

ORIGINAL

060220-EC

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-100, SUB 103

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Investigation of Integrated  
Resource Planning in North  
Carolina -2005

- ) PUBLIC COMMENTS AND
- ) STATEMENT OF POSITION OF
- ) THE ALLIANCE TO SAVE
- ) ENERGY AS AN INTERESTED
- ) PARTY FOR THE JUNE 27
- ) EVIDENTIARY HEARING IN
- ) RALEIGH, NC

BY THE ALLIANCE TO SAVE ENERGY: The Alliance to Save Energy, located in Washington, DC, offers these comments and statement of position to the North Carolina Utilities Commission (Commission) as part of its proceeding to examine the role of utility demand-side management (DSM) and energy efficiency programs in the current integrated resource (IRP) planning docket.

The Alliance to Save Energy (Alliance) is a nonprofit 501-c-3 organization with the mission of promoting energy efficiency worldwide to achieve a healthier economy, a cleaner environment and energy security. The Alliance was founded in 1977 to carry out this mission. The full scope of our energy efficiency policy and program activities is described on our web site at: [www.ase.org](http://www.ase.org).

**Introduction**

Our comments today concern our recent experience advocating for increased utility DSM and energy efficiency program activity in the State of Georgia as part of a similar IRP proceeding before the Georgia Public Service Commission (GA PSC). The Alliance was an intervener in that proceeding and a key participant in the DSM Working Group established by the GA PSC to provide it with recommendations on future DSM and IRP activities. We feel that that this experience may be useful to the Commission to chart the future course of considering the proper and effective role of DSM in North Carolina. Attached to these comments, we provide the following relevant documents from the Georgia IRP proceeding which may be useful to include in the record for this current proceeding:

- o Georgia PSC Order in 17687-U, July 9, 2004
- o Georgia Demand-Side Management Working Group Report, February 15, 2005
- o Georgia PSC Order in 17687-U, May 25, 2005

DOCUMENT NUMBER-DATE

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## **Alliance Intervention Experience**

The Alliance to Save Energy intervened in the 2004 Georgia Power Company and Savannah Electric Company (Companies) IRP proceedings and submitted testimony (assisted by GDS Associates, a leading DSM consulting firm in Georgia) to the Commission addressing seven points:

1. Demonstrate that the implementation of cost effective energy efficiency program in the service areas of the Companies could save ratepayers hundreds of millions of dollars (over \$1.4 billion in net present value saving to ratepayers of Georgia Power Company alone);
2. Show that the TRC test is the correct cost effectiveness test for DSM programs in Georgia;
3. Explain the recommendations of the Alliance to Save Energy relating to DSM programs and the need for a DSM Working Group;
4. Present up-to-date information of successful DSM programs and savings in other states;
5. Identify fundamental shortcomings in the DSM measure screening process used by the Georgia Power Company and the Savannah Electric and Power Company;
6. Demonstrate that the IRP plans filed by the Georgia Power Company and the Savannah Electric and Power Company were not integrated IRP plans as per the Georgia IRP statute and Commission rules; and
7. Provide Alliance to Save Energy recommendations for DSM cost recovery and shareholder incentive mechanisms.

The testimony provided the Commission with current mainstream thinking on the benefits of DSM and the best use of cost effectiveness tests to identify and screen potential energy efficiency programs. However, the Alliance testimony was significantly different from the Companies' testimony and left the Commission with an "all-or-nothing" message. Rather than return to the hearing process to further develop the record, a motion was unanimously passed by the Commission to have the opposing parties work out an acceptable solution.

## **Formation of Georgia DSM Working Group**

As noted by the Commission, the positions of the parties on DSM programs were very far apart and they were unable to find a balance between economic efficiency (i.e. Total Resource Cost test benefits) and fairness and equity (i.e. Rate Impact Measure test results.) A motion was passed in July 2004 which ordered the creation of a DSM Working Group (Working Group) to develop reasonable and credible DSM initiatives. Comprised of the parties in the IRP cases, the Working Group's task was to propose a DSM Plan to the Commission that would be a comprehensive proposal consisting of:

1. A mix of DSM initiatives to be recommended to the Commission for approval, including how they would be implemented;
2. A recommendation of a process for the selection of future DSM initiatives; and

3. Recommendations for changes to the Commission's IRP rules regarding DSM or for proposed legislation (Georgia 2004).

It was further ordered by the Commission that the mix of DSM initiatives to be recommended be selected according to the following criteria:

1. The proposed DSM Plan should minimize upward pressure on rates and maximize economic efficiency;
2. The cost/benefit analysis result of each initiative using all three tests (RIM, Total Resource Cost, and Participants) shall be considered by the Working Group and shall balance between economic efficiency and fairness and equity;
3. An examination of where growth is occurring on the system shall be performed by the Working Group, which shall attempt to concentrate its recommended initiatives there. Consideration shall also be given to initiatives that encourage participation by low-income customers;
4. In addition to traditional DSM programs, the Working Group shall consider rate design initiatives. In considering such initiatives, the Working group should consider the cost/benefit analysis of such initiatives and the time periods that such initiatives would be available to a customer;
5. Every effort should be made by the parties to develop innovative programs and market approaches that will prevent upward pressure on rates and subsidies between participants and non-participants; and
6. Where appropriate, the Working Group should consider the development of pilot initiatives (limited enrollment, limited terms) as a tool to gauge initiatives.

A final order was issued by the Commission in August 2004 with a directive to the Working Group to deliver its recommendations to the Commission by February 15, 2005.

### **DSM Working Group Final Report**

The Working Group presented its Final Report to the Commission on February 16, 2005. In the report, four pilot DSM programs and an evaluation process for selecting future DSM initiatives were offered to the Commission for adoption. The four pilot programs were:

1. An ENERGY STAR<sup>®</sup> Home Program for new construction;
2. ENERGY STAR Appliance Program;
3. Duct Sealing and Infiltration Control Program; and
4. Home Inspector Program.

The report also made a recommendation for future DSM evaluations. The Working Group proposed a new procedure to screen and analyze proposed DSM programs for future IRP proceedings. First, the procedure would set an "analytical cap" for DSM expenditures – a proposed limit on the total amount of projected rate impact over the life of a program (3 years in Georgia). The analytical caps proposed in the report covered a range between \$10 million/year to 1.5 percent of the revenue derived from residential and commercial sector electricity sales (~\$40-50 million/year.) Second, DSM programs would be evaluated using both the RIM and TRC tests, showing program costs, program savings and potential impacts on rates up to the analytical cap amount. Therefore, this approach would not prevent the Commission from considering a

program because it failed the RIM test. Finally, the procedure recommended a new stakeholder participation process that involves interested parties during different stages of the IRP process – 18 months, 12 months, and six months before the IRP is filed with the Commission. This new procedure would therefore provide the Commission with additional options in selecting appropriate DSM programs.

The Commission had also requested from the Working Group recommendations on legislative proposals that could increase energy efficiency levels in Georgia. In response, the Working Group proposed measures that would facilitate the adoption of energy efficient appliances and equipment through traditional tax incentives, regulations tested in other states, and improved energy efficiency in state government facilities for the benefit of state taxpayers. The proposed legislative changes included:

1. Sales tax “holiday” for energy efficient appliances;
2. State appliance standards;
3. Development of a Georgia state energy policy; and
4. State facilities energy conservation goals.

Additional comments and recommendations were provided in the Final Report for the Commission to consider, such as pursuing fuel neutral participation in DSM programs from other utilities (i.e. gas companies and electric membership cooperatives).

### **2005 Commission’s Final Order**

On May 17, 2005, after almost a year of Working Group deliberations, the Commission voted 5 to 0 to unanimously accept the recommendations of the Working Group. In the Final Order, the Georgia Power Company agreed to implement each of the four pilot programs included in the report and the Savannah Electric and Power Company agreed to participate in the ENERGY STAR Home Program. It was further ordered by the Commission that the two utilities implement the evaluation process recommended in the report for selecting future DSM programs.

Recently, the Georgia Power and Savannah Electric and Power Companies (Companies) released documentation describing each of the energy efficiency initiatives they agreed to implement, which include:

#### **ENERGY STAR Home Program.**

This program seeks to increase the awareness level about the benefits of new ENERGY STAR homes sold in Georgia and provide incentives to cover the cost of home ratings. The Companies will also work with other utilities of the state to increase the awareness to all state residents.

#### **ENERGY STAR Appliance Program.**

The main objective of this program is to increase consumer awareness and understanding of the benefits of ENERGY STAR appliances. Working with ENERGY STAR, the Companies will educate retailers, consumers, and others to promote the energy efficiency benefits of ENERGY STAR appliances.

**Home Inspector Program.**

The Companies will train home inspectors about the benefits of energy efficiency and inspectors will make recommendations to potential home buyers at the point of sale.

**Duct Sealing and Infiltration Control Affinity Marketing.**

Working with Georgia Interfaith Power and Light (GIPL), Georgia Power will pay a fee to GIPL for each one of its members that is a Georgia Power customer that makes a duct sealing or a duct sealing/infiltration control improvement. Homes that are 10 years old or older with central heating and/or cooling will be targeted and qualify.

**The 2007 IRP Process**

Because of the new rules for IRP planning set by the Commission in adopting the Working Group report, the 2007 IRP process has been started and stakeholder meetings have been held. The stakeholder meetings have provided a forum for all parties in the IRP process to propose ideas for future DSM programs in Georgia to be considered by the Commission. The energy efficiency advocates in the stakeholder group have proposed that the Georgia Environmental Facilities Authority's (GEFA) Technical and Economic Potential for Energy Efficiency study ("TEPOT") provide a framework for considering DSM programs for the 2007 IRP.

Conducted by ICF Consulting, the TEPOT study provided detailed estimates of energy savings and peak demand reductions by sector and end use. For energy savings (kWh), about one-half of the energy savings potential was found to be concentrated in residential and commercial air-conditioning and in residential, commercial and industrial lighting. For peak demand savings (kW), about two-thirds of the savings potential was concentrated in these same end-uses. Thus, the energy efficiency advocates recommended that the future DSM programs in Georgia focus on lighting and air-conditioning in the residential and commercial sectors because this is where the major energy efficiency potential lies.

The Georgia utilities have been urged to develop programs that address these priority end-uses. At a minimum, all of the measures and programs that were found to pass the TRC test in the recent GEFA TEPOT study need to be included in measure screening and program screening, according to the energy efficiency advocates. The new DSM programs recommended by energy efficiency advocates for the 2007 IRP include the following:

- New commercial energy efficient construction program;
- New residential energy efficient construction program (expanded Energy Star Homes and advanced residential new construction);
- Existing residential air-conditioning replacement/upgrade program;
- Existing residential lighting efficiency program;
- Existing commercial air-conditioning replacement/upgrade program; and
- Existing commercial lighting efficiency program.

In addition to addressing high impact areas for energy efficiency, these programs also lend themselves to tie-ins with the newly-enacted energy efficiency tax incentives included in the Energy Policy Act of 2005. This legislation includes incentives for:

- Energy efficient new residential construction;
- Energy efficient new commercial construction;
- Energy efficiency retrofits of existing residential buildings; and
- Energy efficiency retrofits of existing commercial buildings.

We have found that the new IRP process with its emphasis on stakeholder input is providing all parties with the opportunity to debate and discuss the merits of different approaches to DSM and utility energy efficiency programs. This has been a major improvement over the previous adversarial process.

### **Other Resources Available to the Commission**

The Commission should also examine current efforts to address many of the issues that arise in state IRP discussions. We believe that three very useful resources are as follows:

1. EPA/DOE National Energy Efficiency Action Plan. The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA), together with leading electric and gas utilities, the National Association of State Regulatory Utility Commissioners (NARUC), leading state public utility commissions, and the National Association of State Energy Officials (NASEO), have initiated a major undertaking: a National Action Plan for Energy Efficiency. It was announced in October 2005, and has held numerous meetings and produced work products since then. The goal of the plan is to create a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities.

This effort is engaging energy market leaders—including electric and gas utilities, state agencies, energy consumers, energy service providers, and environmental/energy efficiency advocates—in the development of the Energy Efficiency Action Plan. Through this Action Plan, leaders will identify key barriers limiting greater investment in energy efficiency and develop and document sound business practices for removing these barriers and improving the acceptance and use of energy efficiency relative to energy supply options. Upon completion of the Action Plan, leaders will pursue these business practices through their business channels, as appropriate, and will assist in the dissemination of these business practices to key audiences

The Energy Efficiency Action Plan will be a well-documented set of business cases, best practices, and recommendations that are designed to spur greater investment in energy efficiency by utilities and energy end-users within the next five years. Key anticipated products include:

- A report documenting best practices for overcoming barriers limiting utility investment in energy efficiency;
- A resource library of “best practice” model energy efficiency programs in a variety of end-use sectors;
- A communications strategy, including a series of regional/state workshops to share business cases and create additional leadership opportunities; and,
- A network of experts and resource materials on energy efficiency practices

The Commission and its Work Group should investigate the applicability of the Action Plan's work products to this current IRP proceeding. More details are available at:  
<http://www.epa.gov/cleanenergy/eeactionplan.htm>

2. EPA's Clean Energy-Environment State Partnership Program. Under the Partnership Program, states work across their relevant agencies to develop and implement a comprehensive strategy for using existing and new energy policies and programs to promote energy efficiency, clean distributed generation, renewable energy, and other clean energy sources that can provide air quality and other benefits. States are establishing and working toward achieving one or more specific and robust clean energy-air quality goals, including state goals for cost-effective clean energy.

EPA provides access to a comprehensive package of planning, policy, technical, analytical, and information resources to help State Partners establish and implement sound Clean Energy-Environment State Action Plans. EPA's Clean Energy-Environment Guide to Action describes 16 clean energy policies and strategies that states have used to achieve cost-effective clean energy. EPA also documents and disseminates successful state clean energy policies and provides opportunities for training and peer exchange.

North Carolina is a partner with EPA on this project through the North Carolina Energy Office and the North Carolina State Energy Office and the North Carolina Department of Environment and Natural Resources, Division of Air Quality. The Commission and its Work Group should contact these agencies and investigate the applicability of the Action Plan's work products to this current IRP proceeding. More details are available at:  
<http://www.epa.gov/cleanenergy/stateandlocal/partnership.htm>

3. Western Governors' Association. The Western Governors' Association's Clean and Diversified Energy Advisory Committee (CDEAC) has evaluated an array of options for bringing on-line 30,000 Megawatts of clean energy by 2015, increasing energy efficiency 20 percent by 2020 and providing adequate transmission for the region. A comprehensive series of documents has been made available and would be of significant value to the Commission and the Work Group. More information on these resources are available at:  
<http://www.westgov.org/wga/initiatives/cdeac/index.htm>

## **Recommendations and Statement of Positions**

In conclusion, the Alliance to Save Energy offers the following recommendations to the Commission:

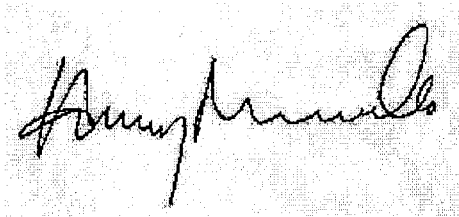
- The Commission should move ahead with its plans to set up a Work Group to insure that all parties and stakeholders have an opportunity to provide their input to defining cost-effective utility-operated energy efficient programs. The Work Group will be of significant value if the parties in the IRP proceeding have widely differing opinions on cost-effective DSM potential and other related issues. The Work Group will provide the proper venue to find common ground. We also believe that the Commission should provide the Work Group with a budget to engage any specialized outside consulting

assistance it may need. Some parties will have resources to attend the Work Group meetings, but it will be unlikely that parties other than utilities will be able to fund any needed research.

- The Commission should provide some guidance to the Work Group on the cost range it is willing to accept in order to field DSM programs. This can be expressed as a percentage of utility revenue or in absolute dollars. National experience shows that effective DSM programs require expenditures in the range of 0.50% to 1.5% of utility revenues.
- The Commission should require that the Work Group focus its efforts to sectors and end-uses that have the highest growth and greatest impact on forcing new supply resources. We believe that North Carolina's situation may be similar to Georgia's in that the impact of new residential and commercial construction is significant in driving load growth.
- The Commission should make a clear statement on the potential for cost-effective energy efficiency in North Carolina in any orders resulting from the upcoming evidentiary hearings. This will be of significant value to the Work Group as it prioritizes state needs to correctly target DSM and efficiency programs. Cost effective energy efficiency potential should be evaluated with the Total Resource Cost Test.

The Alliance, though not a party to the proceeding, is willing to assist the Commission and the Work Group in any way we can. We ask that these comments be made part of the record in this docket so that the Commission and the Work Group can make use of the recent Georgia IRP experience described above and use the other resources we have identified.

Respectfully submitted by:



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Attachments:

1. Georgia PSC Order in 17687-U, July 9, 2004
2. Georgia Demand-Side Management Working Group Report, February 15, 2005
3. Georgia PSC Order in 17687-U, May 25, 2005



**IN RE: DOCKET NO. 17687-U: GEORGIA POWER COMPANY'S  
2004 APPLICATION FOR AN INTEGRATED RESOURCE  
PLAN**

**DOCKET NO. 17688-U: SAVANNAH ELECTRIC AND  
POWER COMPANY'S 2004 APPLICATION FOR AN  
INTEGRATED RESOURCE PLAN**

**FINAL ORDER**

Date Submitted: July 2, 2004

Date Decided: July 9, 2004

**APPEARANCES**

**For Georgia Power Company:** Kevin C. Greene, Esq., Melissa L. Pignatelli, Esq., Troutman Sanders; **For Savannah Electric and Power Company:** Leamon R. Holliday, III, Esq., Bouhan, Williams and Levy; **For the Commission Staff:** Jeffrey C. Stair, Esq. Administrative Procedures Attorney, and Helen O'Leary, Administrative Procedures Attorney; **For the Consumers' Utility Counsel Division:** John Z. Wu, Staff Attorney; **For the Georgia Industrial Group:** Randall Quintrell, Esq.; **For the Georgia Textile Manufacturer's Association:** Peyton S. Hawes, Esq.; **For Calpine Corporation:** Michael S. Bradley, Esq., and Charles B. Jones, III, Esq., Sutherland, Asbill & Brennan; **For Southern Alliance for Clean Energy, Inc.:** James J. Presswood, Jr., Esq., Staff Attorney; **For Alliance to Save Energy:** Mr. Harry Misuriello; **For Georgia Environmental Facilities Authority:** Erin Kelley, Esq.; **For Homeowners Opposing Powerline Encroachment:** Richard N. Hubert, Esq., Chamberlain, Hrdlicka, White, Williams & Martin; **For Resource Supply Management:** Mr. Jim Clarkson; **For Georgia Interfaith Power and Light:** J. Renee' Kastanakis, Esq.; Reverend Woody Bartlett; and **For Live Oaks Company, LLC:** Mr. John S. Ellis.

## BY THE COMMISSION:

### I. STATEMENT OF PROCEEDINGS

On January 30, 2004, Georgia Power Company ("Georgia Power" or "GPC") and Savannah Electric and Power Company ("Savannah Electric") (collectively referred to herein as "Companies") separately submitted to the Commission applications for Integrated Resource Plans ("IRPs" or "Plans") for approval pursuant to O.C.G.A. § 46-3A-1 *et seq.* ("IRP Act" or "Act"). The Georgia Public Service Commission ("Commission") issued a Procedural and Scheduling Order on March 5, 2004, finding it appropriate and administratively convenient to hold concurrent and consolidated hearings in these dockets. No party entered an objection to the consolidation of the cases. 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).

The Procedural and Scheduling Order directed the Companies, at a minimum, to address those issues that are required by the IRP Act and Commission Rule 515-3-4 ("IRP Rules"), as well as any directives issued for the Companies to follow in the 2001 IRP cases.<sup>1</sup> In addition to the issues that traditionally are included in an IRP case, the Commission sought input from interested parties whether existing Utility Rule 515-3-4-.04(3), Request for Proposals Procedure for Long-Term New Supply-Side Options, should be modified to provide in greater detail the manner in which new supply side resources are to be requested, evaluated and presented to the Commission for certification.

In accordance with O.C.G.A. § 46-3A-5(c), the Commission established fees for review of the IRPs within sixty days of the filing of the applications. The Commission concluded that \$143,060.00 was the appropriate fee for Georgia Power Company,<sup>2</sup> and \$61,311.00 for Savannah Electric.<sup>3</sup> On March 16, 2004, Georgia Power and Savannah Electric remitted the established fee amount, thereby making the statutory deadline for this proceeding to be July 14, 2004.

Pursuant to statute, the Commission Staff ("Staff") and the Consumer Utility Counsel Division ("CUCD") of the Governor's Office of Consumer Affairs were parties to these dockets. Applications for Intervention were filed as follows:

Docket No. 17687-U: Resource Supply Management ("RSM") intervened on February 18, 2004; Georgia Industrial Group ("GIG") intervened on February 19, 2004; Georgia Textile Manufacturers Association ("GTMA") intervened on February 20, 2004; Calpine Corporation ("Calpine") intervened on February 25, 2004; Georgia

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<sup>1</sup> See *Final Order*, Docket Nos. 12499-U, 13305-U and 13306-U, filed on July 17, 2001.

<sup>2</sup> Docket No. 17687-U, *Order Establishing Fee for Georgia Power Company's Application for Approval of the 2004 Integrated Resource Plan*, filed on March 22, 2004.

<sup>3</sup> Docket No. 17688-U, *Order Establishing Fee for Savannah Electric and Power Company's Application for Approval of the 2004 Integrated Resource Plan*, filed on March 22, 2004.

Environmental Facilities Authority (“GEFA”) intervened on February 25, 2004; Southern Alliance for Clean Energy (“SACE”) intervened on March 5, 2004;<sup>4</sup> Live Oaks Company, LLC intervened on March 26, 2004; Alliance to Save Energy (“ASE”) intervened on April 16, 2004; Georgia Interfaith Power and Light (“GIPL”) intervened on April 16, 2004; and Homeowners Opposing Powerline Encroachment, Inc. (“HOPE”) intervened on April 19, 2004.

Docket No. 17688-U: Calpine intervened on February 25, 2004; SACE intervened on March 5, 2004;<sup>5</sup> Live Oaks Company, LLC intervened on March 26, 2004; and ASE intervened on April 16, 2004.

No party was denied intervention during the proceedings.<sup>6</sup>

On March 5, 2004, and again on May 25, 2004, the Commission filed amendments to its Procedural and Scheduling Order. Both sets of amendments were not substantive in nature, but, rather, were the result of the Commission’s need to modify the dates on which the hearings were to be held and filings were to be made.

The Commission conducted the hearings in three phases in this matter. During the first phase of the hearings, the Companies presented their direct cases on April 19, 2004, and April 20, 2004, through one panel of witnesses comprised of Mr. Richard A. White. Mr. Larry R. White, Mr. Jeffrey A. Burleson, and Mr. Garey C. Rozier.<sup>7</sup>

On May 25, 2004, the Commission Staff presented a panel of witnesses setting forth its positions in these dockets. This panel consisted of Mr. Mark W. Crisp, Mr. Jerry W. Smith, Mr. Evan D. Evans, Ms. Kathleen F. Best, Mr. Daniel R. Cearfoss, Jr. and Mr. Phil M. Hayet. GIG and GTMA co-sponsored two witnesses, Mr. Jeffry Pollock and Mr. John A. Mallinckrodt, who testified on this same date, with Mr. Timothy Eves testifying on behalf of Calpine in between the presentations of the two GIG/GNG witnesses.

A witness panel comprised of Mr. Richard F. Spellman and Mr. Harry Misuriello also testified on behalf of ASE on May 25, 2004, and on May 26, 2004, as well, followed by a panel of three witnesses for SACE that consisted of Mr. James Presswood<sup>8</sup>, Ms. Rita

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<sup>4</sup> In the Georgia Power IRP docket, an Amended Application for Leave to Intervene was filed by SACE on May 20, 2004.

<sup>5</sup> Also on May 20, 2004, an Amended Application for Leave to Intervene was filed by SACE in the Savannah Electric IRP docket.

<sup>6</sup> Although Mr. John S. Ellis intervened on behalf of Live Oaks Company, LLC, no appearance at the hearings was made by Mr. Ellis on behalf of this party.

<sup>7</sup> Both Mr. Burleson and Mr. Larry R. White are employed directly by Georgia Power. Mr. Richard A. White is employed by Savannah Electric. Mr. Rozier is employed by Southern Company Services. See Pre-filed direct testimony of the Companies’ panel of witnesses, page 1.

<sup>8</sup> Mr. Presswood testified as a subject matter expert during the hearings and also served as SACE’s counsel in this proceeding.

Kilpatrick, Mr. William Prindle.<sup>9</sup> This second phase of the hearings concluded after the testimony on behalf of a witness sponsored by GIPL, Ms. Melissa Heath, was provided.

Thereafter, during the third and final phase of the hearing that was held on June 28, 2004, the Companies presented rebuttal testimony through the same panel of witnesses that previously testified to support their direct cases.

At the conclusion of the hearings in these dockets, closing arguments and/or proposed final orders were filed by the Companies, ASE, Calpine, RSM, Staff, and the CUCD on July 1, 2004, or on July 2, 2004, as permitted by the Commission.

On July 9, 2004, at a Special Administrative Session, the Commission considered the positions of the various parties and rendered decisions on the Companies' respective IRPs.

In conjunction with doing so, the Commission hereby adopts in this Final Order, with modifications and further directives, the IRPs filed by Georgia Power and Savannah Electric. In doing so, the Commission sets forth in this Order further direction to Georgia Power and Savannah Electric for further reporting and analysis to be performed and provided to the Commission prior to or in conjunction with their next IRP filings, amendments or applications for de-certification. Finally, this Order issues directives by the Commission that are to be followed by its Staff in order to facilitate a Demand Side Management Working Group and initiate the process required for amending the agency's existing Utility Rule 515-3-4-.04(3), Request for Proposals Procedure for Long-Term New Supply-Side Options.

## II. JURISDICTION AND AUTHORITY

Georgia Power and Savannah Electric are public electric utilities serving retail customers within the State of Georgia. Georgia Power and Savannah Electric are two of the five retail operating companies of which the Southern Company system is comprised. This Commission has jurisdiction over Georgia Power's and Savannah Electric's IRPs pursuant to O.C.G.A. § 46-2-1 et seq., generally, and the IRP Act in particular.

The IRP Act requires the Companies to file Integrated Resource Plans at least every three years.<sup>10</sup> The Companies' obligations 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

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<sup>9</sup> Although Ms. Sara Barczak was identified on the pre-filed direct testimony as a witness who would be testifying on behalf of SACE, she was unavailable to appear at the hearing to answer questions about the panel testimony. As such, the panel was permitted to proceed with its testimony in her absence.

<sup>10</sup> O.C.G.A. § 46-3A-2.

options, including both demand-side and supply-side options; and the assumptions used and the 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 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.<sup>11</sup>

The Commission is required under O.C.G.A. § 46-3A-2 to make determinations as to the adequacy of the IRPs and to ensure that the utilities' Plans have appropriately addressed numerous matters. There must be a determination that the forecast requirements contained in the Plan are based on substantially accurate data and an adequate method of forecasting.<sup>12</sup> The Commission must also find that the Plans identify and take into account any present and projected reductions in the demand for energy that may result

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<sup>11</sup> O.C.G.A. § 46-3A-1(7).

<sup>12</sup> O.C.G.A. § 46-3A-2(b)(1).

from measures to improve energy efficiency in the industrial, commercial, residential, and energy-producing sectors of the state.<sup>13</sup>

Further, the Commission must determine whether the Plans adequately demonstrate 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;
- (E) Facilities that operate on the principle of cogeneration or hydro-generation; and
- (F) Other generation facilities and demand-side options.<sup>14</sup>

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.<sup>15</sup>

With regard to its rule-making authority to enact or modify regulations regarding the manner in which new supply-side resources are to be attained for the Companies' retail customers, the Georgia Legislature conferred upon the Commission a general blanket of authority under which it may enact those rules necessary to execute the functions that it has been delegated.<sup>16</sup> Along this avenue of authority, the Commission included in the Procedural and Scheduling Order a request for information from parties in order to determine whether its existing Utility Rule 515-3-4-.04(3), Request for Proposals Procedure for Long-Term New Supply-Side Options, should be enhanced and, if so, in what manner. In furtherance of this purpose, the agency's stated areas of interest included:

- (a) The procedures for the issuance of any Request for Proposals (RFP)
- (b) The contents of the RFP
- (c) The need for and role of an Independent Evaluator to oversee the RFP process
- (d) Evaluation Criteria and Procedures including selection process for a competitive tier and/or short list of bidders
- (e) Codes of conduct for participation in an RFP
- (f) The manner in which Information will be made available to bidders
- (g) Exceptions, if any, to the RFP procedures

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<sup>13</sup> O.C.G.A. § 46-3A-2(b)(2).

<sup>14</sup> O.C.G.A. § 46-3A-2 (b)(3).

<sup>15</sup> GPSC Utility Rule 515-3-4-.01(2).

<sup>16</sup> O.C.G.A. § 46-2-30.

- (h) The inclusion of a "Self-build" option by a Georgia-regulated utility, in the RFP process; and
- (i) A description of, and the use that is to be made of, a "Target Price" in the RFP evaluation process.<sup>17</sup>

### **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<sup>18</sup> based on the evidentiary record created, taking into consideration any joint proposals for a resolution to an issue raised by this agency.

#### **A) REVIEW AND EVALUATION OF THE INTEGRATED RESOURCE PLANS FILED BY GEORGIA POWER COMPANY AND SAVANNAH ELECTRIC AND POWER COMPANY<sup>19</sup>**

##### **1) LOAD FORECAST**

In Volume 1A, Table 4.2, on page 9 of the Technical Appendix<sup>20</sup> to Georgia Power Company's 2004 IRP filing, the load forecast for the years 2004 through 2023 is set forth as it pertains to the Companies' service areas as well as the Southern System as a whole. With regard to the demand and energy forecasts that are used to project load for the Companies, the Staff panel of witnesses was the only one to comment on each of them. A review of the testimony provided by Staff regarding the adequacy of the forecasts filed by Georgia Power and Savannah Electric is relevant to this Commission making at determination whether they should be approved as filed.

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<sup>17</sup> *Procedural and Scheduling Order*, March 5, 2004, p. 6.

<sup>18</sup> The areas of discussion included in the body of the Order in terms of Findings of Fact and Conclusions of Law speaks only to the areas of the Plans filed that were contested. Matters that were not disputed or previously were decided by the Commission in these dockets are referenced in the ordering paragraphs only.

<sup>19</sup> Due to the way the transcripts of the three phases of the hearing were prepared in these dockets, there is no way to identify specific pages in the transcripts when pre-filed testimony of any witness(es) is(are) referenced. As a consequence, all statements referenced as an authority in this Final Order will be cited from a party's pre-filed testimony, which, at the hearing, was accepted into the record as evidence.

<sup>20</sup> This information is contained in the Trade Secret version of the Georgia Power's filing.

a) **Sufficiency of Load Forecasts**

**Georgia Power Company**

In conducting its analysis, Staff noted that Georgia Power used econometric models developed in-house for the short-term forecasts (2004–2006), and a set of EPRI end-use models (REEPS, COMMEND and INFORM) for the longer-term forecasts (2007-2023). Georgia Power also used the EPRI model, HELM, to produce the demand forecast. The long-term models used are well accepted industry-wide, and Georgia Power performed an appropriate analysis of data input and calibration for each of these load forecast models. Staff acknowledged that some judgment was necessary in the selection of variables for all models, and that Georgia Power appeared to have made reasonable decisions for the Budget 2004 forecast, which was prepared during the spring of 2003.<sup>21</sup> The energy forecast is dependent on the input variables provided by Economy.com.

In its analysis of load, Georgia Power provided data that indicated a recent tendency for this company to over-forecast total company demand, with the errors ranging from approximately 1% to 7% on a weather adjusted basis<sup>22</sup>. However, the more recent interim forecasts appeared to have improved and were in the range of 1% to 4% error. Staff determined that these percentages of errors are in the range of what is acceptable.

A similar review of the weather adjusted comparisons for total company energy<sup>23</sup> revealed that on a total company basis, Georgia Power systematically also has over-forecasted energy usage. However, the forecast errors are within acceptable ranges of 3% to 5%, with more recent forecasts indicating improved accuracy with variances of approximately 1% to 3%.

Staff evaluated the weather adjusted energy forecasts by customer class<sup>24</sup> and concluded that forecast accuracy is within acceptable limits, with the potential exception of the industrial class. (Pre-filed Panel Testimony of Staff, p. 49). The industrial class energy forecast errors from the Budget 1999 through the Budget 2001 forecasts are in the range of 15% over-forecasted. The Budget 2002 forecast improved accuracy considerably to the 3% to 7% range. Georgia Power lost industrial customers from 1990 through 2003. Over the period, the number of industrial customers declined at the average annual rate of 2.9%. Georgia Power forecasted an average annual rate of decline for industrial customers of 1.6% for the period of 2004 through 2023. The industrial class represented approximately 24% of the total Georgia Power demand in 2003. A ratio has been projected by the Company to decline to about 20% in 2023. On

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<sup>21</sup> Georgia Power performed weather-normalization for both energy and demand data in order to provide historically appropriate comparisons of forecasts to actual energy and demand.

<sup>22</sup> *Georgia Power's 2004 IRP Filing Technical Appendix Volume 2, Section 9, pages 189- 190.*

<sup>23</sup> *Georgia Power's 2004 IRP Filing Technical Appendix Volume 2, Section 9, page 185.*

<sup>24</sup> *Georgia Power's 2004 IRP Filing Technical Appendix Volume 2, Section 9, pages 185-188.*



an energy basis, the industrial class represented about 35% in 2003, a ratio is projected to decline to 30% in 2023.<sup>25</sup>

Staff observed that Georgia Power estimated and adjusted the industrial class to account for a trade secret concern that has the potential to be realized in the upcoming years. Id. at 50. Minor adjustments start in 2007 and major adjustments occur in 2008 and beyond. It is likely these estimates will change when trade secret concerns had by the Company are decided one way or another. Secondary economic effects of these trade secret concerns were included in the residential and commercial classes also.

In looking at Georgia Power's forecast, which was prepared in the spring of 2003, Staff concluded that there have been potential signs of some economic recovery in the southeastern United States, which make it prudent to examine a case where some growth in the industrial class resumes before 2008. In order to examine this scenario, Staff recommended a sensitivity case to be performed, that in addition to other data changes, increased the total system load and demand by 1% over the Georgia Power Budget 2004 forecasts. Id. at 51. This case represents the possibility that some economic recovery is now in progress but had not yet been picked up in the Georgia Power forecasting models.

#### **Necessity for Update to Georgia Power's Existing Load Forecast**

When doing cross-examination of the Companies' direct testimony, Staff inquired as to whether there would be an updated load forecast filed with the Commission by Georgia Power for use in the upcoming 2004 rate cases. (Transcript (Tr.) 47.) Witness Jeffrey Burleson indicated that one had not been prepared and there was no intention to file one. (Tr.48.) During the rebuttal phase of the hearing, Staff made additional inquiries during cross-examination through which the genuine need for the Commission to obtain a new or updated load forecast from Georgia Power was explored. (Tr.984-997.) Among the points made by Staff that would support a more current load forecast being filed by Georgia Power included the fact that some of the data underlying the one in the IRP was from at least January 2003, maybe earlier (Tr.991-992); the growth predicted in the forecast for the various retail customer sectors may have far exceeded actual growth as per recent Company pronouncements (Tr.986-991); and the significant role that a load forecast plays in a rate case, which Georgia Power filed on July 1, 2004, seeking increased rates. (Tr.990-994.)

Through its responses, Georgia Power witness Burleson disputed any need for an updated load forecast to be filed. He indicated that, as per the Final Order in the last IRP case (Docket No. 13305-U), Georgia Power only had to notify the Commission if a new load forecast was developed by the Company. (Tr.980.) Mr. Burleson indicated that information tracking any variances in the load forecast is routinely made available to management of the Company in the form of reports. (Tr.982.)

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<sup>25</sup> Georgia Power Company's Technical Appendix, Vol. 2, Section 2, page 22.

In furthering his opposition to preparing an updated forecast based on actual data becoming available since it was prepared in early 2003, this witness contended that the actual data, once weather normalized, would result in the forecast being lower than what it is presently. (Tr.994-995.) While there may be actual data that shows higher sales for a customer class, Mr. Burleson seemed to infer that such increases were somehow offset by lower than predicted sales in the forecast for another class. (Tr.986-988)

When asked about the importance of its load forecast in terms of its upcoming rate case, Mr. Burleson did concede that there would be overearnings by a utility if its revenue requirements were to be spread across a customer base that was lower than what was forecasted. (Tr.992-994.) In light of this and other inquiries made by Staff, Mr. Burleson stood firm in his position that a load update was not necessary.

While the Commission understands the position of Georgia Power in this regard, it shares Staff's concern about Georgia Power's decision that a more current load forecast will not be made available for the rate case that is to be decided later this year. While Mr. Burleson possesses a great deal of credibility as a witness, the Commission would be derelict in its duty if it were merely to rely on his representations as to the impact that the availability that actual data has had on the forecast, and not to direct that this updated information be filled with this agency. Since the information necessary to update the existing forecast appears to be readily available to representatives of the Company, it should not be any hardship for the Company to do an update to its load forecast.

It also must be noted that the need for an updated load forecast is compounded by the fact that a cost of service study has been done by rate schedule for the first time in the 2004 rate case. If actual sales data deviates from that which is embedded in the existing load forecast, it could result that certain customer classes will have rates set for them that subsidize rates that will be set for consumers that take service under another class's rates. To eliminate any far-reaching ramifications from this occurring, it is imperative that by no later than August 15, 2004, Georgia Power must file an updated load forecast and budget comparison information with the most up-to-date information as of March 31, 2004.

### **Savannah Electric and Power Company**

Staff noted that Savannah Electric prepared short-term (2004–2006) econometric models for most classes. (Pre-filed Panel Testimony of Staff, p. 53). For its industrial class, the company tabulated individual customer forecasts to obtain the forecast of the entire class. Savannah Electric used a set of EPRI end-use models (REEPS, COMMEND and INFORM) for the longer-term forecasts (2007-2023). The company also used the EPRI model, HELM, to produce the demand forecast. The long-term models are well accepted industry-wide and Savannah Electric has performed the appropriate analysis of data input and calibration for each of these models.

Like its sister company, Georgia Power, Savannah Electric performed weather-normalization for both energy and demand data in order to provide historically accurate comparison of forecasts to actual energy and demand. It provided data indicating forecast errors that are in the range of approximately 1% to 5% on a weather adjusted basis, with the exception of the industrial energy.<sup>26</sup> However, a more recent interim Budget 2003 forecast resulted in errors of 1% to 3%. As with Georgia Power, this range of errors is acceptable, and the company's demand forecast is also within standard tolerances. Id.

For the industrial energy forecast comparisons on a weather adjusted basis, Savannah Electric over-projected energy sales by as much as 15% in the most recent forecast.<sup>27</sup> Staff noted that it was advisable to attempt additional econometric or other modeling for the short-term industrial energy sector to see whether any improvement could be achieved since this class represented approximately 20% of the total sales in 2003. Id.

Staff ultimately concluded that Savannah Electric's short-term models fit the historical data and appear to be reasonable and consistent with trends, with the possible exception of the industrial sales forecast, and that the company's demand projections were reasonable. Id. at 54.

#### **Necessity for Update to Savannah Electric's Existing Load Forecast**

While Savannah Electric witness Richard White was not asked the same questions about the load forecast as Georgia Power witness Jeffrey Burleson, similar concerns are present about the age of the existing load forecast exist since Savannah Electric also will be filing a rate case later this year. Irrespective of the concern that this utility does not share its sister company's situation in terms of doing a cost of service by individual rate, Savannah Electric likewise is directed to update its load forecast and budget for filing with the Commission based on the relevancy of such information to the rates that will be set next year as a result of its 2004 rate case filing.

#### **b) Recommendations Regarding the Companies' Load Forecast**

Based upon the evidence in the record, the Commission finds and concludes that it is appropriate to approve the demand and energy forecasts as filed by Georgia Power and Savannah Electric without modification to any projections to any customer class. In doing so, however, the Commission does find the concerns about the vintage of the forecast information, which is old and can easily be updated by actual data. Providing this more current information is essential because this information will play a critical role in the Company's upcoming rate case. As such, the Commission further finds and concludes that Georgia Power and Savannah Electric shall each update its forecasts utilizing actual data through March 31, 2004. Once updated, these forecasts shall be filed by the Companies on or before August 16, 2004.

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<sup>26</sup> *Savannah Electric's 2004 IRP Filing*, Technical Appendix, Section 1, pages 46-47.

<sup>27</sup> Id. at 46.

## 2) RELIABILITY—AUTHORIZED TARGET RESERVE MARGIN

In an effort to plan for a reliable system, allowances for capacity resources in excess of a utility's projected peak demand requirement are made for the purpose of recognizing that generating units can fail randomly, and load projections typically have some measure of forecast error. This commitment to have excess capacity provides a reasonable assurance that the utility will always have resources available to serve its load. A system with too large of a reserve margin will tend to have high revenue requirements because it will overbuild capacity on its system. A system with too small of a reserve margin will have to depend on purchases from the wholesale market that can be quite high at times of peak demand, once again resulting in high revenue requirements. The goal of a reserve margin study is to determine the level at which revenue requirements are the lowest for a given level of reserve margin. This results in a well-planned, reliable, and cost-effective utility system.

In the 2004 IRP, the Companies have proposed that the ultimate system reserve margin should be set at 13.5% for the first 3 years, and then 15% for the years after that. As support underlying this recommendation, Southern Company Services conducted a reserve margin study<sup>28</sup> that updated the one that was previously done in 1999. The conclusion reached in both studies was that 15% is the appropriate level of reserve margin for the Southern Company System. In the 2001 IRP, Georgia Power cited to the 1999 study as its basis for relying on 15% as its target reserve margin level for the Southern Company System.<sup>29</sup> Also, in the 2001 IRP, Georgia Power proposed a lower System reserve margin level for the short-term, arguing that it was an acceptable level for the first three years of the IRP study period. Ultimately, the Commission accepted these target reserve margin levels for the 2001 IRP.

For purposes of its 2004 IRP reserve margin study, Southern Company Services relied on its Monte Carlo Frequency and Duration Model "MCFRED," to develop the relationship between system revenue requirement and reliability based on Expected Unserved Energy (EUE). The cost of EUE is the payment which one customer is willing to make to avoid an hour of sudden, unexpected, firm load curtailment on a hot, summer afternoon. The goal of the reserve margin study is to determine the appropriate level of reserve margin such that total system revenue requirement is minimized, considering the cost of generating to serve load, the cost to build new capacity and the cost of expected unserved energy that might result from not having built quite enough capacity to serve load. In the 2004 filing, the reserve margin study explains that several changes were made in the modeling methodology to more closely represent the operational characteristics of the system.

Base on the results of the reserve margin study and the resulting analysis done by Staff, the Commission believes that the Companies' proposed system reserve margin

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<sup>28</sup> See Technical Appendix Volume 1B of Georgia Power's filing.

<sup>29</sup> *Staff Panel Testimony* filed May 11, 2001, Docket Nos. 13305 and 13306, page 18 at line 5.

recommendation, which includes a risk adjustment,<sup>30</sup> should be approved in this IRP. Their recommendation appears to be quite reasonable based on a number of facts. These include an acknowledgement that a 15% reserve margin is consistent with what other utilities typically use, that presently there is considerable excess merchant capacity in the southeast region and that Southern Company as a whole is itself in an over-capacity situation.

As such, the Commission finds and concludes that the Companies' proposed 13.5% target reserve margin for the 2004 – 2006 time frame shall be set at 13.5%, with 15% to be used for the remainder of the study period. It is further directed that, in future reserve margin studies, as with all evaluations that are conducted as part of an IRP, consistent modeling data should be used to the greatest extent possible.

### **3) SUPPLY-SIDE MANAGEMENT**

#### **a) Generation Expansion Plan**

##### **Georgia Power Company's Resource Planning Process**

Georgia Power's base case supply-side Resource Plan, which covers the 20-year period from 2004 through 2023, identifies the need for new resources to begin in 2009 and continue every year thereafter through 2023. In each of those years, Georgia Power proposes to add various combinations of gas-fired combustion turbine ("CT") and combined cycle ("CC") units. Between 2004 and 2008, the Companies' have already made commitments to satisfy their resource needs based on prior IRPs, through reduction in the peak demand forecast, and in accordance with Commission certification proceedings that took place in December 2000 and December 2002.

The December 2000 certification allowed Georgia Power to proceed with the following resources:<sup>31</sup>

- 1,800 MW of purchased power coming online in the 2003 and 2004 time period based on purchases from Southern Power Company. (The Franklin and Harris Power Purchase Agreements (PPAs).
- 12 MW upgrades to the Goat Rock Hydro units

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<sup>30</sup>On page 48 of the Risk Margin study, Southern Company Services reported that the optimal reserve margin for the system is actually lower than the 15% reserve margin that the Companies have recommended. However, through a series of additional analyses, risk factors were derived and added to the lower reserve margin result. The net result of these risk factors is that additional capacity has to be planned for the system to satisfy the higher reserve margin targets. It should be noted that the use of risk adjustments is not unusual when they are applied in such a way that the utility may meet other goals in addition to those required by the basic methodology. Staff determined that planning for a reliable system in an uncertain environment was an adequate reason in these filings to use a risk adjustment.

<sup>31</sup> *Georgia Power Company's 2004 IRP Main Document*, pages 1-7.

The December 2002 certification included:

- 1,660 MW of purchased power coming online in 2005 based on purchases from Duke Energy Southeast Marketing, LLC and Southern Power Company.<sup>32</sup>

### **Savannah Electric's Resource Planning Process**

Savannah Electric's base case supply-side resource plan also covers the same 20-year time frame and has identified the need for new resources to begin in 2009. Just as in the case of Georgia Power, after 2009, and through the remainder of the planning period, Savannah Electric's resource plan calls for the addition of CT and CC units. Based on decisions made in prior IRPs and approved in Commission certification proceedings (one in March 2000, and another in December 2002), Savannah Electric has already made commitments to satisfy its resource needs covering the period of 2004–2008.

In March 2000, the Commission certification allowed Savannah Electric to proceed with the following resources:<sup>33</sup>

- 200 MW of purchased power coming online in June 2002 based on purchases from Southern Power Company, from its Wansley Combined Cycle Plant. This is a 7.5 year PPA covering the period of June 2002 through December 2009.

The December 2002 certification provided approval for:

- 200 MW of purchased power coming online in June 2005 based on purchases from Southern Power Company, from its McIntosh Combined Cycle Plant.<sup>34</sup>
- The retirement of approximately 100 MW at Plant Riverside on May 31, 2005, based on the purchase of McIntosh unit.

Based upon the information filed by the Companies in their IRPs, the Commission finds and concludes that the Companies' respective Generation Expansion Plans appear to be adequate.

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<sup>32</sup> Since both Companies filed their IRPs on January 30, 2004, a joint application was made to the Commission on May 7, 2004, requesting direction to buy the two units, McIntosh 10 and 11, which were the subject of the purchase power agreements that they previously entered with Southern Power Company, and which the Commission certified in December 2002. The Commission issued this directive in an order filed on May 19, 2004, in Dockets 15392-U and 15393-U and will be considering the valuation of them as part of a rate case later this year.

<sup>33</sup> *Savannah Electric and Power Company's 2004 IRP Main Document*, pages 1-8.

<sup>34</sup> See Footnote Number 17.

**b) Unit Retirement Study**

In conjunction with its 2004 IRP filings, the Companies have considered whether it is prudent to consider for retirement any of their electric plants or the individual units located within them. In doing so, Georgia Power has requested that the Commission de-certify the Plant Atkinson CTs 5A and 5B, which total 80 MW of capacity, and which were retired from service on December 31, 2003. (Pre-filed Panel Direct of the Companies, page 7.) Upon examining whether Georgia's plans for the retirement of these two units are reasonable, Staff testified that they were. (Tr.485.) No other party addressed this issue with Georgia Power at the hearing.

A decision to extend the life of a unit at Plant Kraft has been made by Savannah Electric in its IRP filing. This utility previously had been planning for the retirement of the Kraft CT unit, which is a 17 MW combustion turbine that is capable of providing black start service. However, Savannah Electric since has performed further retirement evaluations (Pre-filed Panel Direct of the Companies, page 14) and is now recommending that the life of Kraft CT 17 MW be extended. Neither Staff (Pre-filed Staff Panel Direct Testimony, pages 43-44) nor any other party has opposed Savannah Electric's doing so.

Based on these considerations, the Commission finds and concludes that it is reasonable for Plant Atkinson CT's 5 A and 5B to be de-certified by Georgia Power Company. The Commission further finds and concludes that it is prudent for Savannah Electric to extend the planned life of the 17 MW Kraft CT unit that is capable of providing black starts and to remove it from further consideration for retirement.

**c) Fuel Forecast**

Staff expressed concern in its direct testimony that natural gas prices have risen sharply in the past year or two and seem to be forecasted to gradually trend lower from the currently high levels for a few years before returning to an upwardly trending pattern over the long term. (Pre-filed Staff Panel Direct Testimony, p. 16.) Unlike past history, as the natural gas prices decline in the next few years, none of the industry experts appear to expect prices to drop back to around \$3.00/mmbtu again over the next 20 years. Id. For purposes of making a proper analysis of the IRP filings, Staff compared the Companies' base and high gas forecast to other forecasts including NYMEX and the Energy Information Administration's ("EIA") forecast. Based on its comparison, Staff concluded that the Companies' reference case forecast may be a little low. Id.

The Staff pointed out that price forecasts currently exhibited large fluctuations associated with many uncertainties in the markets. Id. at 15. The EIA 2003 Energy Outlook forecast of the fuel prices may be low given the more recent developments in the natural gas markets. The EIA revised these price forecasts upward in the EIA 2004 Energy Outlook published in December 2003. The gas price for electric generators for the Middle Atlantic region, as reported in the 2004 EIA Energy Outlook, was revised

upward by an average of 10.6% for the period 2004 to 2025. Id. at 54-55. For the short-term period 2004 to 2008, the average increase in the gas price forecast for the electric generators is 18.4%. Id. For the period of 2009 to 2025, the average annual price upward revision is about 8.4%. At the retail level, the EIA forecast for residential gas prices in the Middle Atlantic Region was revised upward by an average of 8.8% for the period of 2004 to 2008, and an average of 3.7% for the period of 2009 to 2023. Id. For commercial customers and industrial customers, the price forecast revisions are higher: commercial users: 2004-2008, 19.3%; 2009-2023, 10.3%; and industrial users: 2004-2008, 13.9%; 2009-2023, 9.8%. Id. Even though there is not full agreement with all of the Companies' data assumptions, none were determined by Staff to be completely unreasonable. (Pre-filed Staff Panel Direct Testimony, p. 15.)

Within the testimony of John Mallinckrodt, the Georgia Industrial Group and Georgia Textile Manufacturers Association expressed concern that GPC is planning to rely totally on natural gas for future resource additions. (Pre-filed Testimony of John Mallinckrodt, p. 2.) A primary basis for GPC's reliance on natural gas is an assumption that natural gas prices will drop due to increased imports of liquid natural gas ("LNG"). Id. Mr. Mallinckrodt pointed out that domestic supply is declining, as are imports from Canada, and that even assuming that all LNG that is projected to be imported through both existing, expanded and new terminals, LNG will still not significantly increase domestic gas supply. Id. at 5. GIG/GTMA argued that contrary to GPC's projection of declining natural gas prices in 2004 to 2009 timeframe, natural gas prices are not likely to change significantly relative to current high levels. Id. at 7.

The fuel forecasts of Georgia Power and Savannah Electric utilized in various parts of the IRP originated over a range of dates. For example, fuel prices used in some of the forecast models were based on the EIA 2003 Energy Outlook published in December 2002 (*Georgia Power's 2004 IRP Filing Main Document*, page 3-3; *Savannah Electric's 2004 IRP Filing Technical Appendix*, Section 1, page 76), and it appears that other fuel forecasts were derived for other analyses such as the Optimal Resource Mix Study.

Staff recommended that the Companies update and file prospectively their fuel forecasts on June 30th of each year. (Pre-filed Staff Panel Direct Testimony, p. 87.) As per Staff, the updates should include an assessment of how the conclusions and recommendations reached by the Commission in the most recent IRP order may need to be modified as a result of the updated forecasts. These updates should also include a comparison of the forecasts used in the previous IRP with the actual data for the current year. The Staff also recommended that the Commission consider continuing its previous order requiring Georgia Power and Savannah Electric to file load and fuel forecasts, together with detailed supporting information and analyses each year, rather than at the three year IRP intervals, in order to capture significant changes in the region. Id.

With regard to three of Staff's recommendations, the Companies argued that, pursuant to Commission Rule 515-3-4-.06(5), they already are already required to notify the Commission of any major changes in any condition that would impact resource



planning. (Pre-filed Panel Rebuttal of the Companies, page 41.) Georgia Power and Savannah Electric also are currently under the obligation to file with the Commission a copy of each load forecast update prepared by the Companies as soon as such update becomes available. Id. Similarly, since the Companies already currently file a copy of the Environmental Compliance Strategy each year, as well as filing a status report of their certified DSM programs, the obligation to make a further in this area would be burdensome and unnecessary. In sum, the Companies argued that Commission already has in place several mechanisms through which it can stay abreast of their resource planning process in between filed IRPs and additional filings to report on same would be redundant. Id.

The Commission is concerned about the volatility in the price of natural gas, the increasing cost of fuel, and the IRPs' long term reliance on natural gas. In order for this agency to adequately monitor the issues surrounding fuel that have developed in recent years and are expected to continue, the Commission finds and concludes that both Companies shall promptly notify the Commission of any changes in fuel price conditions, including external forecasts that may warrant development of a new utility price forecast. In imparting this information, Georgia Power and Savannah electric also shall advise the Commission of the impacts these changes may have on the long range IRP.

The Commission further finds and concludes that the Companies shall make available any fuel forecast update as soon as it is available. This information shall be provided as appropriate within each 6 month Progress Report to the Commission as required by Utility Rule 515-3-4-.05.

#### **4) DEMAND SIDE MANAGEMENT**

##### **a) Demand Side Management Issues Raised by The Companies Proposals**

Neither the IRP filing for Georgia Power nor the filing made by Savannah Electric contained any new Demand Side Management ("DSM") programs because, the Companies contended, none were found to be cost-effective by applying the screening tests specified in the Commission's rules and prior orders. (Pre-filed Panel Direct of the Companies, page 41.) Georgia Power and Savannah Electric have indicated that it remains appropriate for this Commission to use the Rate Impact Measure ("RIM") test as the final screening tool to determine whether a DSM measure should be implemented. Id. at 10 and 16. Both Companies also stated their intent to continue the Power Credit program, which was reauthorized by the Commission in its 2001 IRP order. Id. at 9 and 16.

Georgia Power also proposed to maintain its Low Income Weatherization Assistance Program and to continue existing energy information programs that provide customers

with cost-effective energy saving options. Id. at 10. Similarly, Savannah Electric has made the same proposal. Id. at 16.

1) **Implementation of Additional Measures to Foster Energy Efficiency**

a) **Partnership with Energy Star®**

Georgia Power and Savannah Electric indicated that in April 2004, they entered into a partnership with Energy Star®, through which appliances acknowledged as having a certain level of energy efficiency would be promoted by the Companies in ways such as providing consumers with manufacturers' coupons for energy efficient appliances with their bills. (Tr.1029.)

The Commission finds and concludes that both GPC and Savannah Electric shall continue to develop the partnership that it has entered into with Energy Star® through which appliances acknowledged as having a certain level of energy efficiencies would be promoted by the Companies in ways such as providing consumers with manufacturers' coupons for energy efficient appliances with their bills.

b) **Desire for Greater Levels of Customer Education**

It was apparent to the Commission through comments made by public witnesses that most of them supported additional education regarding efficient use of electricity. Public witness Ms. Peggy Bartlett stated in relevant part that “[w]here I expected some folks to be quite resistant to suggestions that they change their personal habits with regard to lights, computers, small appliance, copy machines, . . . we have found extremely positive response. People want to know what to do. They are grateful for educational specifics of what they should do.” (Tr.428.) Another citizen who made public comments, Ms. Elizabeth Mojica, stated that she was “disappointed in Georgia's lack of renewable energy sources and the poor education of consumers on energy conservation issues.” (Tr.446.) Mr. John Heavener, also a public witness who gave up his personal time to come to the hearing, commented that “[a] part of that strategy could be encouraging commercial and residential consumers to utilize Energy Star® appliances and building products as well as instituting education campaigns on how to reduce the demand for energy.” (Tr.458.)

The interest among consumers in making efficient use of electric energy also was addressed by Staff witness Evan Evans, who testified that helping people understand how to set programmable thermostats already located in their homes could itself be a program design, and that education along those lines incorporated into the informational program that Georgia Power already has in place would produce benefits. (Tr.521.) In terms of understanding how to exact energy efficiencies from current electric usage, ASE's witness, Dick Spellman, noted that the existence of market barriers resulted in most people lacking awareness of energy efficient technologies, which is why

educational programs like the one provided by Georgia Power through brochure information are greatly needed to educate the public. (Tr.849-850.)

Georgia Power and Savannah Electric stated on rebuttal that “[a]lthough [they] work with customers daily on how to use energy efficiently, the Companies are also willing to engage in additional customer education regarding DSM.” (Company Panel Rebuttal testimony, page 7.) As support for this representation, the Companies noted a number of ways that they proposed to do so. The Companies further stated their willingness to more aggressively promote their willingness to conduct energy audits for customers upon request in an effort to raise customer awareness of the availability of this service. (Tr. 1027-1037.)

Based upon the foregoing, the Commission finds and concludes that the Companies shall initiate customer education programs through which they each will disseminate information to consumers about the efficient use of electricity. Georgia Power and Savannah Electric also shall more aggressively promote the availability of energy audits for interested customers.

**c) Funding for Educational Initiatives**

In order for Georgia Power and Savannah Electric to properly implement the customer education programs that they have been charged with initiating, the Commission finds and concludes that Georgia Power shall fund with no more than \$2,000,000 annually an energy efficiency campaign that it shall implement to promote consumer awareness of those energy efficiency measures and practices that produce the greatest economic efficiency and benefit to a participant. Savannah Electric shall support a similar initiative with no more than \$200,000 annually in funding to do so.

All of the funding authorized for these programs shall be directed to promoting education regarding those energy efficiency measures and practices that produce the greatest economic efficiency and benefit for the participant. In terms of outreach to achieve this goal, the Companies may use any recognized medium through which their customers could reasonably be expected to be reached with energy efficiency information, including, but not limited to, television advertisements, radio spots and advertisements in local newspapers and periodicals.

All such advertisements made through these mediums shall be for the exclusive purpose of promoting education in the area of energy efficiency and shall not serve as a forum to promote the Southern brand (or that of its subsidiaries) in any way, or to further other initiatives of the Companies outside of those contemplated herein. Television, radio and/or print ads shall provide as much information about managing electric usage as possible in the time/space allotted. A general understanding of electric energy efficiency and conservation should be able to be derived by the average viewer after viewing/listening to any advertisements. The theme of all advertisements should be strictly education-based. Any advertisements that the Commission, in its sole discretion,

finds not to be adequate for its intended purpose shall not be financed with monies allocated in this order for consumer education.

Copies of television ads, radio scripts and print advertisements containing information that is to be disseminated to the public shall first be provided to the Commission's Consumer Affairs Office, the Commission's Public Information Office and the Commission's Electric Staff in advance of being published. Upon their receipt of same, Staff will immediately give other interested parties five (5) business days to review the content of what the Companies seek to publish in order to raise any objection as to the content of the ads. The Commission shall be the ultimate decision maker as to whether an advertisement shall be approved.

In order for Staff to monitor the spending that the Companies will be doing in providing energy efficiency education, the Companies shall file quarterly reports with the Commission detailing with specificity the expenditures made through this education program. None of the funds allocated shall be used for any expenditure not expressly contemplated by this order.

d) **DSM Working Group**

The Integrated Resource Planning statute requires this Commission to consider both demand side and supply-side options. In doing so, this Commission must evaluate "the economic, environmental, and other benefits to the state and to consumers of the utility" associated with these various options. O.C.G.A. §§ 46-3A-1(7) and 46-3A-2(b)(3).

In the early 1990's, the Commission embraced numerous DSM programs that ultimately proved costly to non-participants and provided little system-wide benefit. The primary reason for this failure was that there was no real focus or targeted objectives in approving those DSM options. As a result of this failure, in its 1995 IRP Order the Commission adopted the RIM test, which virtually eliminated implementation of any DSM initiative. As it has turned out, the Commission went from one extreme to another.

Since 1995, much has changed in the electric industry that now may impact this Commission's opinion about the need for more DSM. Among other things, many states have found ways to improve and refine these DSM programs. The move towards retail electric deregulation has all but ended, and many regulators are once again considering the public service obligations of utilities that have been granted monopoly rights. These factors, coupled with a dramatic increase in fuel costs to generate energy over the past few years, make the issue of energy efficiency one that must be more closely examined to see whether the position that this agency supported in 1995 regarding the RIM test should be revisited.

In light of these factors, the Commission seeks to find a solution that will strike a balance between economic efficiency and fairness and equity when considering implementation of DSM programs. Regrettably, the record that was created in these

dockets has not been not adequately developed in this area for the Commission to be able to find that balance. The positions of the parties on DSM were very far apart and, for most of the hearing, the parties seemed to be talking past each other and not attempting to reach any middle ground.

As such, rather than returning to the hearing process at this time to further develop the record, the Commission believes that a more productive way to proceed would be to form a DSM Working Group that shall meet to develop a proposed DSM initiative for this Commission to consider. Instead of the all-or-nothing approaches that were presented at the hearing, it is the sincere desire of this agency that the Working Group will develop a reasonable and credible DSM initiative.

Based on the foregoing, the Commission finds and concludes that a Working Group of interested stakeholders to develop a proposed DSM Plan for residential and commercial customers for the Commission's consideration. The Commission Staff shall organize and act as the facilitator of the Working Group, which shall consist of the parties in the IRP cases. The Companies shall not be required to pay the cost of retaining a consultant as requested by ASE during the hearing

The Working Group shall convene for the first time no later than August 15, 2004, and meet as often as needed thereafter. Within 10 days after each of its meetings, the Working Group shall file reports with the Commission in these IRP dockets. These reports shall detail the minutes of the meeting and provide status information regarding the project, including milestones reached and a timetable for completion of remaining milestones. The Commission does not find it appropriate to require the Companies to provide \$300,000 as requested by ASE to pay costs that may be incurred by the group in executing and fulfilling its mission.

The Companies will provide to the Working Group such data as may be reasonably necessary for the Working Group to perform its tasks and develop its proposed DSM Plan. To the extent that the Companies contend that any such information is proprietary, it shall be filed with the Commission and be made available to members of the group pursuant to the Commission's Trade Secret rules.

The proposed DSM Plan shall be a comprehensive proposal consisting of 1) a mix of DSM initiatives to be recommended to the Commission for approval, including detailed information regarding how each of the initiatives would be implemented; 2) a recommended process for the selection of DSM initiatives in the future; and 3) recommendations regarding the need for changes to the Commission's IRP rules regarding DSM or for proposed legislation.

The recommended mix of DSM initiatives in the DSM Plan shall be selected by the Working Group using the following criteria:

- a. The proposed DSM Plan should minimize upward pressure on rates and maximize economic efficiency. This directive is extremely critical given Georgia Power Company's \$328 million pending rate increase request and Savannah Electric and Power Company's scheduled rate filing.
- b. The cost/benefit analysis results of each initiative using all 3 tests (RIM, Total Resource Cost test and Participants test) shall be considered by the Working Group and shall balance between economic efficiency and fairness and equity.
- c. An examination of where growth is occurring on the system shall be performed by the Working Group, which shall attempt to concentrate its recommended initiatives there. Consideration shall also be given to initiatives that encourage participation by low-income customers.
- d. In addition to traditional DSM programs, the Working Group shall consider rate design initiatives. In considering such initiatives, the Working Group should consider the cost/benefit analysis of such initiatives and the time periods that such initiatives would be available to a customer.
- e. Every effort should be made by the parties to develop innovative programs and market approaches that will prevent upward pressure on rates and subsidies between participants and non-participants.
- f. Where appropriate, the Working Group should consider the development of pilot initiatives (limited enrollment, limited terms) as a tool to gauge initiatives.
- g. The Working Group shall also provide input to the utilities in the development of the energy efficiency educational efforts approved by the Commission.

By no later than February 15, 2005, the Working Group shall conclude its mission by submitting a proposed DSM Plan to the Commission.

After the Working Group has tendered its recommendation to the Commission, this agency will consider any further action to be taken regarding the appropriate mix of DSM initiatives to be adopted and the process for the selection of DSM initiatives in the future.

e) **Increased Weatherization Program Funding**

In their rebuttal testimony, the Companies acknowledged the Commission's concerns regarding low-income customers and expressed a continued commitment to the low-income weatherization assistance programs that have been established for these

customers. (Tr.1025-1026.) Under cross examination by the Staff during the rebuttal phase of the hearing, the Companies indicated that they were amenable to increasing the existing level of funding for their respective low-income weatherization programs. Id. Georgia Power proposed raising its funding level by \$300,000 annually (Tr.1025), while Savannah Electric indicated that it believed a \$30,000 per year funding increase of its program was appropriate. (Tr.1026.)

During the Special Administrative Session held on July 9, 2004, to issue a decision in this matter, the Commission Chairman read a letter (that also was made part of the record) from Georgia Power in which it was stated this utility, and not its ratepayers, would provide this extra funding. Savannah Electric, he noted, was working toward doing the same thing.<sup>35</sup>

As such, the Commission finds and concludes that the low-income weatherization program of Georgia Power Company shall be continued. Its level of funding, now set at \$1,000,000, shall be increased by \$300,000, thereby making \$1,300,000 the total sum of money that shall be dedicated to the program annually for the next three years. Georgia Power Company has agreed that this additional \$300,000 in annual funding shall not be recoverable from ratepayers.

Savannah Electric's low-income weatherization program also shall be continued. Its level of funding, now set at \$100,000, shall be increased by \$30,000, thereby making \$130,000 the total sum of money that shall be dedicated to the program annually for the next three years. Savannah Electric shall work toward supplying the additional funding so that the \$30,000 will not be paid by ratepayers. After doing so, Savannah Electric shall report back to the Commission with information as to whether this is possible.

In terms of executing their weatherization programs, both Companies shall offer programmable thermostats to customers with central heat and air who wish to have them installed. Education regarding the use of these thermostats also shall be provided to the participants in these programs.

**f) Staff's Programmable Thermostat Recommendation**

During its direct case, Staff recommended that Georgia Power and Savannah Electric should be required to develop and implement pilot programs that provide customers an incentive to install programmable thermostats (Energy Star®) in existing residences, and that pilot programs be initiated by both Companies. (Pre-filed Direct Testimony of Staff Panel, page 58.) Initially, it was proposed by Staff that Georgia Power's program should be limited to 25,000 participants, while Savannah Electric's program should have up to 2,000 participants Id.

In the rebuttal testimony of Georgia Power and Savannah Electric, the Companies expressed support for all of Staff's DSM recommendations except for this one. (Pre-filed

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<sup>35</sup> Transcript of Special Administrative Session, July 9, 2004, pages 4-5.

Panel Rebuttal Testimony of Companies, page 19.) This lack of support stemmed from Georgia Power's further examination of this measure<sup>36</sup> in which programmable thermostats were represented as having passed the RIM test by only \$1.00 before any rebate was considered. Id. After the \$25 rebate recommended by Staff was added to the cost of the program, Georgia Power noted that the programmable thermostat program failed the RIM test by at least \$24 per thermostat. (Tr. 545.) It also was represented that additional program costs would only serve to worsen this disparity, and that the specifics for Savannah Electric regarding this measure's implementation would be similar. Id.

In light of the Commission's decision to create a Working Group to further consider DSM initiatives, the Commission declines to adopt the Staff recommendation on the development of pilot programmable thermostat program at this time.

## **2) Continuation of Power Credit Program**

As proposed by the Companies, the Commission finds and concludes that Power Credit program should be continued. However, as recommended by Staff (Pre-filed Panel Direct of the Staff, page 60), the program shall be further evaluated by the Georgia Power and Savannah Electric based upon the marginal costs that result from this filing and be included with the updated evaluation of other DSM measures within 3 months of the issuance of the Commission's final order in these dockets. Furthermore, until such time that the Companies project that they will begin activating the programs to reduce peak loads, these programs only should be evaluated as providing reliability benefits.

## **3) Request for Updated DSM Data Made By Staff**

With regard to the "consistency of data" issue discussed elsewhere in this order, Georgia Power and Savannah Electric agreed during cross examination by Staff to file the demand side management evaluation, just as it has always done, with what would be the most current data available at the time of the filing. (Tr.1039.) The Companies did, however, indicate the need to come back with a supplemental filing, probably in the late March/early April time frame, which would show the results of the DSM evaluation using all of those new cost assumptions that were developed in the IRP process. Id. Georgia Power Company and Savannah Electric noted that it would be their intent to try and have that data available prior to the presentation of the Companies' direct cases for the next IRPs filed. As a consequence, Georgia Power and Savannah Electric would be providing updated evaluations for all of those measures with the exact same cost data used in the IRP process itself. (Tr.1037.)

To move towards consistency of data in all analysis performed, the Commission finds and concludes that it is appropriate for the utilities to update the DSM evaluation as described herein during the next IRP filing.

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<sup>36</sup> This examination centers on use of such a thermostat in a home heated by natural gas.



## 5) Use Made of Real Time Pricing Tariffs

In reviewing the Companies' various pricing options, Staff pointed out a number of short-comings with Georgia Power's Real Time Pricing ("RTP") tariffs in terms of it being viewed as a load management tool. Staff argued that due to the way this tariff has been administered, RTP has not resulted in a sizable reduction of load during peak periods. (Pre-filed Direct Testimony of Staff Panel, page 60.) Rather, Staff contended that since it appears that RTP is being used to compete for new loads, the Company's claims of peak load reduction benefits to its system really do not exist. Id. Staff did not dispute that RTP can be a tool for economically adjusting the load shapes of participants in a manner that can benefit not only them but non-participants as well. It did take the position, however, that in order to be effective and beneficial, the hourly price signals must be adequate to encourage participants to change their hourly load shapes. Id. at 60-61. Prices charged of participants on these tariffs must be set to ensure that these customers are supporting the marginal costs incurred to serve them, plus provide a reasonable contribution toward fixed costs. Id. If they are not set to recover these costs, then non-participating customers would be subsidizing the customers on these rates.

The Staff also expressed a concern that the tariff does not contain sufficient requirements for establishing a firm Customer Baseline Load (CBL) below the actual projected load for new load. Id. at 61. The RTP tariff automatically permits an industrial customer to establish its CBL at 60% of the forecasted load for new load, without proof that it can actually operate at 60% of the forecasted load. In addition, the CBL for new loads can be further reduced by reducing load on a one-time basis for only two (2) consecutive hours, with a day-ahead notice. RTP customers have significant economic incentive to reduce their loads for these two hours, considering the fact that they can achieve significant potential savings on all additional load reductions.<sup>37</sup> Staff was concerned that, while RTP tariffs provide significant incentive for customers to temporarily reduce loads to obtain lower RTP prices, reductions may not materialize when the need for significant, sustained load to be shed in the future. Id. at 62. This concern is supported by the fact that estimated RTP reductions for 2003 were such a small fraction of the total RTP load above CBL on Georgia Power's system. If a customer's CBL is set artificially low, then that customer would not be making an appropriate contribution towards fixed costs and those costs would have to be shifted to the remaining non-participating customers.

Staff testified at the hearings that Georgia Power's RTP tariff, as presently administered, has not achieved an appreciable level of load reduction relative to total load above the CBL. Id. at 63. As such, it should be subject to revisions in the upcoming rate case to achieve this goal, if the Commission regards the purpose of RTP to be a load management tool. Id. In addition, the Staff recommended that in its next IRP filing,

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<sup>37</sup> This information was derived from the Staff Report filed with the Commission in Docket No. 16896-U, Proceeding to Examine Alleged Discrimination in the Application of Georgia Power Company's Real Time Pricing Tariff, filed on November 14, 2003, p. 8-9.

Georgia Power provide an updated study of the peak load reduction benefits and costs of RTP. Id.

In rebuttal testimony Georgia Power argued that the Staff recommendations do not recognize the primary purposes of the RTP tariffs, which are to provide marginal cost based rates to customers in Georgia that represent market conditions while fully covering cost and making a contribution to fixed costs of customers. (Pre-filed Panel Rebuttal of the Companies, page 21-22.) Georgia Power further argued that its RTP tariffs helped it to compete in the customer-choice market, which results in downward pressure on rates to all of its customers. It was further noted that load management also was a benefit derived from RTP tariffs, through which customers could compare the value of electricity to their cost and make a decision whether or not to purchase energy. Id. Georgia Power testified that it has seen RTP load reduction of over 800 MW in previous years when constrained capacity resources forced the RTP price to extremely high levels. Id.

The Commission finds and concludes that the RTP tariffs shall be further evaluated during the Georgia Power 2004 rate case. If it is found to be appropriate in that case for modifications to the RTP tariffs to be made, the Commission will consider doing so in conjunction with issuing its final order in that docket. For purposes of this case, however, from a system reliability standpoint, it is extremely important to have the best information available to evaluate the load impact of RTP tariffs on the system. Therefore, the Commission finds and concludes that, in its next IRP filing, Georgia Power shall provide an updated study of the peak load reduction benefits from its RTP tariffs.

## **6) Green Power Programs**

Georgia Power Company's 2004 IRP filing includes a stated intention to pursue Green Energy contracts that will provide renewable resources to meet customer requirements.<sup>38</sup> Savannah Electric stated in its IRP filing<sup>39</sup> that it will participate in the Green Power Program approved in Docket No. 16574-U. These programs will not provide capacity resources but will allow willing customers to purchase green energy at zero-cost to non-participants. Both are designed so that they are voluntary for the participants and will have no adverse impact on non-participants. The green portfolio as contemplated will likely include solar, wind, and landfill gas resources.

In the summer of 2003, the Commission approved for each company a Green Energy tariff that authorizes it to sell renewable energy under certain terms and conditions. Despite obtaining this approval, however, the Companies have represented that they are having difficulty in finding local viable sources for their Green Power Programs (Tr.89), which presently are not active. In its testimony, the Staff Panel recommended

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<sup>38</sup> See pages 1-7.

<sup>39</sup> See page 9.

that the Companies increase their efforts to locate and contract for green energy resources. (Pre-filed testimony of Staff Witness Panel, p. 71.)

In conjunction with their doing so, Staff also recommended that a target date of one year be established for them to identify a source or sources of green energy, to secure these resources, to establish the availability of the option and to initiate subscriptions with their customers. Id. If, however, within the one year period from August 1, 2004, the Companies remain unable to establish a contractual relationship renewable energy despite employing their best efforts, they should be required to return to the Commission with an explanation and request that their Green Power Programs be re-evaluated. Id. The Companies indicated that they agreed with this recommendation in their rebuttal testimony. (Pre-filed testimony of Companies' Rebuttal Panel, pages 2-3.)

As a consequence of the foregoing, the Commission finds and concludes that the Companies shall increase their efforts to locate and contract for green energy resources. A target date of one year from the date of this final order shall be established at which time the Companies shall identify a green energy source or sources; contract to secure the resources; confirm the availability of the tariff with interested consumers, as well as commence their pre-planned advertising campaigns; and to initiate subscriptions with their customers. If, by August 1, 2005, the Companies remain unable to successfully execute these functions despite employing their best efforts, Georgia Power and Savannah Electric shall file notification of the underlying circumstances with the Commission by September 1, 2005, so that the agency can re-evaluate their Green Power Programs.

## **7) TRANSMISSION**

The Staff Panel was the only set of witnesses that provided any type of examination of the Companies' transmission system planning, the results of which will be set forth generally hereinafter. In doing so, Staff found that the Companies made an assessment of the adequacy and reliability of their transmission system by using the Guidelines for Planning the Southern Company Transmission System (the "Southern Guidelines"), the Guidelines for Planning the Georgia Integrated Transmission System ("ITS Guidelines"), the North American Electric Reliability Council ("NERC") Planning Standards, and the Southeastern Electric Reliability Council ("SERC") Supplements to the NERC Planning Standards. The Companies used two basic criteria for determining its reliability of the transmission grid: (1) overloads on line conductors (based on their thermal limits), and (2) under-voltage on transmission busses.<sup>40</sup> (Pre-filed Panel Testimony of Staff, pages 66-67.)

Staff observed that these criteria were applied first to the "base case" where all generation and loading conditions are at levels that are expected to be "normal."

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<sup>40</sup> There are other planning criteria such as transient stability but the criteria mentioned above are the main ones.

Subsequently, the criteria were applied to contingency cases (in particular to first-contingency failure situations), where a generation unit or a transmission line (or transformer) is removed from service. Id. at 67. Under these contingency conditions, the Companies would be able to determine where trouble spots are given likely operating conditions which would allow them to determine whether operating solutions exist to solve the problem, or whether new transmission facilities must be built to solve it. Insofar as their planning procedures are concerned, the Companies took a typical approach to identifying and proposing various solutions to problem areas on the transmission system, eliminating solutions that do not work, and selecting the most cost-effective solution for the long-term.

Staff's analysis resulted in a finding that three basic types of transmission projects existed: 1) projects related to general improvements to the transmission grid; 2) projects related to the addition of new generation to the transmission grid; and 3) projects related to the increase in interface transfer capacity (imports or exports) between the Southern Company (Georgia Power and Savannah Electric in particular) and adjacent utility systems. Although Staff's review was limited to only 12 projects, each of them appeared to be justifiable.<sup>41</sup> Id. at 68-69. The Companies were believed to have identified projects in the ten-year transmission plan that presently are or will be necessary to provide adequate and reliable electric service to their respective customers. Id. Of course, the Commission does not certify transmission projects in the IRP, and decisions on the inclusion of transmission costs in base rates is a decision that is made in rate cases.

In terms of recommendations, Staff had just one. In future IRP filings, Staff would like the Companies to provide the most inclusive and detailed data available for the first half of its 10-year plan. For the remaining half of its plan, the data provided could contain less in-depth information. Id. at 91. In considering Staff's request in this regard, the Companies have indicated in their rebuttal that they are not opposed to doing so. (Pre-filed Panel Rebuttal Testimony of the Companies, page 3.)

As such, the Commission finds and concludes that future IRP filings should provide specific, comprehensive, detailed data for the first 5 years of the 10-year transmission plan, and less detailed data for the remaining 5 years of the plan.

## **8) ENVIRONMENTAL COMPLIANCE STRATEGY**

In analyzing the Companies' IRP filings, Staff reviewed the 2002/2003 Environmental Compliance Strategy Report contained in the Technical Appendix, Volume 1B of Georgia Power's IRP filing. In doing so, the Environmental Compliance Strategy Report was examined to determine if the many environmental issues impacting electric utility operations were adequately analyzed and properly incorporated into the IRPs. Staff also

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<sup>41</sup> Despite making this statement, Staff noted that it could not be stated with certainty that every other project is absolutely necessary, nor could it be said definitively that there might not be other alternatives to some of the projects that the Companies are proposing.

evaluated the environmental issues and assumptions utilized in the Unit Retirement Study, which is also found in Technical Appendix, Volume 1B.

As a result of conducting its review, Staff made three recommendations to the Commission in which it sought additional information to what had been filed in the IRPs. Its first recommendation was that, within 60 days of a final order in these dockets, a comprehensive assessment be filed by the Companies detailing all of the possible impacts of all pending environmental regulations that may take effect in the next twelve months. This assessment should provide the Commission with an annual update of the impact of newly promulgated environmental regulations or proposed legislation that may modify the Companies' most recently completed IRP process. It also should include a high and low range of potential capital cost requirements if a particular regulation is promulgated or legislation is enacted, and state whether compliance with the enactment will materially change the recommendations made in the 2004 IRPs. Staff further proposed that the Companies be directed to provide the Commission with an annual update of their Environmental Compliance Strategy along with an analysis of how the updated strategy will impact the Companies' planning processes for the addition of generation and transmission. (Pre-filed Panel Testimony of Staff, pages 91-92.)

A second recommendation made by Staff was for the Companies to use in future IRP filings the same environmental scenarios from their Unit Retirement Study as they do in the Resource Planning Model (IRP Base Case). Id. at 92. This request was made based on a belief that in the 2004 filings, the Unit Retirement Study used included two additional cases recognizing the potential for increased levels of compliance, including Regional Particulate, Regional Haze, State NOx 8-hour Ozone SIPs, Mercury MACT, Clear Skies Act, Clean Power Act and Clean Air Planning Act. Id. The scenarios used in the Resource Planning Model Base Case, however, appeared to Staff to only include previous Acid Rain provisions, the 1-hour ozone requirements and the Regional NOx SIP Call for Georgia beginning in 2007. Using the same scenarios in both the IRP base case and the Unit Retirement Study was promoted by Staff as providing for greater homogeneity.

Staff's third recommendation was for Georgia Power to prepare and file an assessment of the potential impact of increased environmental costs due to hydropower re-licensing. Id. at 92-93. The assessment sought should include the potential impact of increased environmental costs due to hydropower relicensing, reflecting not only the costs of relicensing but also the potential for lost capacity due to operational modifications to mitigate environmental concerns and the potential increased capacity as a result of unit rehabilitation. In addition thereto, Staff recommended that Georgia Power be directed to provide an assessment of the impact of lost hydropower generation on the existing IRP resource mix if, during relicensing, capacity loss occurs due to environmental mitigation.

With respect to its first recommendation, it should be noted that the Company filed on May 21, 2004, Southern Company's 2003/2004 Environmental Compliance Strategy Review, which is an annual filing that is made on behalf of Georgia Power and

Savannah Electric. This 2004 environmental filing, which was made one week after Staff's panel testimony was filed, contains much of the information that Staff recommended be filed, although perhaps not to the level of detail that was identified in the panel testimony. (Pre-filed Panel Rebuttal of the Companies, page 43.)

As it pertains to Staff's second recommendation, the Companies indicated that there was no objection with compliance but noted that it appeared to be the product of Staff's confusion that the environmental scenarios from the IRP base case were different from those used in the Unit Study when this was not the case. (Pre-filed Panel Rebuttal of the Companies, pages 49-50).

Regarding the third recommendation, however, Georgia Power has expressed concerns in its panel rebuttal testimony regarding Staff's request as it relates to the preparation and filing of an assessment of potential impacts of increased environmental costs due to Hydropower Re-licensing. In doing so, Georgia Power noted that such an analysis was done in compliance with the 2001 IRP order in which it was noted that cost and other issues related to facility upgrades were largely unknown some 5 years before the first facility was to be relicensed.<sup>42</sup> (Pre-filed Panel Rebuttal of the Companies, page 53.)

Based upon the foregoing, the Commission finds and concludes that the Companies shall continue to file their Environmental Compliance Strategy Review on an annual basis; provided, however, that the scope of this filing shall be supplemented to include: 1) a high and low range of potential capital cost requirements if a particular regulation is promulgated or legislation is enacted, and information whether compliance with the enactment will materially change the recommendations made in the 2004 IRPs; and 2) an analysis of how the updated strategy will impact the Companies' planning processes for the addition of generation and transmission.

The Commission further finds and concludes that it is appropriate for Georgia Power to keep this agency and its Staff abreast of any developments that will result in more concrete information becoming available regarding cost estimates and facility upgrades for the hydropower facilities that are to be relicensed. Information that should be provided to the Commission on this issue, when available, shall include the potential impact of increased environmental costs due to hydropower relicensing, reflecting not only the costs of re-licensing but also the potential for lost capacity due to operational modifications to mitigate environmental concerns and the potential increased capacity as a result of unit rehabilitation. In addition thereto, Georgia Power shall provide in its Environmental Compliance Strategy Review an assessment of the impact of lost Hydropower generation on the existing IRP resource mix if, during relicensing, capacity loss occurs due to environmental mitigation.

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<sup>42</sup> The hydropower facilities to be relicensed within the next 20 years include Morgan Falls (2009), Bartletts Ferry (2014) and Wallace Dam (2020).

## 9) GENERAL RECOMMENDATIONS

### a) Anticipated Impacts of Resource Plans on Rates

In its rebuttal testimony, the Companies opposed providing more detailed information regarding individual company rate impacts resulting from the underlying resource selections. (Companies' Pre-filed Rebuttal Panel Testimony, p. 48.) The panel indicated that more detailed information regarding rate impacts of resource selections was not the purpose of the IRP hearing, which was held to examine the development of resource plans and not project rates. (Tr. 1013-1014.) However, when pressed as to what type of hearing would take place at which the Commission would have the opportunity to examine the potential rate impacts, given that gas prices are high, environmental costs are growing and the company plans to do nothing but build gas-fired units, no forum could be identified. Id. It was also noted during rebuttal that what information had been provided about rate analyses in Exhibit A-1 to Georgia Power's Technical Appendix 1-A pertained to the Southern Company foot print as a whole, and not to each of the individual operating companies. (Tr. 1004-1005.)

Based upon the absence of company-specific details regarding rate-analyses for the resources identified in the plan, the Commission finds and concludes that the Companies must more fully communicate in future IRP filings information regarding the anticipated impacts their resource plans have on their forecasted rates. The nature of the Companies' resource mix clearly is changing. Operating companies' rates are vulnerable to such things as fuel spikes, environmental actions and technology advancements. As the resource mix changes from one that primarily uses coal and nuclear energy to one that more heavily relies on natural gas, the vulnerabilities and rate impacts that accompany such change must be clearly and accurately articulated within the IRP filings. Furthermore, at such time as the ultimate decision is to be made as to selecting one technology type over another, the knowledge of forecasted rate impacts should provide additional guidance in selecting the appropriate resource type. The IRP review, with its focus on a long-term evaluation of resource plans would be the ideal proceeding to also evaluate the resulting impacts on individual operating company customer rates.

### b) Filing of Information in Integrated Resource Plans

In future IRP filings, the Companies are encouraged to use consistent data in evaluating all aspects of the IRP. Again, this includes transmission analyses, DSM modeling, retirement studies, as well as the load forecast, etc.

## **B) DIRECTIVES PERTAINING TO THE IRP RULES REGARDING THE PROCESS FOR ISSUING AND EVALUATING REQUESTS FOR PROPOSALS**

As previously stated in this Order, the Commission invited interested parties to provide testimony during the hearings on various topics related to the manner in which bids for purchase power contracts are solicited and evaluated on behalf of the Companies. The purpose of seeking this information was to consider amending Utility Rule 515-3-4-.04(3), Request for Proposals Procedure for Long-Term New Supply-Side Options, to state with greater specificity the steps that were to be followed when a competitive solicitation was to be issued for purchase power to fill a designated supply-side need. Recommendations were made that pertain to the timing issues related to the bidding process to be considered in future solicitations.

### **a) Modifications Proposed to Existing Utility Rule 515-3-4-.04(3)**

The Staff, Calpine, and GTMA/GIG pre-filed testimony<sup>43</sup> that responded to the issues identified by the Commission on this subject, all of which was supportive of having some form of an independent evaluator involved in the RFP process. Each of the witnesses testifying on this topic, however, had different ideas regarding the details that would need to be laid out regarding the manner in which the RFP was to be issued, how they were to be evaluated, and how the winning solicitations were to be selected and presented to the Commission for certification. The Companies, while not as adamant as the other responding parties as to the need to have an independent entity perform these functions, offered testimony as to what they believed would be a fair process through which an independent monitor could assist in the RFP.<sup>44</sup>

As the hearing progressed, representatives of Staff, Calpine, GTMA/GIG, the CUC and the Companies met to discuss this issue to see if a joint solution could be reached. During the rebuttal phase of the hearings, the Companies, on behalf of all of the aforementioned parties, entered into evidence as "Joint Parties Exhibit 1" a Stipulation endorsing the acceptance of measures to be applied in future supply-side solicitations over which a Commission-selected Independent Evaluator would preside. The structure proposed therein represents principles and procedures the sponsoring entities believe should be captured and embodied in a rulemaking by the Commission to modify existing Rule 515-3-4-.04(3) in order to adopt an Independent Evaluator ("IE") for use in all

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<sup>43</sup> Staff's initial view on the RFP related issues can be found on pages 76 through 87 of its pre-filed panel testimony. Calpine's preliminary position on these issues was provided by Mr. Timothy Eves on pages 8 through 20 of his pre-filed testimony. GTMA/GIG's stance on this subject matter was provided by Mr. Jeffry Pollock on pages 5 through 10 of his pre-filed testimony.

<sup>44</sup> The positions taken by the Companies on the contemplated RFP process changed throughout the hearings and can be found on pages 17 through 27 of their pre-filed direct testimony, as well as later in their proposal modifying this initial position found on pages 22 to 40 of their rebuttal.



future RFPs. To make the changes called for by the Stipulation, it was further recommended that a rulemaking be commenced by the Commission.<sup>45</sup>

Based on the agency's review of the Joint Stipulation, which is attached and incorporated by reference herein, the Commission finds and concludes that it is appropriate to approve and accept its terms and provisions as part of the Final Order in these dockets. In order to properly further the enhancements that have been authorized, the Commission finds and concludes that a rulemaking proceeding shall be initiated before the end of August 2004, in which the Commission shall accept and incorporate the proposed amendments to the RFP Rule in accordance with the RFP/IE structure endorsed by the stipulation.

**b) Detailed Code of Conduct To Be Prepared by the Companies**

The Commission also finds and concludes that the Companies shall prepare and file for the agency's approval no later than August 31, 2004, a detailed code of ethics regarding affiliate communications, particularly as they relate to the preparation and evaluation of competitive solicitations. The depth and breadth of the code of conduct that is to be proposed by Georgia Power and Savannah Electric shall be extended to cover those individuals that are directly or indirectly in the employ of any of its affiliates or parent company and shall be executed in the manner contemplated by the Joint Stipulation.

**c) Status Of The 70/30 Directive Regarding The Ownership Percentage Of And The Purchased Power Percentage Of Capacity Called For In the 2001 IRP Order**

In his pre-filed testimony, Calpine witness Tim Eves argued that the directive calling for at least 70% ownership of capacity by the Companies and not more than 30% purchased power<sup>46</sup> should be regarded as a flexible Commission "guideline" and not a "hard cap."<sup>47</sup> (Pre-filed testimony of Calpine, p. 21-22.) However, the manner in which the limitations on the percentage of purchased power works is now governed by the terms of the Joint Stipulation. The only remaining question is whether the Commission, at this time, should modify those percentages. Having considered doing so, the Commission expressly declines to make any such modification at this time. In opting not to change the percentages, the Commission notes that the Companies are not and will not be in the next 3 years in a situation in which the issue the 30% cap will be reached. Consistent with the terms of the Joint Stipulation, the Commission will revisit the issue in the 2007 IRP.

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<sup>45</sup> On transcript pages 962-966, Companies' witness Garey C. Rozier provided a good summary of the contents of the Stipulation, which will not be recited again in this Order, but rather, will be made an attachment to and be incorporated by reference.

<sup>46</sup> This 70/30 directive is contained in the *Final Order* issued in IRP Docket Nos. 13305-U and 13306-U.

d) **Directives Pertaining to the Contemplated Solicitation for 2009 Capacity Needs**

1) **Inclusion of Life of Unit Solicitations in Future IRPs**

During the hearing, Staff made a recommendation that future capacity solicitations should include requests for consideration of proposals for "life-of-unit" proposals. (Pre-filed Direct Staff Panel Testimony, page 90.) As understood by the Commission, these bids effectively permit a merchant unit owner to sell the capacity and energy to the Companies for the same time period that the Companies themselves would operate a self-build option. On rebuttal, the Companies indicated that it was opposed to seeking life-of-unit proposals on the grounds that it would cause a loss in operating flexibility, was unnecessary since the existing 7 to 15 year solicitations have yielded good results, and would cause confusion as to what is actually meant in by the phrase "life-of-unit" in submitting and evaluating such a bid. (Tr. 1014-1016.)

The Commission disagrees with the Company in part, and would like to see such bids solicited in order to foster competitive bidding in Georgia. In seeking life-of-unit bids, however, the Commission does agree that there exists a potential for confusion as to what exactly is being sought in terms of a supply side resource.

Based on these concerns, the Commission finds and concludes that in the 2009 RFP, the Companies shall seek 30-year contracts for purchased power in addition to the 7- and 15-year contracts that it has been soliciting in recent time. In the event that this directive would conflict with the Commission's 30% limit on total supply-side purchased power resources, the life-of-unit purchases could then be structured as an actual sale of the unit(s) to the Companies.

2) **Schedule of Actions for the Next RFP to be Issued**

In furtherance of the objectives set forth in the Joint Stipulation regarding the competitive bidding process referenced above, the Commission finds and concludes that the a schedule of events for the release of an RPF shall be adhered to in conjunction with seeking the most economical supply-side capacity assets in the immediate future. On or before July 15, 2005, the Companies will file for approval with the Commission a proposed schedule of events for the release of RFPs for the time period 2009 through 2012. This filing shall also include target dates for submitting proposed IE's, RFP Service Dates, dates for notification of bid and evaluation team members, dates for filing of draft RFP's and standard purchase power agreements and capacity to be sought in each RFP.

Once approved by the Commission, any deviations, planned or unintended, from the established schedule must be authorized by this agency before they are made by the Companies.

#### **IV. ORDERING PARAGRAPHS**

**WHEREFORE IT IS ORDERED** that the Commission adopts the Integrated Resource Plans developed by Georgia Power and Savannah Electric with the augmentations and/or modifications set out below.

**ORDERED FURTHER**, that the demand and energy forecasts filed by Georgia Power and Savannah Electric be approved without modification to any projections to any customer class.

**ORDERED FURTHER**, that Georgia Power and Savannah Electric shall update their demand and energy forecasts and budget comparison information through March 31, 2004, in order to reflect actual usage that has occurred since these forecasts were finalized in the spring of 2003. Once updated through this time frame, these forecasts shall be filed with the Commission by no later than August 16, 2004.

**ORDERED FURTHER**, that in conducting future reserve margin studies, as with all evaluations that are conducted as part of an IRP, consistent modeling data should be used to the greatest extent possible.

**ORDERED FURTHER**, that the Companies' target reserve margin for the 2004–2006 timeframe shall be set at 13.5%, with 15% to be used for the remainder of the study period.

**ORDERED FURTHER**, that the Companies' Generation Expansion Plans shall be regarded as adequate based upon the information that has been made available to the Commission .

**ORDERED FURTHER**, that Plant Atkinson CT's 5 A and 5B shall be de-certified by Georgia Power Company.

**ORDERED FURTHER**, that Savannah Electric shall extend the planned life of the 17 MW Kraft CT unit capable of providing black starts and remove it from further consideration for retirement until such time when such action is shown to be warranted.

**ORDERED FURTHER**, that Georgia Power and Savannah Electric shall inform the Commission in a filing of any changes in fuel price conditions, including external forecasts that may warrant development of a new utility price forecast and advise the Commission on the impacts these changes may have on the long range IRP. The Companies also shall make available any fuel forecast update as soon as it is available within each 6 month Progress Report to the Commission called for by Utility Rule 515-3-4-.05.

**ORDERED FURTHER**, that both GPC and Savannah Electric shall further develop the partnership that it has entered into with Energy Star® through which appliances acknowledged as having a certain level of energy efficiencies would be promoted by the Companies in ways such as providing consumers with manufacturers' coupons for energy efficient appliances with their bills.

**ORDERED FURTHER**, that Georgia Power and Savannah Electric also shall more aggressively promote the availability of energy audits for interested customers.

**ORDERED FURTHER**, that the Companies shall offer as part of their low-income weatherization programs the option of having programmable thermostats installed to those customers with central heat and air that wish to have the thermostat installed. Education as to how to use the thermostat shall also be provided.

**ORDERED FURTHER**, that a Working Group be created of interested stakeholders to develop a proposed DSM Plan for residential and commercial customers for the Commission's consideration. The Commission Staff shall organize and act as the facilitator of the Working Group, which shall consist of the parties in the IRP cases.

**ORDERED FURTHER**, that the recommendation by ASE and supported by SACE and GIPL for the Companies to be required to fund a consultant for a working group is rejected in its entirety.

**ORDERED FURTHER**, that the Working Group shall convene for the first time no later than August 15, 2004, and meet as often as needed thereafter.

**ORDERED FURTHER**, that within 10 days after each of its meetings, the Working Group shall file reports with the Commission in these IRP dockets. These reports shall detail the minutes of the meeting and provide status information regarding the project, including milestones achieved and a timetable for completing those that remain.

**ORDERED FURTHER**, that the Companies will provide to the Working Group such data as may be reasonably necessary for the Working Group to perform its tasks and develop its proposed DSM Plan. To the extent that the Companies contend that any such information is proprietary, it shall be filed with the Commission and be made available to members of the group pursuant to the Commission's Trade Secret rule.

**ORDERED FURTHER**, that the proposed DSM Plan shall be a comprehensive proposal consisting of 1) a mix of DSM initiatives to be recommended to the Commission for approval, including detailed information regarding how each of the initiatives would be implemented; 2) a recommended process for the selection of DSM initiatives in the future; and 3) recommendations regarding the need for changes to the Commission's IRP rules regarding DSM or for proposed legislation.

**ORDERED FURTHER**, that the recommended mix of DSM initiatives in the DSM Plan shall be selected by the Working Group using the following criteria:

- a. The proposed DSM Plan should minimize upward pressure on rates and maximize economic efficiency. This directive is extremely critical given Georgia Power Company's \$328 million pending rate increase request and Savannah Electric and Power Company's scheduled rate filing.
- b. The cost/benefit analysis results of each initiative using all 3 tests (RIM, Total resource Sot test and Participants test) shall be considered by the Working Group and shall balance between economic efficiency and fairness and equity.
- c. An examination of where growth is occurring on the system shall be performed by the Working Group, which shall attempt to concentrate its recommended initiatives there. Consideration shall also be given to initiatives that encourage participation by low-income customers.
- d. In addition to traditional DSM programs, the Working Group shall consider rate design initiatives. In considering such initiatives, the Working Group should consider the cost/benefit analysis of such initiatives and the time periods that such initiatives would be available to a customer.
- e. Every effort should be made by the parties to develop innovative programs and market approaches that will prevent upward pressure on rates and subsidies between participants and non-participants.
- f. Where appropriate, the Working Group should consider the development of Pilot Initiatives (limited enrollment, limited terms) as a tool to gauge initiatives.
- g. The working group shall also provide input to the utilities in the development of the energy efficiency educational efforts approved by the Commission.

**ORDERED FURTHER**, that by no later than February 15, 2005, it shall conclude by submitting a proposed DSM Plan to the Commission.

**ORDERED FURTHER**, that the Commission does not find it appropriate to require the Companies to provide \$300,000 as requested by ASE to pay costs that may be incurred by the group in executing and fulfilling its mission.

**ORDERED FURTHER**, that after the Working Group has tendered its recommendation to the Commission, this agency will consider any further action to be

taken regarding the appropriate mix of DSM initiatives to be adopted and the process for the selection of DSM initiatives in the future

**ORDERED FURTHER**, that given the Commission decision to create a Working Group to consider DSM programs, the Staff recommendation that the Companies develop a pilot programmable thermostat DSM program is not adopted by the Commission at this time.

**ORDERED FURTHER**, that the low income weatherization program of Georgia Power Company shall be continued. Its level of funding, now set at \$1,000,000, shall be increased by \$300,000, thereby making \$1,300,000 the total sum of money that shall be dedicated to the program annually for the next three years. Georgia Power Company has agreed that this additional \$300,000 in annual funding shall not be recoverable from ratepayers.

**ORDERED FURTHER**, that Savannah Electric's low-income weatherization program also shall be continued. Its level of funding, now set at \$100,000, shall be increased by \$30,000, thereby making \$130,000 the total sum of money that shall be dedicated to the program annually for the next three years. Savannah Electric shall work toward supplying the additional funding so that the \$30,000 will not be paid by ratepayers. After doing so, Savannah Electric shall report back to the Commission with information as to whether it can do so.

**ORDERED FURTHER**, that additional education on the efficient use of electricity shall be made available by the Companies.

**ORDERED FURTHER**, that Georgia Power shall fund with no more than \$2,000,000 an energy efficiency campaign that it shall implement to promote consumer awareness of those energy efficiency measures and practices that produce the greatest economic efficiency and benefit to a participant.

**ORDERED FURTHER**, that Savannah Electric shall fund with no more than \$200,000 an energy efficiency campaign that it shall implement to promote consumer awareness of those energy efficiency measures and practices that produce the greatest economic efficiency and benefit to a participant.

**ORDERED FURTHER**, that in order to further their respective energy efficiency educational campaigns, the Companies may use any recognized medium through which their customers could reasonably be expected to be exposed, including, but not limited to, television advertisements, radio spots and advertisements in local newspapers and periodicals.

**ORDERED FURTHER**, that all information disseminated through the media shall be for the exclusive purpose of promoting education in the area of energy efficiency and shall not serve as a forum to promote the Southern brand (or that of its subsidiaries) in any way, or to further other initiatives of the Companies outside of those contemplated

herein. Television, radio and/or print ads shall provide as much information about managing electric usage as possible in the time/space allotted. A general understanding of electric energy efficiency and conservation should be able to be derived by the average viewer after seeing/listening to any advertisements. The theme of all advertisements should be strictly education-based. Any advertisements that the Commission, in its sole discretion, finds not to be adequate for its intended purpose shall not be financed with monies allocated in this order for consumer education.

**ORDERED FURTHER**, that copies of television ads, radio scripts and print advertisements containing information that is to be disseminated to the public as part of the energy efficiency programs shall first be provided to the Commission's Consumer Affairs Office, the Commission's Public Information Office and the Commission's Electric Staff in advance of being published. Upon their receipt of same, Staff will immediately give other interested parties five (5) business days to review the content of what the Companies seek to publish in order to raise any objection thereto. The Commission shall be the ultimate decision maker as to whether an advertisement shall be approved.

**ORDERED FURTHER** that the Companies shall file quarterly reports at the Commission detailing with specificity the expenditures made through this education program. None of the funds allocated shall be used for any expenditure not expressly contemplated by this order.

**ORDERED FURTHER**, that to move towards consistency of data in all analyses performed, the Commission finds that it is appropriate for the utilities to update the DSM evaluation as described herein during the next IRP filing.

**ORDERED FURTHER**, that the Companies shall continue their implementation of the Power Credit Program;

**ORDERED FURTHER**, that the Power Credit program shall be further evaluated by the Companies based upon the marginal costs that result from this filing and be included with the updated evaluation of other DSM measures within 3 months of the issuance of the Commission's Final Order in these dockets.

**ORDERED FURTHER**, that with regard to the "consistency of data" issue discussed elsewhere in this order, as it relates to the DSM screening analysis, Georgia Power and Savannah Electric shall file the demand side management evaluation with what would be the most current data available at the time of the filing, but then come back with a supplemental filing, in the late March, early April time frame, that would show the results of the DSM evaluation using all of those new cost assumptions that were developed in the IRP process.

**ORDERED FURTHER**, the Companies shall update their DSM evaluation in the manner described in this order for use in their 2007 IRP filings.

**ORDERED FURTHER**, that the Commission shall evaluate the RTP tariffs during the Georgia Power 2004 rate case and make any appropriate tariff revisions at that time as it sees fit.

**ORDERED FURTHER**, that, in its next IRP filing, Georgia Power shall include an updated study of the peak load reduction benefits from RTP tariffs.

**ORDERED FURTHER**, that the Companies shall increase their efforts to locate and contract for green energy resources for their Green Energy Programs.

**ORDERED FURTHER**, that a target date of one year from the date of this Final Order shall be established during which the Companies shall identify a green energy source or sources; contract to secure the resources; confirm the availability of the tariff with interested consumers, as well commence their pre-planned advertising campaigns; and to initiate subscriptions with their customers.

**ORDERED FURTHER**, that if, by August 1, 2005, the Companies remain unable to successfully execute these functions relating to renewable resources despite employing their best efforts, Georgia Power and Savannah Electric shall file a notification of the underlying circumstances with the Commission by September 1, 2005, so that the agency can re-evaluate their Green Power Programs.

**ORDERED FURTHER**, that in future IRP filings, the Companies provide the most comprehensive, detailed data available for the first half of their 10-year transmission plan. For the remaining half of its plan, less detailed data may be filed

**ORDERED FURTHER**, that the Companies shall continue to file their Environmental Compliance Strategy Review on an annual basis; provided, however, that the scope of this filing shall be supplemented to include: 1) a high and low range of potential capital cost requirements if a particular regulation is promulgated or legislation is enacted, and information whether compliance with the enactment will materially change the recommendations made in the 2004 IRPs; and 2) an analysis of how the updated strategy will impact the Companies' planning processes for the addition of generation and transmission.

**ORDERED FURTHER**, that Georgia Power shall keep this agency and its Staff abreast of any developments that will result in more concrete information becoming available regarding cost estimates and facility upgrades for the hydropower facilities that are to be relicensed. Information that should be provided to the Commission on this issue, when available, shall include the potential impact of increased environmental costs due to hydropower relicensing, reflecting not only the costs of re-licensing but also the potential for lost capacity due to operational modifications to mitigate environmental concerns and the potential increased capacity as a result of unit rehabilitation.

**ORDERED FURTHER**, that Georgia Power shall provide in its Environmental Compliance Strategy Review an assessment of the impact of lost Hydropower



generation on the existing IRP resource mix if, during relicensing, capacity loss occurs due to environmental mitigation.

**ORDERED FURTHER**, that the Companies must more fully communicate to the Commission in future IRP filings information regarding the anticipated impacts their resource plans have on their forecasted rates. The vulnerabilities and rate impacts that accompany the resource mix change being planned for must be clearly and accurately articulated within the IRP filings.

**ORDERED FURTHER**, that in conducting IRP studies the Companies should to the greatest extent possible, set as an objective to use consistent data throughout all analyses conducted as part of the IRP.

**ORDERED FURTHER**, that the Joint Stipulation regarding the RFP/IE rule enhancements agreed to by interested parties in these dockets is approved as part of the Final Order in the dockets, a copy of which is attached and incorporated by reference herein.

**ORDERED FURTHER**, that a rulemaking proceeding shall be initiated by Staff before the end of August 2004, in which the Commission shall promulgate as rule amendments the RFP/IE structure endorsed by the Joint Stipulation.

**ORDERED FURTHER**, that the Companies shall prepare and file for the agency's approval no later than August 31, 2004, a detailed code of conduct regarding affiliate communications, particularly as they relate to the preparation and evaluation of competitive solicitations.

**ORDERED FURTHER**, that the depth and breadth of the code of conduct that is to be proposed by Georgia Power and Savannah Electric shall be extended to cover those individuals that are directly or indirectly in the employ of any of its affiliates or parent company and shall be executed in the manner contemplated by the Joint Stipulation.

**ORDERED FURTHER**, that consistent with the IRP Final Order issued July 5, 2001, the Commission shall limit the amount of supply-side capacity provided through purchased power contracts to 30 percent of total supply-side resources. A determination of whether this cap should be increased, decreased or eliminated in its entirety is an issue that this Commission will not have the need to contemplate until the 2007 IRP.

**ORDERED FURTHER**, that in the 2009 RFP, the Companies shall seek 30-year contracts for purchase power in addition to the 7- and 15-year contracts that it has been soliciting in recent time. In the event that this directive would conflict with the Commission's 30% limit on total supply-side purchase power resources, the life-of-unit purchases could then be structured as an actual sale of the unit(s) to the Companies.

**ORDERED FURTHER**, that on or before July 15, 2004, the Companies will file for approval with the Commission a proposed schedule of events for the release of RFPs for the time period 2009 through 2012. This filing also shall include target dates for submitting proposed IE's, RFP Service Dates, dates for notification of bid and evaluation team members, dates for filing of draft RFP's and standard purchase power agreements and capacity to be sought in each RFP.

**ORDERED FURTHER**, that once approved by the Commission, any deviations, planned or unintended, from the established schedule of events must be authorized by the agency before they are made by the Companies.

**ORDERED FURTHER**, that no determinations are made as to the need, effectiveness or reasonability of any rates, tariffs and pricing strategies filed in conjunction with the IRPs in this Order. The feasibility and determination of the appropriate level of these rates, tariffs and pricing strategies shall be made in the general rate cases that have been or will be filed by the Companies in 2004.

**ORDERED FURTHER**, that all findings of fact and conclusions of law contained within the preceding sections of this 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 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 a Special Administrative Session held on July 9, 2004.

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**REECE MCALISTER**  
**EXECUTIVE SECRETARY**

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**H. DOUG EVERETT**  
**CHAIRMAN**

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**DATE**

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**DATE**

FINAL REPORT OF THE GEORGIA DSM  
WORKING GROUP

FEBRUARY 15, 2005

Prepared in Response to the Georgia Public Service Commission Orders in Integrated  
Resource Planning dockets 17687-U and 17688-U

## **I. Executive Summary**

In July of 2004, the Georgia Public Service Commission unanimously passed a motion establishing the Demand-Side Management Working Group to address issues raised in Integrated Resource Planning dockets 17687-U and 17688-U. This motion was subsequently included in the ordering paragraphs of the Commission's final order in this docket, and directed the workgroup to accomplish three tasks:

- Bring the Commission a mix of DSM initiatives to be recommended to the Commission for approval, including detailed information regarding how each of the initiatives would be implemented;
- Recommend a process for the selection of DSM initiatives in the future;
- Recommendations for the need for changes to the commission's IRP rules regarding DSM or for proposed legislation.

The motion and subsequent order also established six criteria for proposing this mix of DSM programs to the Commission. These criteria are described later on in this report, but foremost among the criteria was the requirement that the proposed DSM Plan should minimize upward pressure on rates and maximize economic efficiency.

This report to the Commission provides an overview of the deliberations of the workgroup and its recommendations to the Commission in the following major areas:

- A proposed mix of DSM programs for the Commission to consider and approve for immediate implementation
- A recommended procedure for evaluation of future DSM programs
- Recommended Changes to IRP rules and Legislative recommendations

These are described in detail in the body of the report and in its appendices.

### **The Workgroup Process**

The Demand Side Management (DSM) Working Group met officially eight times and informally several times to fulfill the order of the Commission dated July 14, 2004. The Commission directed that all interveners in Dockets 17687-U and 17688-U would be allowed to participate as members of the workgroup. The workgroup looked at the three tests run by Georgia Power Company (GPC) and Savannah Electric and Power Company (Savannah Electric) to evaluate potential DSM measures that have been adopted by the Commission. Those three tests, Total Resource Cost (TRC), Participant, and Rate Impact Measure (RIM), have provided the basis for Commission decisions on whether to implement DSM programs. All three tests involve the projection and estimation of many costs.

The Commission requested information to help it balance rate impacts with economic efficiency when considering DSM resources. As one way to accomplish this goal, the workgroup recommends an "analytical cap" that would provide the Commission adequate

information to review effective DSM measures while minimizing the IRP preparation responsibility burden on the Companies. The “analytical cap” is a proposed limit on the total amount of projected rate impacts over the life of the program before the Companies would stop evaluating additional programs for that integrated resource planning cycle, currently every three years. This cap, as described later on, is expressed both in absolute dollars and as a percentage of the companies’ revenue requirements. Thus, the Commission would have before it DSM proposals that include program costs, energy savings, and quantifiable impacts on customer rates, if any. The companies would be required to design programs up to the analytical cap. Any party would be free to oppose the actual implementation of any program that did not pass RIM, but the Commission would not be prevented from considering a program just because it failed RIM but provided other TRC benefits of interest to the Commission. The companies would be required to quantify the rate impact in their evaluation so that the Commission would have the best information possible to make an informed decision. One other step in this process would be to allow the Commission to authorize a pilot program for any program, including those that did not pass RIM, in order to acquire additional information about the true cost, demand and energy savings of the program.

The workgroup understood the limited resources available and worked diligently to maximize the impact of its recommendations while placing as little burden as possible on the ratepayers. The discussions were very productive and led the workgroup to some very innovative suggestions that merit additional scrutiny.

## **II. Introduction**

Neither the 2004 IRP filing for Georgia Power nor the filing made by Savannah Electric contained any new DSM programs because, the Companies contended, none were found to be cost-effective by applying the screening tests specified in the Commission’s rules and prior orders, although other parties disagreed. Georgia Power and Savannah Electric indicated in that proceeding that it remained appropriate for this Commission to use the RIM test as the final screening tool to determine whether a DSM measure should be implemented.

The Integrated Resource Planning statute requires this Commission to consider both demand side and supply-side options. In doing so, this Commission must evaluate “the economic, environmental, and other benefits to the state and to customers of the utility” associated with these various options. This suggests that these other benefits be evaluated using the TRC test which is designed to quantify these important benefits.

In the early 1990’s, the Commission approved numerous DSM programs that ultimately proved costly to non-participants and provided little system-wide benefit. In its final order in Dockets 17687-U and 17688-U the Commission found that the Primary reason for this failure was that there was no real focus or targeted objectives in approving those DSM options. Others assert that the reasons for failure were a heavy reliance on the TRC test without consideration for RIM, and unanticipated expenses associated with implementing programs without much use of preliminary pilot projects for evaluation

purposes. As a result of this failure, in its 1995 IRP Order the Commission adopted the RIM test, which virtually eliminated implementation of any DSM initiative. As the Commission noted in its July 2004 motion, the Commission went from one extreme to another. Thus, the Commission's motion and subsequent order charged the workgroup to provide recommendations that would assist the Commission in achieving a balance between rate impacts (e.g., RIM) and economic efficiency (e.g., TRC.)

Since 1995, much has changed in the electric industry that now may impact this Commission's opinion about the need for more DSM. Among other things, many states have found ways to improve and refine these DSM programs. This, along with a dramatic increase in fuel costs, makes the issue of energy efficiency one that should be more closely examined to see whether the policy that this agency supported in 1995 regarding DSM evaluation should be continued.

The Commission is seeking to find a solution that will strike a balance between economic efficiency and fairness and equity when considering implementation of DSM programs. The Commission felt that the record that was created during the hearings for these dockets has not been adequately developed in this area for the Commission to be able to find that balance.

The Commission therefore believed that a more productive way to proceed would be to form a DSM Working Group that would develop a proposed DSM initiative for the Commission to consider. Instead of the all-or-nothing approaches that were presented at the hearing, it was the sincere desire of the Commission that the Working Group develop a reasonable and credible DSM initiative.

**a. Charge from the Commission**

The Commission directed the workgroup to accomplish three tasks:

1. Bring the Commission a mix of DSM initiatives to be recommended to the Commission for approval, including detailed information regarding how each of the initiatives would be implemented;
2. Recommend a process for the selection of DSM initiatives in the future;
3. Recommendations for the need for changes to the commission's IRP rules regarding DSM or for proposed legislation.

The Commission further directed that the mix of DSM initiatives to be recommended shall be selected according the following criteria:

1. The proposed DSM Plan should minimize upward pressure on rates and maximize economic efficiency;
2. The cost/benefit analysis results of each initiative using all 3 tests (RIM, Total Resource Cost test and Participants test) shall be considered by the Working Group and shall balance between economic efficiency and fairness and equity;

3. An examination of where growth is occurring on the system shall be performed by the Working Group, which shall attempt to concentrate its recommended initiatives there. Consideration shall also be given to initiatives that encourage participation by low-income customers;
  4. In addition to traditional DSM programs, the Working Group shall consider rate design initiatives. In considering such initiatives, the Working Group should consider the cost/benefit analysis of such initiatives and the time periods that such initiatives would be available to a customer;
  5. Every effort should be made by the parties to develop innovative programs and market approaches that will prevent upward pressure on rates and subsidies between participants and non-participants; and
  6. Where appropriate, the Working Group should consider the development of pilot initiatives (limited enrollment, limited terms) as a tool to gauge initiatives.
7. The workgroup believes that the recommendations in this report and the proposed mix of DSM programs meet the Commission's requirements as set forth above.

**b. Members of the DSM Working Group**

The Commission directed that all interveners in the IRP dockets 17687-U and 17688-U would be allowed to participate as members of the workgroup. Although not all interveners chose to participate, most did. Participating interveners along with the primary representatives were:

1. Georgia Power (GPC) - Jeff Burleson, Dean Harless
2. Savannah Electric – Dick White, Matt Gignilliat
3. Southern Alliance for Clean Energy (SACE) - Jim Presswood, Rita Kilpatrick
4. Alliance to Save Energy (ASE) – Harry Misuriello, Dick Spellman
5. Georgia Environmental Facilities Authority (GEFA)-Kevin Kelly, Julia Miller,
6. Consumers' Utility Counsel (CUC) Division of the Governor's Office of Consumer Affairs – Jeanette Mellinger, Christiane Sommer, Matthew Hardy
7. Georgia Interfaith Power and Light (GIPL) – Woody Bartlett
8. Georgia Industrial Group(GIG) – Randy Quintrell
9. Georgia Textile Manufacturer's Association (GTMA) – Peyton Hawes
10. Resource Supply Management (RSM) – Jim Clarkson
11. Georgia Public Service Commission (PSC) – Jim Bottone, Dan Cearfoss, Janey Chauvet

Non-intervenors who regularly attended and participated in the Working Group discussions included Dennis Creech from the Southface Energy Institute, Tyler Newman from the Georgia Homebuilders Association, and Phil Weatherly from Georgia EMC.

### III. DSM Initiatives

The Work Group settled on four programs to offer to the Commission for adoption at this time. Each program is discussed in detail in the appendices. These four programs are designed to accomplish the goals set out in the Commission's order:

- a. The proposed statewide, "fuel neutral" **Energy Star Home Program** is directed at growth areas as it applies to new construction.
- b. The **Energy Star Appliance Program** uses market forces and market techniques to encourage the purchase of more energy efficient appliances, while establishing partnerships across the manufacturing and retail sectors.
- c. The **Duct Sealing and Infiltration Control Program** is the implementation of the only measures to pass all three screening tests and uses an innovative marketing strategy designed to minimize cost while maximizing effectiveness.
- d. The **Home Inspector Program** is an innovative program that seeks to educate home inspectors to the benefits of DSM so that they can convey additional recommendations to potential homebuyers at the time of home purchase.

### IV. Recommended Procedure for future DSM evaluation

The workgroup looked at the three screening tests run by the companies to evaluate potential DSM measures that have been adopted by the Commission. Those three tests, TRC, Participant, and RIM, have provided the basis for Commission decisions on whether to implement DSM programs since 1995. All three tests involve the projection and estimation of many costs. The Work Group is proposing a process where additional measures would be further developed for Commission consideration. To implement this process, the workgroup decided on an "analytical cap" that would apply to measures that did not pass RIM, but may offer substantial TRC benefits. It would also provide the Commission additional options in selecting appropriate DSM programs. As described earlier, the analytical cap would represent some degree of projected rate impact. The companies would be required to design DSM programs until the cumulative projected rate impact reaches the analytical cap. Any party would be free to oppose the actual implementation of any program that did not pass RIM, but the Commission would not be prevented from considering a program just because it failed RIM as is the case today. The companies would be required to quantify the rate impact in their evaluation so that the Commission would have the best information possible to make an informed decision. One other step in this process would be to allow the Commission to authorize a pilot program for any program, including those that did not pass RIM, in order to acquire additional information about the true cost of the program.

The listing of the proposed programs would rank them first by those that passed RIM, then by their TRC score. The objective was that if the Commission agreed to pursue the implementation of a program that did not pass RIM, that program should represent the least cost resources available for the system as a whole.



The Work Group did not decide where to recommend the Commission set the analytical cap. There were a range of proposed caps, from an absolute cap of 10 million dollars of rate impact to a cap of up to 1.5% of the revenues of the affected class. As of today, the 1.5% cap would equate to a rate impact of 40-50 million dollars for the commercial and residential classes. If the Commission decides to adopt the analytical cap process, the interested parties, including staff would offer their recommendation to the Commission at that time.

## V. Recommended Changes to IRP rules and Legislative recommendations

### Proposed legislative changes

In its order establishing the demand-side management working group, the Commission asked for recommendations on legislative proposals that could increase energy efficiency levels in Georgia. These proposals facilitate adoption of energy efficient appliances and equipment through traditional tax incentives and regulations tested in other states. Other proposals facilitate improved energy efficiency in state government facilities for the benefit of Georgia's taxpayers. The Commission should ask the workgroup to draft a letter for its signature to the Governor, House and Senate leaders and key committee chairmen to ask for their support in implementing these steps.

- **Sales tax “holiday” for energy efficient appliances.** This proposal establishes one or more time periods per year when energy efficient consumer products are exempt from the Georgia state sales tax. This type of tax exemption has been successfully used in other jurisdictions to assist the market for ENERGY STAR products develop. There are two periods during the year when these incentives can tie into other efforts to promote energy efficiency: October, when Energy Awareness Month campaigns are conducted; and in the spring for traditional home appliance retail promotions. This measure typically enjoys broad bi- partisan support in addition to support from the appliance retail industry and consumer groups.
- **State appliance standards.** States have authority to regulate the energy performance of appliances and equipment not covered by Federal standards. Cost-effective appliance and equipment standards have been responsible for reducing US energy consumption by 2.5 percent over the last 20 years and have provided significant consumer and environmental benefits. States have recently taken the lead in the coverage of new product categories not regulated by the Department of Energy, such as ice machines and certain cooling equipment. The states of California, Connecticut and Maryland currently set minimum cost effective efficiency requirements, soon to be joined by New Jersey. Legislation is pending in many other states with good prospects for passage. State legislation has been based on the model bill developed by the Appliance Standards Awareness Project which sets the technical requirements for 18 residential and commercial products. Many of the specifications are based on ENERGY STAR criteria.

- **Support a Georgia state energy policy.** The Commission has a legitimate interest in supporting and helping to formulate a state energy policy for Georgia. Such a policy could set measurable goals for the state to achieve in managing its beneficial use of energy over the long term. A comprehensive policy would address energy use in all sectors (buildings, transportation, and industry) and provide direction to Georgia's state agencies, local governments, institutions, businesses and industries. The Commission's primary interests are in managing current loads and future growth in the residential, commercial and industrial sectors. Beneficial demand side policies include effective building energy codes and their enforcement, upgrades of appliance and equipment efficiency, and support for voluntary market-based initiatives such as the ENERGY STAR program.
- **State facilities energy conservation goals.** The Federal government has set energy use reduction targets for government facilities through executive order. Federal facilities are required to achieve a 20 percent reduction in energy use over a reasonable period of time compared to a baseline year. A number of state governments have followed this example. Companion initiatives include purchasing and procurement policies to buy energy efficient ENERGY STAR products. A similar program in Georgia would assist the Commission in managing Georgia's energy demands.

#### **VI. Rate Structure Recommendation**

The Work Group had several discussions on possible rate design and how consumers could be given better information as to the costs to serve them during peak periods so that they could choose to lessen their demand on the system. The Work Group recognizes that rate design can itself be an important Demand Side Measure. Proper rates and the subsequent customer response can increase the efficiency of the utility system by discouraging use at the system peak and encouraging use during the off-peak periods.

GEFA supplied the Work Group with a study of energy efficiency residential rates. That study is attached as Appendix 6.

Customers should, to the extent possible and practical, receive prices that correspond to the utility's margin cost to produce and deliver power. Time sensitive rates such as TOU and RTP should be additional consideration.

While the Work Group is not advocating a specific rate design as part of this filing, the Commission should order the Companies to file possible rate structures that would enhance DSM goals as part of its IRP filing.

#### **VII. Additional Comments and Recommendations**

- The Commission should direct/encourage fuel neutral participation in DSM programs from gas companies, gas marketers, EMCs, and municipal energy suppliers.

- Some members of the DSM workgroup believe that the group should continue to meet periodically to be able to refine its procedures to bring the Commission the best, most up to date information possible and to continue to explore additional means to implement DSM in creative, market based ways that place the least burden on ratepayers as possible. Others believe the proposed new process already affords a collaborative approach since interested parties will be involved in each phase of the Companies DSM evaluation process.
- There were recommendations on revising the existing IRP rules related to information provided during program certifications, power line construction having to do with an evaluation of needs tied to DSM implementation, monetizing the value of reduced air emissions to use in the calculation of avoided costs, and others that some members of the workgroup believed fell outside the scope of the workgroup. The workgroup strived to keep a narrow focus on how best to design immediate DSM opportunities and how best to evaluate DSM in the future in order for the Commission to implement the strongest plan possible without undue cost shifting while providing for the maximum benefit to ratepayers.
- The fact that avoided costs in the Docket 4822-U order have a 5% adder for purposes of screening QFs was discussed among the group.
- The timing of the IRP filings in relation to the accounting order/rate cases was also discussed as an issue of concern to some members, however, no agreement was made on whether or how best to coordinate or adjust the timing for IRP and rate case schedules.

## **VIII. Appendices**

1. Proposed DSM evaluation process
2. Energy Star Home Program
3. Energy Star Appliance Program
4. Duct Sealing and Infiltration Control Program
5. Home Inspector Program
6. Residential Rate Structure Study

## **Appendix 1**

### **Proposed DSM Screening Process**

#### **Striving to fulfill the Commission's Final Order in the 2004 IRP Docket**

In the Final Order for the 2004 IRP Docket (Docket 17687-U), the Georgia Public Service Commission lamented the current state of debate concerning demand-side management programs in Georgia and articulated an interest in reexamining the value of demand-side management programs for Georgia's ratepayers while overcoming the mistakes of the past that "proved costly to non-participants and provided little system-wide benefit."<sup>1</sup> The Commission expressed its desire to "find a solution that will strike a balance between economic efficiency and fairness and equity when considering implementation of DSM programs."<sup>2</sup>

The Commission Order created a Demand-Side Management Working Group and charged the group with creating a DSM Plan that minimizes upward pressure on rates while maximizing economic efficiency and encompasses, among other things, a "recommended process for the selection of DSM initiatives in the future..."<sup>3</sup>

The Demand-Side Management Working Group has worked hard to fulfill these goals and, here, presents to the Commission a collaborative process and a method for future evaluation of DSM initiatives.

#### **Greater Pre-Filing Collaboration in the Future**

The Georgia DSM Working Group proposes a change to the DSM plan development process in order to allow participation by interested stakeholders in the screening and ranking process for DSM measures and programs before the official filing of the IRP with the Georgia PSC. Here are the proposed changes:

1. Utilities filing IRPs will meet with interested stakeholders at least three times, as the DSM portion of the IRP is developed, to solicit input from these stakeholders, as follows:
2. Approximately 18 months before the official IRP filing date by the utilities, the Companies will gather input from interested stakeholders on DSM measures and programs that should be included in the DSM measure and program screening process and to gather input on costs, useful lives, energy savings, and maximum achievable market penetration of these measures and programs;

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<sup>1</sup> "Final Order." Georgia Public Service Commission. July 9, 2004. Page 20.

<sup>2</sup> Ibid. Page 20.

<sup>3</sup> Ibid. Pages 36 & 37.

3. Approximately 12 months before the official IRP filing date, the Companies will meet with interested parties to review initial results of all cost effectiveness screening results for DSM measures. At this point in the process, the parties may agree to adjust the “analytic” cap, as proposed below (see note (3)(b)(iv) below); and
4. Approximately 6 months before the official IRP filing date, the Companies will meet with interested parties to review initial results of all cost effectiveness screening results for DSM programs (where cost effective measures have been bundled into programs).

### **DSM Screening Process for the Future**

The DSM Working Group’s proposed DSM Screening Process for the Future outlines a new process by which the Companies will evaluate DSM measures and programs and present the results of this evaluation to the Commission in their IRP filing. The DSM Screening Process for the Future consists of the following steps<sup>4</sup>:

1. **Review of Significant Events Since Previous IRP Filing:** The Companies will describe significant events that have taken place with DSM since the previous IRP filing.
2. **Demand-Side Resource Assessment and Initial Cost Screening:** The Companies will conduct a demand side resource assessment and initial cost screening, which will consist of several components.
  - a. First, the Companies will present the results of their **comprehensive review** of available demand-side management technologies / measures. The Companies report how many residential and non-residential demand-side measures they have identified for consideration.
  - b. Next, the Companies will conduct a **qualitative screening**, evaluating whether the identified DSM measures are commercially available in their service territory, whether the measures are appropriate for their customers, whether the technology is premature, etc. Based on this screening, the Companies will exclude all measures they consider unworthy of further analysis.
  - c. Lastly, the Companies will conduct an **economic screening** of the remaining measures, calculating the energy consumption and energy savings potential for each individual DSM measure. This permits the Companies to calculate the costs and benefits for a single installation of each DSM measure. The Companies will then use these costs and benefits to score each measure according to the Participant Test, the Total Resource Cost (TRC) test, the Rate Measure (RIM) test and the Societal Cost Test, as required by PSC rule 515-3-4.04.

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<sup>4</sup> Note: Steps 1 through 2(c) are the same as the current process.

### 3. Demand-Side Program Development:

- a. After the Companies have conducted the economic (cost – benefit) screening of DSM measures, they will rank both the list of residential and the list of non-residential measures with measures that pass both TRC and RIM at the top of the list followed immediately by a ranking of measures based on TRC benefits of the DSM measures.
- b. The Companies will then develop DSM program budgets starting with the first measure on the list, going sequentially down the list.
  - i. The Company will diverge from a strict sequential approach in instances where the bundling of measures (that do not appear sequentially) makes programmatic and economic sense.
  - ii. For each program, the Companies will list (1) the absolute dollar value of net present value from the TRC test for the program and (2) the absolute dollar value of net present value from the RIM test for the program (considering expected levels of participation for the program), and will indicate what the long-term percentage rate impact is for the program with respect to the Companies’ commercial and residential retail revenues over the life of the DSM measures in the program. DSM Working Group members accept the premise that the “program eligible class” should cover the costs for any DSM programs. Since the Commission instructed the Working Group to address DSM initiatives for the commercial and residential classes, the Working Group proposes that cost recovery for the programs be limited to the commercial and residential classes.
  - iii. The Companies will continue to conduct this sequential analysis, keeping a running total of the absolute dollar value of the net present value of TRC benefits and RIM impacts for all proposed DSM programs and the percentage that absolute dollar value of RIM impact represents with respect to the Companies’ commercial and residential retail revenues. The “percent rate impact” figures will be calculated over the useful life of DSM measures in the program.
  - iv. To limit the additional amount of work and analysis that is required to prepare the DSM portion of future IRPs, the Companies will stop its DSM program cost analysis once the running total of absolute dollar value of RIM impacts, for all proposed programs, hits a prescribed cap. DSM Working Group members differed in opinion about the appropriate level at which to set this “analytic” cap. Georgia Power proposes the cap be set at \$10 million of upward rate impacts. Other parties proposed setting the cap at either 1% or 1.5% of total retail revenues for the commercial and residential classes. One percent of the retail revenues for the commercial and residential classes amounts to roughly \$36 million, while 1.5% amounts to roughly \$53 million.

- c. The Commission should use the list of proposed DSM programs, listed with associated long-term rate impacts, to determine which programs it deems appropriate to recommend pursuing for certification or approval, based on its determination of a balance between supporting demand-side management measures and minimizing upward pressure on rates.

An example of this analysis is presented in the attached spreadsheet. All of the long-term TRC benefits and RIM impacts values listed are hypothetical figures for demonstration purposes only.

## **Appendix 2**

### **2004 IRP – DSM Working Group Energy Star Home Program February 2005**

#### **General Discussion**

The Energy Star Home program will be a statewide program with all electric utilities, including investor owned utilities, electric membership corporations (“EMC”) and municipalities and gas utilities able to opt-in as the market develops. For purposes of this document, the entities listed above participating in the Energy Star Home program will be collectively referred to as “Utilities.” The Georgia Public Service Commission (“Commission”) should encourage, or direct, gas distribution companies to participate so that a “fuel neutral” program that leverages natural market forces evolves. A fuel neutral Energy Star Home customer awareness campaign would be supported by those Utilities either directed or wishing to participate. Support from non-regulated Utilities for the Energy Star Home customer awareness campaigns is voluntary. The main goals of this program are to:

1. Increase the number and penetration of ENERGY STAR Homes in Georgia;
2. Acquire cost effective electric and gas energy savings for Georgia;
3. Increase consumer demand for ENERGY STAR Homes through public education and ENERGY STAR Homes awareness activities; and
4. Increase realtors and lenders’ understanding of the benefits of ENERGY STAR Homes.

Georgia Power Company (“Georgia Power”) and Savannah Electric and Power Company (“Savannah Electric” – collectively, the “Companies”) will take a leadership position with other Utilities and work to raise Energy Star customer awareness. The Companies will also work with builders, realtors and Energy Star inspectors to develop an Energy Star Home program concept which promotes Energy Star Home energy efficiencies for homes that have heat pumps and electric water heating. The Companies’ programs will serve as a leadership example to other Utilities in the state, and the Companies will actively reach out to other Utilities and encourage them to participate and coordinate program offerings.

The development of the initial program design will consider features commonly found in other successful Energy Star Home programs currently operating in other states (including efficient home design, efficient space and water heating systems, energy efficient air conditioning, efficient appliances and efficient home lighting). The initial program implementation would seek to have 1,000 and 50 Energy Star homes (with heat pumps and electric water heating) completed in Georgia Power’s and Savannah Electric’s (respectively) territory in the first two years. The Companies will provide funding of \$300 per single family home to the builder for assisting to have the heat pump/electric



water heater home certified as an Energy Star Home. This assistance with the cost of the Energy Star certification would be in addition to any standard heat pump incentives that are available. The ultimate owner of the Energy Star home will receive the bill savings associated with the energy usage reductions associated with an Energy Star home. A program evaluation will take place during the first two years. The evaluation results would then be used during and after the two-year period to assess the program and guide any needed changes.

In addition to raising customer awareness, as part of the Energy Star Home program the Companies will: 1) assist home builders in understanding the Energy Star Home energy efficiency requirements and Energy Star Home building practices; 2) assist realtors in understanding the Energy Star Home energy bill saving potential (for reinforcement to potential buyers of the home); and 3) train additional Energy Star Home inspectors to support the increase of Energy Star homes in Georgia. Overall, the program will assist home builders and buyers in designing and constructing homes that use at least 15% less energy than homes built to the current Georgia energy code standards.

Savannah Electric will also sponsor an Energy Star demonstration home during the Parade of Homes in 2005 and will continue this participation in encouraging the benefits of Energy Star to builders throughout the year through such events as the Home Builders Show.

The statewide program should also make provisions to accommodate existing local programs such as the Southface Earth Craft Home program. Earth Craft Homes typically perform at ENERGY STAR Home levels, but also include other “green” and environment-friendly features that appeal to certain customer groups. Therefore, the Energy Star Home program should augment the Earth Craft home and the market momentum it has already created.

### **Qualifying Homes**

Homes can qualify as Energy Star through a:

- Home Energy Rating System (“HERS”) Rating, or
- Builder Option Packages (“BOP”) Rating

**HERS Rating** – the HERS rating is an evaluation of the energy efficiency of a home, compared to a computer-simulated reference house (of identical size and shape as the rated home) that meets minimum requirements of the Model Energy Code (“MEC”). The HERS rating results in a score between 0 and 100; with the reference house assigned a score of 80. From this point, each 5 percent reduction in energy usage (compared to the reference house) results in a 1 point increase in the HERS score. Thus, an Energy Star qualified new home, required to be at least 30% more energy-efficient than the reference house, must achieve a HERS score of at least 86. HERS ratings are conducted by third-party HERS raters.

HERS ratings involve the analysis of a home's construction plans, and at least one on-site inspection of the home. The plan review allows the HERS rater to attain technical information such as orientation, shading area, proposed Seasonal Energy Efficiency Ratio ("SEER") rating, insulation levels, etc. The on-site inspection includes a blower door test (to test the leakiness of the house) and a duct test (to test the leakiness of the ducts). Results of these tests, along with inputs derived from the plan review, are entered into a computer simulation program to generate the HERS score and the home's estimated annual energy costs.

**BOP Rating** – a BOP represents a set of construction specifications for a specific climate zone. BOPs specify performance levels for the thermal envelope, insulation, windows, orientation, heating, ventilating and air conditioning ("HVAC") system and water heating efficiency for a specific climate zone that meet the Energy Star standard (for the purposes of using BOPs, the U.S. has been divided into 19 separate climate zones).

Though constructing a home to BOP specifications negates the need for a full customer HERS rating, third-party verification that BOP requirements have been met is still necessary. Similar to HERS ratings, BOP ratings typically entail at least one on-site inspection of the home to test the leakiness of the envelope and ducts. However, unlike the HERS rating, the score derived from these tests is compared with the pre-determined specifications of the BOP to either pass or fail the house as an Energy Star qualified new home.

### **Education and Training**

Education and training activities will be a critical component of the ENERGY STAR Homes program. Significant cost savings can be obtained by providing the workshops, seminars and other trainings on a statewide scale, across utility service areas. Allies include homebuilders, mortgage lenders, realtors, building inspectors, insulation contractors, HVAC contractors and distributors, and building supply retailers. The overall marketing message is that ENERGY STAR Homes are energy efficient, high performance homes that are nationally recognized by the Environmental Protection Agency for greater value, lower operating costs, superior durability, comfort, and safety.

Strategies for reaching the homebuilder and building subcontractor audience could include:

- Establish partnerships with builder associations in Georgia (e.g. Greater Atlanta Home Builder's Association and the Georgia HBA) to achieve early buy-in and ongoing coordination of marketing and education and training activities;
- Provide onsite instruction/training for builders and their subcontractors;
- Conduct workshops and seminars including comprehensive ENERGY STAR Builder workshops as well as focused trainings on insulation, ventilation, HVAC, and marketing techniques; and
- Provide case studies and articles for builder association newsletters /magazines as well as for local and statewide press releases.

Strategies for reaching new home purchasers, real estate and possibly mortgage lender professionals could include:

- Public awareness campaign focusing on home and trade show exhibits, open-house tours, radio and print ads, trade journal ads, and consumer brochures;
- Coordination with realtor multiple listing service (MLS) to denote “ENERGY STAR Home” and/or HERS ratings;
- Conduct workshops and seminars that focus on such topics as technical overview of ENERGY STAR Homes and marketing techniques for selling ENERGY STAR Homes; and
- Promote program at “First Time Buyers Seminars” sponsored by local banks and possibly include local builders and contractors.

### **Marketing Plan**

Program marketing could include direct builder outreach, targeted mailings (postal system and e-mail), public relations activities, home and trade show exhibits, billboards, radio and print ads, trade journal ads, information on utility web sites, open-house tours, builder and homebuyer seminars, bill stuffers, and consumer brochures. The program will be co-branded with the national ENERGY STAR Homes effort.

### **Staffing**

The participating utility companies will decide how best to staff this program and deliver services. However, sufficient resources will be allocated to meet the program objectives. The use of contractors is anticipated for technical training.

### **Evaluation Plan**

An evaluation plan for the ENERGY STAR Homes program will be developed and will include some or all of the following components:

- Impact Evaluation;
- Process Evaluation;
- Market Assessment and Evaluation (including an analysis of the current penetration of ENERGY STAR Homes in Georgia by participating utility service area);
- Builder and subcontractor focus groups;
- Home buyer survey and/or focus groups;
- Review of Penetration Curves;
- Development of Incremental Cost Information; and
- Development of a cost-effectiveness analysis (Participants Test, Rate Impact Measure test and Total Resource Cost test).

### **Program Budget**

The expected program budget for the first two years will be capped at \$1,500,000 for Georgia Power with the actual expensed amounts depending on the successfulness of the marketing campaign and the program evaluation costs. Program budget dollars can be shifted to accommodate additional Energy Star certification fee payments to builders if the program is more successful than expected. Also, if the program exceeds expected levels of penetration early in the two year pilot phase, the Companies can seek additional funding from the Commission.

Expected annual energy cost savings for a customer with an Energy Star home is about \$150.00.

### **Program Schedule**

The program implementation will begin once the Commission approves the program plan. The following table provides an expected schedule for the major program activities.

<b>Program Activities</b>	<b>Expected Schedule</b>
Develop Program Materials	March – June 2005
Work with Other Utilities	May 2005
General Awareness Campaign	June 2005
Work Shop for Realtors	July 2005
Work Shop for Builders	July 2005
Training for Energy Star Certifiers	March 2005 – December 2007
Program Evaluation (1)	May 2006 – December 2007
Program Results Filing (2)	April 2008

Notes:

- (1) The program impact evaluation should start when there is a large enough sample (probably when there are 50 to 100 Energy Star homes). The process evaluation can be ongoing from the beginning of the implementation of the program.
- (2) After the program evaluations have been completed, the results of the evaluation along with suggested program modifications should be filed with the Commission

### **Cost Effective Analysis**

The Energy Star Home Program is expected to pass the Participants Test, the Rate Impact Measure test and the Total Resource Cost test, however, the program evaluation at the end of the two years will determine the cost effectiveness of the program.

## Appendix 3

### **2004 IRP – DSM Working Group Energy Star Appliance Program February 2005**

#### **General Discussion**

Georgia Power Company (“Georgia Power”) and Savannah Electric and Power Company (“Savannah Electric”) will work with ENERGY STAR® Appliance program managers at the Department of Energy (“DOE”) and the Environmental Protection Agency (“EPA”) to educate retailers, consumers and others (as identified) on the energy bill savings associated with ENERGY STAR appliances. Additionally, Georgia Power will actively reach out to ENERGY STAR appliance manufacturers and retailers to increase awareness of their customers on any manufacturer rebates or coupons they may have available for ENERGY STAR appliances. This would be accomplished through means such as bill stuffers and possibly through brochures and material supplied to retailers for dissemination to their customers. Georgia Power will take a leadership position on ENERGY STAR promotion in Georgia as part of the Southern Company’s system-wide partnership agreement with EPA and DOE. The main goal of this program will be to increase the market penetration of ENERGY STAR appliances in Georgia, particularly for those appliances where the ENERGY STAR penetration is currently below 50 percent.

The ENERGY STAR Appliance program will be a statewide program throughout Georgia with electric utilities (investor owned utilities (“IOUs”), electric membership corporations (“EMCs”) and municipals (“MUNIs”)) and gas utilities able to opt-in as the market develops. The Georgia Public Service Commission (“Commission”) should encourage, or direct, gas distribution companies to participate so that a “fuel neutral” program that leverages natural market forces evolves. It is important that both regulated electric and natural gas companies will offer the same program statewide to avoid market confusion that will affect manufacturer, retailer, and customer participation. There will also be economies of scale in the public awareness campaign and potential training of retailer sales staff. For example, the electric and gas utilities can pool resources to defray costs while ensuring that all retailers and consumers receive the same information and marketing materials.

A fuel neutral ENERGY STAR Appliance public awareness campaign would be supported by those utilities who participate. Support from non-regulated electric and natural gas utilities for the ENERGY STAR Appliance public awareness campaign is voluntary, and utilities may choose to participate only in the public awareness campaigns. The main goals of this program are to:

1. Increase the penetration of ENERGY STAR appliances sold in Georgia;
  2. Acquire cost effective electric and gas energy savings and at least in the case of the Energy Star clothes washer and dishwasher, some water savings for Georgia;
- and

3. Increase consumer demand for ENERGY STAR appliances through public education and ENERGY STAR awareness activities.

## **Introduction**

The overarching goal of the ENERGY STAR Appliance program is to develop the manufacturer and retailer infrastructure and consumer demand to increase the availability and awareness and sales of ENERGY STAR appliances. In support of this overarching goal, the following specific goals have been identified:

- Increase consumer demand and purchase of ENERGY STAR appliances;
- Maintain strong sales of ENERGY STAR appliances to provide impetus for improved federal appliance standards; and
- Increase retailer and manufacturer promotion of ENERGY STAR appliances.

The ENERGY STAR Appliance program's initial two year phase will be designed to support the development, introduction, sale and use of energy efficient refrigerators, freezers, room air conditioners, dishwashers, clothes washers, dehumidifiers, and consumer electronics (e.g., computers, TVs, VCRs, DVD players). The overall goal is to create and sustain positive change in the residential appliance market, increasing availability, consumer acceptance, market penetration, and use of energy efficient appliances that have the ENERGY STAR label.

The major barriers to be addressed by the ENERGY STAR Appliance program can be summarized as follows:

- First cost premium;
- Lack of consumer awareness of ENERGY STAR appliances; and
- Lack of retailer/supplier interest in and support for ENERGY STAR appliances.

The ENERGY STAR Appliance program's intervention strategies will have elements designed to overcome many of these barriers by:

### Addressing first cost premium through:

- Providing communication to customers in support of manufacturers' product rebates and other sales incentives; and
- Demonstration and promotion of ENERGY STAR appliances' economic benefits by featuring life-cycle costing.

### Addressing lack of consumer awareness through:

- Comprehensive marketing/consumer education campaign;
- Point-of-sale displays and materials; and
- Encouragement of manufacturer labeling of products.

### Addressing lack of retailer/supplier interest through:

- Product and program training; and
- Point-of-sale displays, materials and demonstrations.

Table 1.1 presents 2001 saturation rates for major appliances as reported in the Energy Information Administration's ("EIA") 2001 Residential Energy Consumption Survey ("RECs") for the South Atlantic Region. In addition, market share of ENERGY STAR appliances in Georgia is shown for the first three quarters of 2004.

**Table 1.1 Appliance Saturation and ENERGY STAR Market Penetration in Georgia**

<b>Appliance</b>	<b>Current Appliance Saturation in South Atlantic Region<sup>1</sup></b>	<b>2004 ENERGY STAR Market Penetration<sup>2</sup></b>
Clothes Washers	85%	20.5%
Refrigerators	84%	29.0%
Freezers	33%	n/a
Dishwashers	58%	81.8%
Room A/C	14%	25.1%
Dehumidifier	6%	n/a

Sources: 1) 2001 EIA Residential Energy Consumption Survey  
 2) 2004 Energy Star Sales Data (Combined first three quarters of 2004)

Successful implementation of this program is expected to result in an increase in the penetration of energy efficient residential appliances.

The Georgia ENERGY STAR Appliance program will be administered by electric and gas utilities within their respective service territories. This program will be implemented first in the service area of Georgia Power.

The statewide program should also make provisions to leverage national and regional ENERGY STAR public awareness campaigns as well as any local initiatives that may target energy efficient appliances. The ENERGY STAR national appliance program includes an annual promotion campaign beginning April 15 and going through July 15 with the ENERGY STAR appliance manufacturer partners possibly providing:

- local promotions;
- national media campaigns;
- in-store events;
- product buy-downs or discounts;
- product rebates;
- sales promotion support;
- retail training; and
- incentives to retailers.

Georgia's regulated and non-regulated utilities can work with the ENERGY STAR manufacturers by providing assistance in promoting customer and retailer awareness on ENERGY STAR appliances and the timing of ENERGY STAR manufacturers' promotional campaigns.

## **Target Market**

The target market includes Georgia consumers and residential appliance manufacturers, distributors, retailers.

## **Targeted End Uses and Recommended Technologies**

The ENERGY STAR Appliance program seeks to reduce the amount of water, electricity and gas used in homes for washing clothes, refrigeration, automatic dishwashing, consumer electronics, dehumidification, air conditioning and heating. The technologies are ENERGY STAR clothes washers, refrigerators, freezers, dishwashers, consumer electronics, dehumidifiers, and room air conditioners/heat pumps. Georgia Power, in cooperation with other participating gas and electric utilities, will pursue cooperative promotions with retailers and manufacturers of ENERGY STAR appliances.

## **Education and Training**

Education and training activities will be an important component of the ENERGY STAR Appliance program. Significant cost savings can be obtained by providing the consumer education and retailer trainings on a statewide scale, across utility service areas. Approaches from successful regional programs in other areas will be considered when developing initial consumer education and retail sales staff training. A combination of sales videos, on-line educational material, and in-store training will be considered. The overall marketing message, as stated on the EPA website, is:

ENERGY STAR qualified appliances incorporate advanced technologies that use 10-50% less energy and water than standard models. The money you save on your utility bills can more than make up for the cost of a more expensive but more efficient ENERGY STAR model.

Strategies for reaching the manufacturers, distributors and retailers could include:

- Leverage EPA's marketing and public awareness resources in order to immediately offer a known "brand" to manufacturers and retailers;
- Establish partnerships with manufacturers and retailers who have experience with ENERGY STAR appliance campaigns in other regions of the country to achieve early buy-in and recruitment of industry "champions" in Georgia market; and
- Provide onsite training for retail sales staff.

Strategies for reaching consumers could include:

- Public awareness campaign focusing on radio and print ads, bill stuffers, point-of-purchase displays, and consumer brochures;
- Coordinate with Georgia public service campaigns and associated announcements that relate to environmental issues and energy conservation;



- In conjunction with the ENERGY STAR Homes program, promote ENERGY STAR appliances at “First Time Buyers Seminars” sponsored by local banks and retail partners; and
- In conjunction with the Home Inspectors Program, promote ENERGY STAR appliances to new home buyers who may be in the market to replace or purchase new appliances.

### **Marketing Plan**

Marketing activities for the ENERGY STAR Appliance program in Georgia will involve a multi-utility marketing effort that may include:

- A comprehensive public relations and advertising campaign that features television advertising; local newspaper and regional magazine print advertising; point-of-sale materials that are coordinated with the other advertising; and a variety of public relations activities;
- Coordination with the federal ENERGY STAR annual campaign; and
- Support to appliance retailers which could include recruitment into the program; sales representative training; regularly scheduled maintenance visits to retailers; distribution of point-of-sale materials directed to consumers; and support for special promotional events.

### **Staffing Plan**

The participating electric and gas companies will decide how best to staff this program and deliver services. However, sufficient resources will be allocated to meet the program penetration targets. The use of contractors is anticipated for technical training.

### **Evaluation Plan**

The focus of an evaluation plan will be on the development of statewide market progress reports to provide timely feedback on the status of the market and the progress made toward meeting the program's goals and objectives. Rather than comprehensive market assessments conducted every few years, these progress reports should be more brief and conducted frequently (i.e., semi-annually). Each report will address the current status of program activity plus selected program aspects such as information on the tracking of market indicators; customer awareness and understanding of ENERGY STAR brand and labeling; surveys and research to support performance targets established by the participating utilities; or feedback on the effect of changes in program design on market response, such as changes in marketing materials and approaches or promotional rebate levels.

An evaluation plan for the ENERGY STAR Appliance program will be developed and will include some or all of the following components:

- Market Assessment and Evaluation (including an analysis of the current penetration of ENERGY STAR appliances in Georgia);
- Ongoing estimates of market share for ENERGY STAR appliances;

- Consumer awareness and knowledge survey;
- Retailer survey;
- Review of penetration curves;
- Annual reporting; and
- Development of Incremental Cost Information.

### **Market Indicators**

To assess the initiative's progress, the following market indicators should be considered for potential monitoring:

- Market share - percent of market share of ENERGY STAR appliances;
- Price changes - average incremental prices of ENERGY STAR appliances;
- New products - additional number of manufacturers/products joining the program;
- Awareness/attitudes - the percentage of consumers aware of Energy Star appliances;
- Common practice - percent of new homes with Energy Star appliances; number of large residential users that specify Energy Star appliances;
- Leverage of investment - regional marketing support provided by manufacturers; and
- Adoption of labels, codes or standards - upgrading of federal appliance efficiency standards and simultaneous upgrade of Energy Star specifications.

### **Program Budget**

Georgia Power's budget for the initial two year plan will be \$400,000.

### **Proposed Schedule**

The program implementation will begin as soon as it is approved by the Commission. The following table shows the schedule for the major program activities:

<b>Program Activities</b>	<b>Expected Schedule</b>
Develop Program Materials	March – June 2005
Work with manufacturers and retailers	April - July 2005
Set Up Reporting Requirements	July 2005
Program Evaluation	April 2005 – December 2006
Program Evaluation Report Filing	April 2007

### **Cost Effective Analysis**

The ENERGY STAR Appliance program is expected to pass the Participants Test and Total Resource Cost test but fail the Rate Impact Measure test. However, Georgia Power considers it important customer service to increase customer awareness on energy efficiency and ENERGY STAR. Therefore, Georgia Power is providing annual funding of \$200,000 to assist in increasing customer awareness specific to ENERGY STAR appliances.

## **Appendix 4**

### **2004 IRP – DSM Working Group Duct Sealing and Infiltration Control Program February 2005**

#### **General Discussion**

The only two measures that passed all three economic tests (Participant Test, Rate Impact Measure (“RIM”) test and Total Resource Cost test) from the Georgia Power Company’s (“Georgia Power”) updated analysis<sup>5</sup> were Duct Sealing (\$40 in RIM net benefits) and Infiltration Control (\$21 in RIM net benefits) on gas heated homes. These two measures are currently contained in Georgia Power’s energy efficiency informational programs, and Georgia Power will continue to educate its customers on benefits of these two measures. These measures might also be good candidates for an affinity group marketing campaign described below.

Further analysis of these measures shows that the older the home the more benefit there is in making the improvement (both to the customer and to the Georgia Power system). However, even in older homes there is not enough RIM benefit to cover the additional cost of marketing, promotion and administration of a traditional demand side program. Therefore, an innovative approach is needed.

#### **Affinity Group Marketing Approach**

Members of certain affinity groups such as Georgia Interfaith Power and Light (“GIPL”) have an interest in implementing energy efficiency. An affinity group marketing concept will be implemented to leverage GIPL and at least one other affinity group’s communication and marketing channels. Specifically, the affinity groups will promote duct testing and sealing and infiltration control to their membership through their newsletters, workshops, and other communication channels.

The programs will target homes that are 10 years old or older and use the affinity groups as marketing channels. Georgia Power will provide energy efficiency information materials to be distributed by the affinity groups and for the initial two years, will pay the affinity groups \$25 for each Georgia Power customer who makes an improvement in duct sealing or duct sealing and infiltration control to their home as long as the home is 10 years old or older. The affinity group may be able to obtain discount pricing from duct sealing and infiltration control contractors for their members by aggregating homes and seeking competitive bids. This will even further improve the cost-effectiveness to their respective members.

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<sup>5</sup> See the October 14, 2004 Compliance Filing in Docket No. 17687-U, Georgia Power Company’s 2004 Integrated Resource Plan.

Utilization of this innovative approach to energy-efficiency will ensure that the economic benefits of duct testing and sealing and infiltration control are cost-effectively captured. The affinity groups will be able to promote these cost-effective demand side management (“DSM”) measures to those customers who already have demonstrated a strong propensity for energy efficiency through their affinity membership.

**Proposed Budget**

The budget for this program over the next two years is not expected to exceed \$300,000 with most of the cost being associated with customer education materials and rebates for successful improvements being made.

**Proposed Schedule**

The program implementation will begin as soon as it is approved by the Georgia Public Service Commission. The following table shows the schedule for the major program activities.

<b>Program Activities</b>	<b>Expected Schedule</b>
Develop Program Materials	March – June 2005
Work Shops with Affinity Groups	July 2005
Set Up Reporting Requirements	July 2005
Program Evaluation	January – December 2006
Program Evaluation Report Filing	April 2007

**Cost Effective Analysis**

The Duct Sealing and Infiltration Control Program is expected to pass the Participants Test, the Rate Impact Measure test and the Total Resource Cost test;. The program evaluation that will be conducted after the first two years will assess the actual cost effectiveness of the program as well as the ongoing feasibility of keeping the marketing payment at the \$25 level.

## Appendix 5

### **2004 IRP – DSM Working Group Home Inspector Pilot Program February 2005**

#### **General Discussion**

Home inspectors are typically hired to inspect homes prior to home purchases. As a pilot, Georgia Power Company (“Georgia Power”) and Savannah Electric and Power Company (“Savannah Electric”; or collectively, the “Companies”) would initially work with a couple of the larger Home Inspection companies (in their respective service territories) to implement a two-year energy efficiency program in conjunction with typical home inspections in the Companies’ service territories.

The program would train the home inspectors to identify energy efficiency improvement opportunities for resale homes and include energy efficiency recommendations to potential buyers. The program might be associated with the Energy Star Home Performance program. Special emphasis will be placed on duct sealing and infiltration control as part of the home inspectors’ energy efficiency home audit. Additionally, the home inspector can increase customer awareness to the potential home buyers on Energy Star appliances in case new appliances might be bought at the time of home purchase and/or move-in.

During the two years, the program will be evaluated for process implementation and to determine if customers are making any improvements or Energy Star appliance purchases as a result of the home inspector’s recommendations.

**Goal:** The goal of this pilot is to explore using home inspectors (“HI”) as a vehicle to promote energy efficiency in existing homes and to increase the penetration of ENERGY STAR appliances. Home inspections are a nearly universal practice when a house is being purchased, and the HI is hired by the prospective buyer as a trusted source of technical information about the property’s structure and systems. A description of the condition and age of many appliances is a standard part of the HI’s report, and this represents an opportunity to educate the homebuyer on the advantages of home energy efficiency and ENERGY STAR products. There is probably no better time to educate homeowners about energy efficiency than at the time of a home inspection. Homebuyers have a keen interest in the condition and operation of their residential building systems.

**Elements:** The pilot program would incorporate the following elements;

- Investigate the HI industry in Georgia in order to determine the best partner(s) to use as conduit to HIs. This is most likely to be either trade groups, such as the Georgia Association of Home Inspectors, or franchises. The decision should be made on the basis of responsiveness to the concept, ability to engage an adequate force of HIs, and concern/commitment to energy efficiency.

- Identify list of features/appliances to cover in the pilot. (e.g. – furnace, boiler, air conditioner, refrigerator, dishwasher, windows.) Information distributed to homebuyers will tie in to current utility efficiency programs.
- Develop training curriculum, and train HIs on the program concept, inspection techniques, information delivery and advantage/value of appropriate ENERGY STAR products.
- Develop program promotional materials for HIs to distribute during inspection visits.
- Monitoring/evaluation. Build process and effectiveness evaluation into program design.

Savannah Electric will address the Home Inspector Pilot Program by implementation of a version of the Home Inspector program with characteristics of incentives to the home inspector as the inspectors provide energy audit information both to the Company and to the homeowner and will continue to monitor other aspects of the program as they are implemented statewide for possible incorporation into the Savannah Electric program.

**Incentives:** Incentives might be necessary to get HI participation, at least at the pilot stage. The following options that can be explored:

- Pay a \$25 incentive to the HIs based on customer participation, at least for ENERGY STAR products and/or duct sealing improvements for ducts in unconditioned space.
- Pay HIs \$25 per inspection for which they complete an appliance inspection and energy audit form, with copies to the utility. This form could also be used to contact the new homeowner after a period of time, to determine if they have in fact upgraded any appliances to ENERGY STAR or implemented any other efficiency recommendations.

### **Education and Training**

Specialized training for participating HI's may be required. The HI's are familiar with residential building systems and appliances, but may need special training in adapting the home inspection procedure to include identification of opportunities for energy efficiency features. The scope of the training will include:

- Overview of energy efficiency survey techniques
- Energy-efficient HVAC systems and controls (i.e., thermostats)
- Duct sealing
- Energy-efficient ENERGY STAR appliances and equipment
- Water heating systems
- Insulation
- Energy-efficient windows
- Weatherization and infiltration control
- Energy-efficient lighting (permanently-installed and cord-connected)

- Promotion of available electric and gas utility services and efficiency programs such as duct sealing, available ENERGY STAR appliance discounts, available energy tariffs, more detailed energy audits and so forth.
- Preparation of a uniform energy efficiency report for the homebuyer.
- For uniformity of information and economies of scale, the training can be offered jointly by participating electric and gas utilities, most likely through a specialized training organization. If possible the training course will be designed to award continuing education credits to participants. The training curriculum will address both electric and gas use on a fuel-neutral basis.

### **Marketing Plan**

As a pilot program, the home inspection information program will be marketed differently than a full-scale program available to all participants. The marketing plan will have two main components: recruiting HIs to participate in the pilot program; and marketing expanded home inspection services to home-buying clients during the pilot.

- **Recruiting participating home inspectors.** As mentioned earlier, participating home inspectors will be selected by working with the Georgia Association of Home Inspectors (GAHI) and/or with a franchised home inspection service. This is in order to test the pilot concepts with HI organizations that have standardized procedures and uniformly trained staff. Variability in delivery of the service will be minimized. Participating utilities will select suitable and willing HI firms and negotiate terms of participation. The participating HI's will go through the training course described above.
- **Marketing the service to homebuyers.** The expanded home inspection service for energy efficiency will be offered as an addition to the standard home inspection. The participating HI organization, working with the participating utilities, will negotiate and develop a marketing plan that will address the following points:
  - Offering the service to all or part of the HI's customers;
  - Developing an approach to sell the concept to realtors and address their concerns;
  - Fees for the service paid as a utility incentive to the HI, or directly to the HI as an add-on fee to the customer - in a pilot project, homebuyer participation will likely be higher if there is no additional cost to the homebuyer;
  - Marketing literature and brochures, including information on the features and benefits of the HI service and information on related utility efficiency programs; and
  - Design of energy efficiency reports presented to the homebuyers



## **Staffing**

The Companies will decide how best to staff this program and deliver services. However, sufficient resources will be allocated to meet the pilot program objectives. The use of contractors is anticipated for technical training.

## **Evaluation Plan**

An evaluation plan for the home inspection pilot program will be developed and may include some or all of the following components:

- Impact or effectiveness evaluation, based on the homebuyers' adoption of efficiency measures.
- Process evaluation, based on an assessment of service delivery, HI feedback and homebuyer satisfaction.
- Market assessment and evaluation (including an analysis of potential market penetration for the service in Georgia by utility service area)
- Home inspector debriefings and interviews,
- Homebuyer satisfaction survey and/or focus groups,
- Development of incremental cost information for delivering the HI service and costs of measures adopted by homebuyers , and
- Development of a cost-effectiveness analysis (Participants Test, Rate Impact Measure test and Total Resource Cost test).

## **Program Budget**

The expected program budget for Georgia Power for the pilot program will be \$300,000. The budget details will be worked out by participating utilities. The budget will cover the following major items:

- Incentives to participating HI's of approximately \$25 per inspection;
- Development and production of marketing materials and brochures;
- Initial technical training and follow-up workshops;
- Tracking adoption rates on efficiency measures by homebuyers; and
- Program impact and process evaluations

The HI program is expected to process 2,000 efficiency survey during the pilot. Experience in other similar programs shows an average energy use reduction of 9% for electricity and 16% for natural gas. Homebuyers have spent about \$300 on average for efficiency improvements and, as a group, implement at least some recommended measures in 50%-60% of the cases.

## **Program Schedule**

The program implementation will begin once the Commission approves the pilot program plan. The following table provides an expected schedule for the major program activities.

Program Activities	Expected Schedule
Recruit and negotiate home inspector organizations	March – June 2005
Develop HI training course and materials	March - July 2005
Offer training to HI's	August 2005 – October 2005
Operate pilot program and track performance	August 2005 – December 2007
Program Evaluation	January – December 2006
Program Evaluation Results Filing	April 2007

**Cost Effective Analysis**

The Home Inspectors Program is expected to pass the Participants Test and Total Resource Cost test but fail the Rate Impact Measure test. However, Georgia Power considers it important customer service to increase customer awareness on energy efficiency and ENERGY STAR. Therefore, Georgia Power is providing funding of \$300,000 to assist in increasing customer awareness specific to energy efficiency improvements and Energy Star appliances through the Home Inspectors work.

## **Appendix 6**

### **The Status of Energy Efficiency Rates In the United States in 2004**

Prepared for

Georgia Environmental Facilities Authority  
and  
Southface Energy Institute

By

Jane Price Hill  
and  
Susan M. Zinga

September 14, 2004

#### **Status of Energy Efficiency Rates in the United States in 2004**





Electric utility rates are aimed at recovering “costs to serve.” Because much of a utility’s fixed cost is incurred in generating, transmission and distribution facilities, utilities may concentrate on providing incentives to constrain peak electric demand growth. While the incentives may be termed “energy efficiency,” the emphasis is likely to be on reducing kW demand, not kWh usage. As a result, specific “energy efficiency” rates are somewhat rare. However, several such rates have been identified. These energy efficiency rates fall into several categories:

- **Percentage reduction in bill:** These tariffs involve a percentage discount, typically on the kW and kWh charges, but not including riders, for customers’ facilities which meet certain requirements, such as those for an EnergyStar home.
- **Bill credits:** These tariffs offer credits in the form of flat amounts, \$/kW credits, and/or \$/kWh credits for customers who install high efficiency or solar equipment.
- **Adjustments to kW billing demand:** This type of rate permits an automatic adjustment downward in billing demand for customers’ installing high efficiency equipment.
- **Special rates for structures meeting high efficiency standards:** Several utilities allow customers with structures meeting high efficiency standards to take service under tariffs which are more favorable than standard tariffs.




- Miscellaneous tariffs: These tariffs reward high efficient equipment in unusual ways.


*Examples* of these types of rates are listed below.

### Percentage reduction in bill

<u>Utility</u>	<u>State</u>	<u>EE Rate Description</u>
 Central Louisiana P&L	Louisiana	A ten percent discount on electric bills for November through April for “Energy Miser” homes.
 Carolina P&L (Progress Power)	North Carolina	Rider RECD-1B, Residential Service Energy Conservation Discount, provides for a five percent discount on kW and kWh charges for homes meeting EnergyStar standards
 Carolina P&L (Progress Power)	South Carolina	SC customers served by Progress Energy are eligible for a five percent discount on kW and kWh charges for homes meeting EnergyStar standards.
 Blue Ridge EMC	South Carolina	The Total Electric Conservation Rate provides for a six percent deduction for residential customers with all electric homes that meet the Total Electric Conservation standards.

### Bill credits

<u>Utility</u>	<u>State</u>	<u>EE Rate Description</u>
 Maui Electric (MECO)	Hawaii	Maui Electric offers a \$270 rebate, plus a \$5 per month bill credit for residential customers who install high efficiency water heaters with timers.
 MECO, HECO, and HELCO	Hawaii	For commercial customers, these utilities offer a \$125 per coincident peak kW rebate plus \$0.05/kWh (retrofits) or \$0.06/kWh (new construction) for solar water heaters.
 PacifiCorp	Washington	PacifiCorp’s energy efficiency rate provides incentives of \$50/kW and



 Energy Trust of Oregon

Oregon




\$0.12/kWh for commercial projects that exceed code by ten percent, capped at 50% of the energy efficiency measure's cost.






This incentive is paid by the Energy Trust of Oregon, not a specific utility. The rate involves a \$0.40/kWh rebate for solar water heating and \$0.10/kWh for solar pool heaters.

### Adjustments to kW billing demand


<u>Utility</u>	<u>State</u>	<u>EE Rate Description</u>
 Florida Power and Light (FP&L)	Florida	FP&L offers a rider which adjusts billing demand downward for installing efficiency measures.
 Southern Indiana Gas & Electric (Vectren Energy)	Indiana	SIGECO offers reduced demand charges to large power and high load factor customers through an efficiency incentive rider.

### Special rates for structures and/or equipment meeting high efficiency standards


<u>Utility</u>	<u>State</u>	<u>EE Rate Description</u>
 Alabama Power	Alabama	Alabama Power offers a special rate, FDE, for energy efficient homes.
 Jackson EMC	Georgia	Jackson EMC offers Schedule AEA-4, Residential Energy Advantage Service, for homes qualifying as Good Cents or Comfort Home.
 Upper Peninsula Power Company	Michigan	UPPC offers an Energy Efficiency Incentive Rate Alternative to large commercial & industrial customers to encourage energy efficiency.



	Jersey Central Power & Light Co.	New Jersey	JCP&L offers a residential geothermal heat pump rate for installing equipment which meet specified high efficiency criteria.
	Piedmont EMC	North Carolina	Piedmont EMC offers an energy efficiency rate (EER) for customers' having high efficient equipment and a premium level of insulation.
	York EMC	South Carolina	Rate Code 5, Residential/Energy Efficient All Electric Rate rewards homeowners who have highly efficient homes.
	South Carolina Electric & Gas	South Carolina	SCE&G offers Energy Saver Rate 6 for highly efficient homes.
	Black Hills P&L	Wyoming	Customers with high efficiency equipment and demand controllers can take an optional demand service rate with up to 30% savings relative to the standard tariff.

**Miscellaneous tariffs**

<u>Utility</u>		<u>State</u>	<u>EE Rate Description</u>
	Utah P&L	Utah	Utah P&L has a Demand Side Rider to recover the costs of its energy efficiency programs. In lieu of paying this rider, customers can "self direct" these payments to cost effective efficiency improvement projects within their own facilities.

Several tariffs were identified whose names would imply that they are energy efficiency rates, but in fact were intended for peak kW reduction. Examples include:

<u>Utility</u>		<u>State</u>	<u>EE Rate Description</u>
	Public Service of Colorado	Colorado	Public Service of Colorado offers a "customer efficiency" program; however, this is actually a program to reduce peak kW demand, not to improve

	Nevada Power	Nevada	the efficiency of electricity usage. Nevada Power has an “Optional Conservation Service” rate. However, it is in essence a curtailable rate.
	Entergy Arkansas	Arkansas	Entergy Arkansas has an “Experimental Energy Reduction Rider (EER),” but this is more accurately described as an incentive program to reduce on-peak demands, typically by operating standby generators.

While many utility programs are aimed at reducing or shifting demands, they may have the effect of reducing overall energy usage as well. In one survey, 49% of Puget Sound Energy’s Time-of-Use rate participants responded that they cut their overall energy consumption while shifting electric usage.

It should also be noted that there are a number of tariffs that are called “energy efficiency” rates or riders which are actually mechanisms by which utilities recover the cost of their conservation programs. For example, Idaho Power uses revenue collected under its Schedule 91, Energy Efficiency Rider, to support its energy efficiency and conservation programs. While this is certainly a valid use of the term “energy efficiency rate,” it may cause confusion when searching for tariffs intended as specific incentives to promote energy efficiency.

In addition to tariffs to promote energy efficiency, most utilities offer rebate and low-interest loan incentives. Many states offer tax incentives, including income tax credits and sales tax exclusions. Local governments sometimes offer property tax exclusions for renewables or energy efficient equipment. While these are not “energy efficiency” rates per se, they may provide significant encouragement for energy efficiency.

Appendix A is a list of states in alphabetical order presenting the utility name and a description of each energy efficiency rate.

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DOCKET # 17687, 17688  
DOCUMENT # 82743

DOCKETS NO. 17687-U and 17688-U:

82744

Georgia Power Company's and Savannah Electric and Power Company's 2004 Integrated Resource Plans: Demand-Side Management Working Group Report

RECEIVED

Order

MAY 25 2005

EXECUTIVE SECRETARY  
G.P.S.C.

In July, 2005, the Georgia Public Service Commission ("Commission") established the Demand-Side Management Working Group ("Working Group") for the purpose of addressing certain issues raised in the course of the hearings in Dockets No. 17687-U and 17688-U. In its July 14, 2004 Order, the Commission directed the Working Group to accomplish three tasks:

- Bring the Commission a mix of Demand-Side Management ("DSM") initiatives to be recommended for approval, including detailed information regarding how each of the initiatives would be implemented;
- Recommend a process for the selection of DSM initiatives in the future; and
- Propose recommendations for the need for changes to the Commission's Integrated Resource Planning rules regarding DSM or for proposed legislation.

The Commission further ordered that no later than February 15, 2005, the Working Group shall conclude by submitting a proposed DSM Plan to the Commission. The Working Group filed its report with the Commission on February 16, 2005.

The Working Group's report contained an evaluation process for selecting future DSM initiatives, as well as four pilot programs to be offered to the Commission for adoption:

1. The Energy Star Home Program
2. The Energy Star Appliance Program
3. The Duct Sealing and Infiltration Control Program
4. The Home Inspector Program



Georgia Power Company agreed to implement each of the four listed programs, and Savannah Electric and Power Company agreed to participate in the Energy Star Home Program.

**WHEREFORE IT IS ORDERED**, that the Commission hereby adopts the report filed by the Working Group.

**ORDERED FURTHER**, that Georgia Power Company shall implement each of the four pilot programs included in the report.


**ORDERED FURTHER**, that Savannah Electric and Power Company shall participate in the Energy Star Home Program at the level included in the report

**ORDERED FURTHER**, that both Georgia Power Company and Savannah Electric and Power Company shall implement the evaluation process for selecting future Demand Side Management initiatives as presented in the report;

**ORDERED FURTHER**, that a motion for reconsideration, rehearing or oral argument or any other motion shall not stay the effective date of this 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 Administrative Session held on May 17, 2005.

  
REECE MCALISTER  
EXECUTIVE SECRETARY

5-24-05  
DATE

  
ANGELA ELIZABETH SPEIR  
CHAIRMAN

5/24/05  
DATE