BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

In re:	
Georgia Power Company's	Docket No. 36499
Application for the Certification	
of Its Amended Demand Side	
Management Plan	

DIRECT TESTIMONY OF

LARRY T. LEGG

March 19, 2013

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ON BEHALF OF GEORGIA POWER COMPANY'S APPLICATION FOR THE CERTIFICATION OF ITS AMENDED DEMAND SIDE MANAGEMENT PLAN DOCKET NO. 36499

I. <u>INTRODUCTION</u>

PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

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2	A.	My name is Larry T. Legg. I am the Manager of Market Planning for Georgia
3		Power Company ("Georgia Power" or the "Company"). My business address is
4		241 Ralph McGill Boulevard, N.E., Atlanta, Georgia, 30308.
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6	Q.	MR. LEGG, PLEASE SUMMARIZE YOUR EDUCATION AND
7		PROFESSIONAL EXPERIENCE.
8	A.	I graduated from Mercer University in 1988 with a Bachelor's degree. I joined
9		Georgia Power in 1990 in the Customer Service organization. From 1990 to 2006,
10		I held various staff and managerial positions in Customer Service, Sales, Software
11		Development, Revenue Accounting, and Pricing and Rates. During this period, I
12		attended Georgia State University and earned a Master's degree in Business
13		Administration in 1997.
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15		I was named Rate Design Manager for Georgia Power in 2003 where I led the
16		development of Rate Design for the 2004 Retail Rate Case. In 2006, I assumed
17		my current position as Manager of Market Planning for Georgia Power. In this
18		position, my responsibilities include the load, energy and revenue forecast, as well
19		as economic evaluation of Demand Side Management ("DSM") and marketing
20		programs. I have previously testified before the Georgia Public Service
21		Commission (the "Commission") in cases regarding the Integrated Resource Plan

("IRP"), related IRP amendments, certification of demand-side programs and the 1 2 2008 Certification of Units 3 and 4 at Plant Vogtle. 3 WHAT IS THE PURPOSE OF YOUR TESTIMONY? Q. 4 This testimony is filed in support of Georgia Power Company's Application for 5 A. the Certification of Its Amended DSM Plan ("Application"), filed on January 31, 6 2013 concurrently with the Company's 2013 IRP. 7 8 DO YOU ADOPT THE APPLICATION AND THE 2013 IRP AS PART OF 9 0. YOUR TESTIMONY? 10 Yes. I adopt the Company's Application and 2013 IRP as filed on January 31, A. 11 12 2013 as part of my testimony. 13 14 Q. PLEASE SUMMARIZE THE COMPANY'S REQUEST THIS PROCEEDING. 15 16 A. Georgia Power is requesting a Certificate of Public Convenience and Necessity for one new DSM program, decertification of one previously certified DSM 17 program (though the program activities will be subsumed by an existing 18 program), and an amendment to the certificate of public convenience and 19 20 necessity for three DSM programs originally certified in Docket No. 31082 pursuant to Commission Rules 515-3-4-.09(1) and 515-3-4-.10, as well as 21 O.C.G.A. §§ 46-3A-3 through 46-3A-6 and 46-3A-8. In addition, the Company 22 presents updated economics for three certified DSM programs and other DSM 23

activities for Commission approval.

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II. PROGRAM PLAN DEVELOPMENT

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Q. WHAT IS A DEMAND SIDE PROGRAM?

A. As defined by Commission Rule 515-3-4-.02(12), a demand-side program is a utility program designed to implement demand-side measures. A demand-side measure is defined in Commission Rule 515-3-4-.02(11) as any hardware, equipment, or practice which is installed or instituted for energy efficiency or energy management purposes.

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HAS PREVIOUSLY DEVELOPED 0. THE COMPANY **AND** IMPLEMENTED DEMAND SIDE PROGRAMS?

12 A. Yes. Georgia Power currently has a number of demand side programs that provide energy saving opportunities for its customers. Eight programs are currently 13 14 certified by the Commission. The Company holds a certificate for the Power Credit DSM Program, originally certified in Docket No. 6315 and reauthorized by 15 16 the Commission in Docket No. 13305. Power Credit is a direct load control program offered to the residential customer class. Additionally the Company 17 received certificates for seven other energy efficiency programs in Docket No. 18 These seven programs include five residential and two commercial 19 20 programs, each with ten year implementation plans. Other DSM programs available through the Company include weatherization assistance for low income customers, energy efficiency information, assistance and awareness programs, 22 and demand response tariffs. 23

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HOW DID GEORGIA POWER DEVELOP THE DSM PROGRAM Q. PLANS IN THIS APPLICATION?

27 A. In developing the programs described herein, the Company followed the nine-step process known as the "Top-Down Approach" approved by the Commission in the 28 29 2010 IRP. Georgia Power also met with the DSM Working Group ("DSMWG") 30 eight times from 2011 through 2012 and generally reached agreement on the

DSM programs that would be included in the evaluation process. Additionally, 1 2 DSMWG subcommittee meetings were held in January and August 2012. 3 Q. DOES THE PLANNING PROCESS USED TO DEVELOP 4 THE PROGRAMS FOR THIS FILING SATISFY THE COMMISSION'S DSM 5 **EVALUATION RULE?** 6 7 A. Yes. Completion of the nine-step planning process, including the development of 8 the Updated Technology Catalog and other analyses, satisfies the requirements of 9 Commission Rule 515-3-4-.04(4). 10 Q. WAS THE **DSMWG INVOLVED** IN THE **DSM PROGRAM** 11 12 **EVALUATION?** Yes. As previously discussed, Georgia Power met with the DSMWG four times A. 13 14 in 2011 and four times in 2012 in accordance with the nine-step process approved by the Commission in the 2010 IRP Order. Additionally, the Company met with 15 16 DSMWG sub-committees twice in 2012 to discuss DSM program concepts and to discuss modeling of a DSM case proposed by certain members of the DSMWG. 17 Finally, the Company conducted several telephone conference calls and shared 18 data with the DSMWG leading up to the 2013 IRP filing. 19 20 WHAT ASSISTANCE DID THE DSMWG PROVIDE IN THIS PROCESS? 21 Q. 22 A. For the 2013 IRP, the Company filed with the Commission a new energy efficiency potential study on January 31, 2012, along with an update filed on 23 24 December 4, 2012, which served as a starting point for identifying DSM programs 25 to analyze for consideration. The Company met with, discussed, and shared presentations related to DSM program design details with the DSMWG at 26 27 multiple meetings in 2011 and 2012. A smaller sub-group of the DSMWG met and identified program concepts and measures considered for economic screening 28 29 in support of the 2013 DSM development. Input from the sub-group participants

was used in developing the list of programs to analyze. The Company shared the

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list with the larger DSMWG and requested feedback and any additional input to the process. Consensus on programs to include in the analysis was generally reached with the DSMWG. The preliminary results of the program economic screening were also shared with the DSMWG in advance of the filing.

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Q. WAS THE PLANNING PROCESS UTILIZED SUCCESSFUL IN IDENTIFYING A COST-EFFECTIVE DSM PLAN?

Yes. The program planning process used in the development of the Company's 2013 DSM plan provided the Company and the DSMWG adequate time to identify DSM programs that would be included in the evaluation process. Once a general agreement was reached on the programs to be evaluated, the Company analyzed the options and focused the design of its recommended case on those design elements that attempt to maximize economic efficiency, as defined by the Total Resource Cost ("TRC") test, while minimizing the impact to customers, as measured by the Rate Impact Measure ("RIM") test.

However, while the program planning process was effective in identifying a costeffective DSM plan, there are a number of ways in which the planning process could be streamlined and improved for purposes of the 2016 IRP planning process. Several of the steps in the nine-step process are redundant with existing program plans or are no longer needed.

First, the Company is collecting customer feedback on its current programs as a part of its program evaluation protocol, and to require further information collection as part of the nine-step process is unnecessary. Second, several energy efficiency potential studies have been conducted for Georgia since 2005, with each showing similar results, and therefore, there appears to be very little value in conducting further studies in the near-term. Third, the Company's economic evaluation methods for program planning are well-established at this Commission and continuing to specify the manner in which active and passive DSM programs

1		are evaluated or requiring a comparison to system tools is unnecessary.
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3		III. <u>DESCRIPTION OF DSM PROGRAMS</u>
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5	Q.	PLEASE DESCRIBE THE NEW DSM PROGRAM THAT GEORGIA
6		POWER SEEKS TO CERTIFY.
7	Α.	The Company requests that the Commission certify the EarthCents® Commercial
8		Small Business Program as described in the Application. The EarthCents
9		Commercial Small Business Program promotes the purchase of eligible high-
10		efficiency equipment installed at qualifying customer facilities. The program is
11		very similar in structure to Georgia Power's existing EarthCents Commercial
12		Prescriptive Incentive Program and EarthCents Residential Home Energy
13		Improvement Program and specifically targets small businesses that are
14		historically under-represented in energy efficiency program participation rates.
15		Key challenges that this market segment faces include:
16		 Lack of access to capital;
17		2. Insufficient time and/or resources to investigate and review energy
18		efficiency improvements; and
19		3. Leased rather than owner-occupied facilities.
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21		Program benefits include equipment with easily calculated savings,
22		straightforward and easy participation for customers, and reduced measurement
23		and verification costs. Rebates offered through this program serve to reduce the
24		incremental cost to upgrade to high-efficiency equipment over standard efficiency
25		options for these customers.
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27	Q.	WHAT ARE THE GOALS OF THE EARTHCENTS COMMERCIAL
28		SMALL BUSINESS PROGRAM?
29	A.	The goals of the EarthCents Commercial Small Business Program are to increase
30		customer awareness and demand for high-efficiency, energy saving equipment

and increase the availability and market penetration of energy efficient equipment 1 2 that will result in long-term energy savings and peak reduction.

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FOR WHICH CERTIFIED DSM PROGRAMS IS THE COMPANY Q. **SEEKING AN AMENDMENT?** 5

A. The three certified programs for which the Company is seeking an amendment are 6 (1) Residential Lighting and Appliance, (2) New Homes, and (3) Commercial 7 Custom Incentive. 8

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PLEASE DESCRIBE THE REQUESTED AMENDMENT TO THE 10 0. 11 RESIDENTIAL LIGHTING AND APPLIANCE CERTIFICATE.

A. The Residential Lighting and Appliance Program promotes the purchase and installation of energy efficient lighting, lighting fixtures and appliances through customer education, retailer partnerships/training, promotional giveaways of high efficiency lights, and customer incentives. The Company is requesting to separate the lighting portion of the program from the appliance portion of the program and create two separate programs: EarthCents Residential Lighting and EarthCents Residential Appliance. This change will allow the Company to optimize program operations, marketing and outreach efforts, and the performance of each program.

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PLEASE DESCRIBE THE REQUESTED AMENDMENT TO THE 21 Q. RESIDENTIAL HIGH EFFICIENCY NEW HOME CERTIFICATE. 22

A. The Company is requesting to amend the Residential New Homes certificate as a result of the expansion of the program to include not only the performance pathway but also rebates for select individual measures. The renamed EarthCents Residential New Homes Program focuses on a whole-house approach to improving the energy efficiency of new homes, promoting the installation of energy efficient measures in new home construction, and improving the performance of participating homes to at least 15 percent above the current Georgia State Energy Code at the time the home is built. Additionally, it will

1		promote improvements in individual measures such as high efficiency electric
2		heating and cooling equipment and heat pump water heaters.
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4	Q.	PLEASE DESCRIBE THE REQUESTED AMENDMENT TO THE
5		COMMERCIAL CUSTOM INCENTIVE CERTIFICATE.
6	A.	The Company is requesting to amend the Commercial Custom Incentive
7		certificate to incorporate additional non-lighting measures. The renamed
8		EarthCents Commercial Custom Incentive Program provides a platform for
9		comprehensive energy efficiency projects in larger facilities that go beyond single
10		measures and common efficiency practices.
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12	Q.	WHY IS THE COMPANY SEEKING DECERTIFICATION OF THE
13		RESIDENTIAL WATER HEATING PROGRAM?
14	A.	The Company is requesting the decertification of the Residential Water Heating
15		Program in order to incorporate program measures into the existing EarthCents
16		Home Energy Improvement Program to allow for more efficient delivery of
17		service.
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19	Q.	FOR WHICH CERTIFIED DSM PROGRAMS IS THE COMPANY
20		PRESENTING UPDATED ECONOMICS?
21	A.	The Company is presenting updated economics for the EarthCents Home Energy
22		Improvement Program, the EarthCents Refrigerator/Freezer Recycling Program,
23		and the EarthCents Commercial Prescriptive Incentive Program (all of which have
24		been renamed).
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26	Q.	WHAT IMPACT ARE THESE DSM PROGRAMS EXPECTED TO HAVE
27		ON PEAK DEMAND?
28	A.	The Company currently estimates that its energy efficiency programs will result,
29		on average, in approximately 68 megawatts of peak demand reductions and 317
30		gigawatt hours of energy reductions annually at the customers' meters for 2014-

2016 based on the projected implementation levels. Cumulative peak demand reduction is expected to reach 412 MW by year-end 2019.

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Q. WHAT IS THE IMPLEMENTATION SCHEDULE FOR THE DSM PROGRAMS DESCRIBED IN YOUR TESTIMONY?

A. The Company plans to implement the new DSM program in 2014 and begin market and process evaluations approximately six to nine months after program implementation. The Company will conduct impact evaluations approximately nine to twelve months after program implementation, or as program participation levels allow. Specific implementation plans for each program are included in the ten-year program plans submitted in Appendix A of the Company's Application.

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Q. HOW WILL GEORGIA POWER MEASURE THE SUCCESS OF THE THESE DSM PROGRAMS?

A. Program performance and progress towards achieving established goals will be 15 16 tracked on a continual basis. In addition, Georgia Power will contract with independent, third party evaluators through a Request for Proposal solicitation to 17 conduct comprehensive program evaluations at regular intervals (initially planned 18 for three year intervals). The evaluations will include market, process, and impact 19 20 evaluations to review the program's operations, evaluate the program's impact on the local market, and verify the energy and demand savings produced by the 21 program. 22

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IV. CERTIFIED COST OF DSM PROGRAMS AND ADDITIONAL SUM

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Q. WHAT COSTS IS THE COMPANY REQUESTING THAT THE COMMISSION APPROVE?

A. The Company is requesting Commission approval of the DSM program budgets, costs associated with certain other DSM activities, and the Additional Sum amount. The budgets and costs for the Company's DSM programs are set forth in

Appendix C-1 and C-2 to the Application. 1 2 3 Q. IS THE COMPANY REQUESTING AN ADJUSTMENT TO THE ADDITIONAL SUM FOR THESE DSM PROGRAMS? 4 Yes. The Company is requesting an adjustment to the Additional Sum that would 5 A. be applicable to all certified energy efficiency programs, including, if approved 6 by the Commission, the EarthCents Small Business program. 7 8 9 0. PLEASE DESCRIBE **GEORGIA POWER'S** REQUEST FOR 10 ADDITIONAL SUM. The Company proposes to collect an Additional Sum equal to ten percent of the A. 11 12 verified gross energy savings of the net benefits from the Program Administrator Test, similar to the Additional Sum approved in the 2010 DSM Certification but 13 without the adjustment for market effects. Market effects such as free-ridership 14 and spillover are recognized in the industry as important research data points for 15 16 deciding whether to modify or continue DSM programs. However, at the same time, there is significant debate in the energy efficiency community regarding the 17 proper uses of market effect estimates. While market effects are useful for 18 system planning purposes and for future program design, the Company believes 19 20 that for energy savings targets and Additional Sum, the verified gross energy savings is a better indicator of program success. 21 22 The Additional Sum included in the DSM tariffs will initially be based on avoided 23 24 costs, projected program costs and participation levels approved in the 2013 IRP, 25 and will subsequently be trued-up based on actual participation levels. The regulatory treatment for the Additional Sum amounts collected would be handled 26 in the same manner as the Additional Sum amounts collected since the 27 Company's 2010 DSM application. The specific Additional Sum request is set

forth in Appendix F to the Application.

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Q. WHY IS IT NOT APPROPRIATE TO ADJUST THE ENERGY SAVINGS FOR MARKET EFFECTS?

There are a number of reasons why no adjustment should be made for market effects. First, market effects are constantly changing and thus should not be utilized as the basis for a static adjustment to the Additional Sum. While the Company employs industry-standard methods to quantify market effects, the estimate generated only provides information regarding the particular point in time that the surveys are conducted. The Company's most recent analysis of market effects was conducted when the programs were newly introduced into the market. During the initial period of a program's introduction, free ridership tends to be elevated as those individuals that are already engaging in the measures take advantage of available incentives. However, free ridership will typically decrease after that initial period of program introduction. Therefore, a market analysis conducted at a later date would reflect a different mix of customers participating in the program. Utilizing a market effects analysis conducted in an early period of program implementation arbitrarily selects a particular result that is likely not reflective of the mix of customers at a later point in time, and then utilizes such mix on a prospective basis to establish the Additional Sum. Such an arbitrarily selected snapshot should not serve as the basis for the calculation of Additional Sum.

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Second, the Company has no control over free riders and does not have the ability to limit programs in such as way as to limit free riders. Thus, it is not appropriate to hold the Company accountable for such market effects. The factors over which the Company does have control—program implementation, budgets, etc.—all directly influence gross energy savings, and thus gross energy savings is the more appropriate basis for calculation of the Additional Sum.

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Third, the Company's DSM programs are intended to bring about market transformation and market transformation will, over the long run, result in

1 increasing levels of free ridership. As such, it runs contrary to the stated goals of 2 the Company's programs to hold the Company accountable for free riders. 3 Q. HOW WOULD DSM PROGRAM COSTS AS WELL AS THE PROPOSED 4 ADDITIONAL SUM BE COLLECTED? 5 Georgia Power proposes that collection of the costs of approved and certified A. 6 DSM programs and activities, as well as the Additional Sum amount for certified 7 DSM programs, be accomplished through the existing Residential DSM and 8 Commercial DSM tariffs. These tariffs would be filed as part of the Company's 9 2013 base rate case and would be implemented with any approved change of rates 10 on January 1, 2014. 11 12 DOES THIS CONCLUDE YOUR TESTIMONY? 13 Q.

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Yes.