816) PIA Staff recommended that the Commission require the Company to continue with the two year program evaluation cycle, while the Company proposed that the EM&V Reports be completed on a three year cycle. (Tr. 2367) Paragraph 15 of the DSM portion of the Stipulation provides that Commission Staff and the Company agree to work collaboratively to consider whether the Company should continue with the two year program evaluation cycle or in the alternative, utilize a three year evaluation cycle. If the Company and Commission Staff cannot reach an agreement on this issue the matter will be brought to the Commission for resolution. The Commission finds that it is reasonable to allow the Commission Staff and the Company an opportunity to continue to work collaboratively to consider the appropriate period for the program evaluations.

The Commission finds that approval of Paragraphs 14 and 15 of the DSM portion of the Stipulation is in the public interest.

12. The Company Shall Not Enter Into Any Below the Line Activities Utilizing the EarthCents® Brand.

The Company is proposing to rename all of the DSM programs to include "EarthCents®" in the name of the program. (Tr. 527) EarthCents® is a marketing program that was developed by Southern Company, has been used by its operating companies, and is owned by Georgia Power. *Id.* As the EarthCents® brand is being funded by the Company's ratepayers PIA Staff recommended that the Commission order that the Company not be allowed to enter into any below the line activities utilizing the EarthCents® brand. The Commission finds that since the Company's ratepayers are paying for the activities associated with the EarthCents® brand, the

provision of the Stipulation prohibiting the Company from entering into any below the line activities utilizing the EarthCents® brand is reasonable.

The Commission finds that approval of Paragraph 13 of the DSM portion of the Stipulation is in the public interest.

13. Information Request External to the Stipulation.

The Commission is interested in consideration of a low-income DSM program as a part of the current IRP. The Company's filing only included a concept, not the program plan and design necessary to make a determination. Therefore, the Commission finds it is appropriate to order Georgia Power to file a low-income DSM program plan, design and any necessary information within 30 days from the date this Final Order is issued for the Commission's consideration. The Commission will then review the Company's proposal and decide at that time whether to certify it as one of Georgia Power's DSM programs.

IV. ORDERING PARAGRAPHS

WHEREFORE IT IS ORDERED that the Commission adopts the Integrated Resource Plan developed by Georgia Power Company as augmented and/or modified by the Stipulation which is hereby adopted by the Commission.

ORDERED FURTHER, that the Plant Branch Units 3 and 4, Plant Boulevard Units 2 and 3, Plant Kraft Units 1-4, Plant McManus Units 1-2, and Plant Yates Units 1-5 shall be decertified and retired as provided for in the Decertification Application.

ORDERED FURTHER, that Georgia Power Company's Mercury and Air Toxics Standards compliance plan for the continued operation of Plant Bowen 1-4, Plant Wansley Units 1 and 2, Plant Scherer Units 1-3, and Plant Hammond Units 1-4 is approved.

ORDERED FURTHER, that the fuel switch at Plant Yates Units 6 and 7 to natural gas and the fuel switch at Plant McIntosh Unit 1 to operate on Powder River basin coal are approved.

ORDERED FURTHER, that the fuel switch at Plant Gaston Units 1-4 to natural gas is approved.

ORDERED FURTHER, that the environmental measures proposed by Georgia Power Company in the Technical Appendix Volume 2, Summary of Capital Expenditures, Closures, and Operation and Maintenance Expenses to this IRP are approved. Within 30 days of this Final Order, Georgia Power shall file a reconciliation report illustrating how the above-referenced aggregate costs reconcile with the per unit costs detailed in Table A.1 in the Unit Retirement Study. It is also Ordered that the Commission will review the costs associated with these measures in the company's next base rate case.

ORDERED FURTHER, that beginning in October 2013, Georgia Power Company shall provide the Commission with semi-annual updates on the status of the natural gas delivery outlook and the natural gas fuel supply for Plant Gaston Units 1-4 and Plant Yates Unit 6 and 7 until the fuel switch of the units is completed. Georgia Power will also include corrective action or contingency plans in its reports, if necessary.

ORDERED FURTHER, for Plant Branch Unit 1, the decertification date of December 31, 2013 specified in the Commission's Final Order in Docket No. 34218 is hereby changed to April 16, 2015.

ORDERED FURTHER, that within six months of this Final Order Georgia Power Company and Commission Staff shall begin to work collaboratively to address any retirement study modeling issues or transmission planning issues in an effort to resolve any such issues at a date no later than six months prior to Georgia Power's 2016 IRP filing.

ORDERED FURTHER, as to Plant Bowen Units 1 and 2, Georgia Power Company shall continue to keep the Commission informed of all known costs associated with brining these units back online. Further, prior to beginning any further environmental upgrade work, the Company shall provide the Commission with an economic analysis proving that any decisions with regard to repairing, upgrading, or continuing to operate these units is economical.

ORDERED FURTHER, that Georgia Power Company shall provide quarterly compliance reports regarding the status of the work on the following plants and units: Bowen

Units 1-4, Wansley Units 1 and 2, Scherer Units 1-3, Hammond Units 1-4, Yates Units 6 and 7, Gaston Units 1-4, McIntosh Unit 1. These reports shall be contain elements consistent with the Monthly Baghouse Monitoring Reports filed in Docket 34218.

ORDERED FURTHER, that the regulatory accounting issues relevant to the gain on Plant Bowen Unit 6 as well as the net book values of Plant Branch Units 3 and 4 and Plant Boulevard Units 2 and 3 as of their respective retirement dates shall be deferred for consideration until Georgia Power Company's 2013 rate case. This deferral for consideration also applies to any unusable Material and Supplies inventory balance for each Retirement Unit. The regulatory treatment of environmental Construction Work in Progress from Plant Branch Unites 3 and 4 and Plant Yates Units 6 are also deferred for consideration in the rate case.

ORDERED FURTHER, that the over or under recovered cost of removal balances for each Retirement Units shall be deferred for consideration until the Company's 2013 rate case, at which time the costs will be addressed.

ORDERED FURTHER, that the Commission shall determine the appropriate rate base treatment in the 2013 rate case for transmission and substation Plant Held For Future Use whose utilization dates fall outside the ten-year planning horizon.

ORDERED FURTHER, that the Company shall reduce residential and total system peak demand by seventy-five percent of the amounts presented in Exhibit STF-JWH-3.

ORDERED FURTHER, that in the development of future Budget Energy and Load forecasts of average energy consumption per customer, the Company shall evaluate models that include average income measures as well as models that include total income measures and shall choose the model that has the best balance of theoretical and statistical properties.

ORDERED FURTHER, that Georgia Power shall initiate the 241 Battery Storage Demonstration project and the solar tracking demonstration project. The Commission approves Georgia Power incurring the capital costs for these projects as presented in Technical Appendix Volume 2, Selected Supporting Information. The Commission does not approve the recovery of such costs at this time.

ORDERED FURTHER, that, Georgia Power Company shall file a low-income DSM program plan, design, and any other information necessary for the Commission to determine whether to certify the program as part of Georgia Power's DSM Plan within 30 days from the date this Final Order is issued.

ORDERED FURTHER, that the Commission approves Georgia Power Company's proposed wind demonstration projects that were proposed in Georgia Power's 2013 Integrated Resource Plan filing. Consideration must be given to projects which have a meaningful economic impact on the Georgia economy and the involvement of Georgia research universities.

ORDERED FURTHER, that Georgia Power Company shall expand its generation mix with the addition of 525 MW of solar resources. One hundred MW will be Distributed Generation and the remaining 425 MW will be Utility Scale solar. Further, 260 MW will be brought online by 2015 and the remaining 265 MW will be brought online by 2016. For the DG portion of the new solar, parties shall be able to use both fixed tilt and tracking solar technologies and the pricing paid for the energy shall be reflective of the technology used. The Utility Scale

solar will be procured through an RFP process similar to the one approved for the Utility Scale ASI program.

ORDERED FURTHER, that, Georgia Power Company shall utilize a competitive Request for Proposal to procure the additional 425 MW of Utility Scale solar resources and will generally follow the current ASI protocol. The RFP Process will be monitored by an Independent Evaluator.

ORDERED FURTHER, that in conjunction with the ongoing level of review analysis required for provisions 6, 7, 9, 10, 11, and 19 of the Supply Side component of the Stipulation, Georgia Power Company shall pay for any reasonably necessary expert assistance to the Commission Staff in an amount not to exceed \$200,000 annually. The amounts paid by Georgia Power to pay for this expert assistance shall be deemed a necessary cost of providing service and the Company shall be entitled to recover the full amount of any costs charged to the utility.

ORDERED FURTHER, that when filing the 2016 IRP or any update to the IRP prior to the 2016 IRP, Georgia Power Company shall provide the Commission Staff working copies of all models used in the development of that IRP, with each configured to replicate inputs used to derive results incorporated in its base case scenario within 10 days after the IRP or update to the IRP is filed.

ORDERED FURTHER, the recovery of fuel related costs in connection with the termination or amendment of any fuel transportation contracts associated with the Retirement Units shall be addressed in the Company's next fuel case.

ORDERED FURTHER, that Georgia Power Company's 2013 DSM Plan Application is approved as amended by the Stipulation.

ORDERED FURTHER, that the Residential Water Heating Program is hereby decertified, the Certificates for the Residential Lighting and Appliance, Residential New Homes, and the Commercial Customer Incentive Programs are hereby amended, and the New Small Business Commercial DSM Program is hereby certified.

ORDERED FURTHER, that Georgia Power Company's proposed budgets for previously certified DSM program costs and other associated DSM activities are hereby approved.

ORDERED FURTHER, that Georgia Power Company shall increase the projected MWh and MW savings for its proposed energy efficiency programs by increasing the participation projection by 10 percent for all programs (with the exception of the CFL, giveaway program) for the period 2014 to 2016 as proposed by PIA Staff. Within 60 days of the issuance of this Final Order Georgia Power and Commission Staff shall meet to finalize the revised DSM portfolio and DSM budgets for 2014 to 2016 which includes the projection of a 10 percent increase in participation.

ORDERED FURTHER, that Georgia Power Company shall submit a report to the Commission within six months of the issuance of this Final Order on how the Company can utilize each of the Company's demand response programs to save money for its customers.

ORDERED FURTHER, that Georgia Power Company shall provide the Commission an analysis of the long term percentage rate impacts of its certified demand-side programs as part of

future IRP filings. Prior to the filing of the 2016 IRP Georgia Power and the Commission Staff will work collaboratively on the methodology for calculating the long term percentage rate impacts of certified demand side programs.

ORDERED FURTHER, that Georgia Power Company shall include the Power Credit Program in the benefit cost analysis of Georgia Power's portfolio of DSM programs.

ORDERED FURTHER, that the Nine Step Process and the Demand Side Management Working Group shall continue in their present form and will be utilized to evaluate DSM for the 2016 IRP. The Nine Step Process will be renamed the "DSM Program Planning Approach."

ORDERED FURTHER, that Georgia Power Company will receive an additional sum of 8.5 percent of the Net Present Value of the actual net benefits of verified net kWh savings as determined by the Program Administrator test from the certified DSM programs, with no cap, provided that following the annual determination of verified net kWh savings, if the annual incremental kWh savings is less than 50 percent of that initially projected, the additional sum shall be 0.5 percent for demand response measures and 3 percent for energy efficiency measures, and provided further that if additional sum exceeds program costs, the portion of additional sum that exceeds the program cost shall be calculated based on 4 percent of actual net benefits of verified net kWh savings as determined by the Program Administrator test from these certified DSM programs. The Company shall update all data relating to actual program participation, as well as the actual energy savings and actual program costs when calculating the Company's Additional Sum for 2014 and future years.

ORDERED FURTHER, that Georgia Power Company shall provide the Commission Staff with proposed changes to the DSM program plan prior to the implementation of those changes. The Company and the Commission staff will work together to determine which program changes require Commission Staff approval in advance of implementation.

ORDERED FURTHER, that Georgia Power Company shall provide to the Commission detailed evaluation plans for each of the approved DSM programs within 120 days of the issuance of this Final Order. These evaluation plans shall include all evaluation plan information required by the Commission's IRP rule. If necessary, Georgia Power Company may request, and Commission Staff may unilaterally grant, additional time to complete the detailed evaluation plans for each of the approved DSM programs. In the event that Commission Staff does not agree that additional time should be provided to Georgia Power, the Company may make a request to the Commission for additional time to complete the detailed evaluation plans and this matter will be resolved by the Commission.

ORDERED FURTHER, that Georgia Power Company's DSM revenues and expenses shall be true-up on an annual basis to ensure that revenues collected from the Company's customers for DSM related activities are spent on DSM-related activities. The costs for DSM-related activities will be based on calendar year budgeted expenditures and adjusted annually. Differences between actual and forecasted costs, once approved by this Commission, would be true-up by adjusting the DSM tariff for the next annual period. The rider will be adjusted January 1st of each year. The Company and Commission Staff will meet within 60 days of the Commission issuing a Final Order approving the Stipulation to finalize the calculation methodology for the true-up.

ORDERED FURTHER, that Georgia Power Company shall not enter into any below the line activities utilizing the EarthCents® brand.

ORDERED FURTHER, that Georgia Power Company and Commission Staff will continue to work collaboratively to address any concerns related to the EM&V Report for Georgia Power's 2011 Programs. If the Company and Staff cannot reach an agreement on this issue the matter will be brought to the Commission for resolution.

ORDERED FURTHER, that the Commission Staff and Georgia Power Company shall work collaboratively to consider whether the Company should continue with the two year program evaluation cycle or in the alternative, utilize a three year evaluation cycle. If the Company and Staff cannot reach an agreement on this issue the matter will be brought to the Commission for resolution.

ORDERED FURTHER, that commercial customers shall not be entitled to opt out of the DSM-C tariff.

ORDERED FURTHER, that all findings of fact and conclusions of law contained within the preceding sections of this Final Order are hereby adopted as findings and conclusions of this Commission.

ORDERED FURTHER, that a motion for reconsideration, rehearing or oral argument or any other motion shall not stay the effective date of this Final Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over this matter is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission during its Special Administrative Session held on July 11, 2013.

REECE MCALISTER
EXECUTIVE SECRETARY

CHUCK EATON
CHAIRMAN

DATE

DATE