

**Board of Directors' Written Determination
With Respect to PURPA Standards
August 2009**

I. Overview

This document constitutes the written, public determination of Jackson EMC with respect to the four (4) the new standards that Jackson EMC was required to consider pursuant to the Energy Independence and Security Act of 2007 (the "EISA") which amended the Public Utility Regulatory Policies Act of 1978 ("PURPA"). These standards, which shall be referred to in this document as "The EISA Standards," are as follows: **(1) Integrated Resource Planning** (16 U.S.C. § 2621(d)(16)), **(2) Rate Design Modifications to Promote Energy Efficiency Investments** (16 U.S.C. § 2621(d)(17)), **(3) Consideration of Smart Grid Investments** (16 U.S.C. § 2621(d)(18) and **(4) Smart Grid Information** (16 U.S.C. § 2621(d)(19)). This document is adopted pursuant to Rule 15 of Jackson EMC's PURPA Rules and 16 U.S.C.A. § 2621(b).

II. Background

The Board began consideration of each of the EISA Standards on September 5, 2008. Subsequently, the Board directed that Jackson EMC's staff confer with expert consultants on each of the EISA Standards, and to jointly develop testimony relating to each of the EISA Standards for the purposes of guiding and informing the Board's consideration of, and ultimate determination with respect to, each EISA Standard. Jackson EMC scheduled and held a public hearing on March 6, 2009 (the "Hearing"). To solicit and encourage participation in the Hearing, public notice was provided by each of the following means:

1. Letter notice to the Secretary of Energy was sent by Federal Express on March 2, 2009 and by email on March 12, 2009.
2. Website posting beginning on November 14, 2008, at the Jackson EMC website under the PURPA section.
3. Notice in *JEMCO News*, a monthly newsletter sent to each member, was distributed to members during November, 2008. *JEMCO News* is a method of notifying members of the annual meeting.
4. Notice posted in the lobby of the Jackson EMC headquarters.
5. Board resolution adopting the PURPA Manual and record date for notice of the Hearing was approved on September 5, 2008.

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The Board has now completed its consideration of whether the adoption of each of the EISA Standards will serve the three purposes of PURPA,¹ in reliance upon the facts, opinions, conclusions and other information derived from a careful review of the official transcript of the Hearing, and after giving due and thoughtful consideration to applicable federal and state laws, the unique circumstances of non-profit, member-owned cooperatives in general, and to the specific circumstances of Jackson EMC in particular.

III. Findings

Based upon the foregoing, the Board has resolved and makes the determinations set forth below:

A. The Integrated Resource Planning (The IRP Standard)

1. Overview

The IRP Standard provides as follows:

INTEGRATED RESOURCE PLANNING

Each electric utility shall

- i. Integrate energy efficiency resources into utility, state, and regional plans, and
- ii. Adopt policies establishing cost-effective energy efficiency as a priority resource.

16 U.S.C.A. § 2621(d)(16).

2. Consideration

The Board believes that the record of the Hearing indicates that Jackson EMC's current operational and consumer-oriented energy efficiency programs (including load forecasting, demand side management (DSM), consumer energy efficiency programs and resource planning programs) already promote the purposes of PURPA: the conservation of energy and in most cases enhance the efficient use of Jackson EMC's facilities and resources. While recognizing that measuring the goal of furthering equitable rates is difficult to assess, the Board finds that the Cooperative's policies and programs meet this goal. The Board will annually consider the directions of these programs and, at this time, directs that Jackson EMC continue the programs that are currently in use until further

¹ The three purposes of PURPA are: (i) to encourage the conservation of energy; (ii) to optimize the efficient use of energy facilities and resources; and (iii) to encourage equitable consumer rates. 16 U.S.C.A. § 2611.

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notice. In particular, Jackson EMC should evaluate its programs' furtherance of equitable rates on an annual basis. The Board finds that, because these current programs are compliant with the IRP Standard, it is not necessary for Jackson EMC to formally adopt the IRP Standard as set forth in EISA.

3. Determination

The Board finds that Jackson EMC currently meets the IRP Standard to the extent it is able to do so as an electric distribution utility, because Jackson EMC already integrates and evaluates energy efficiency resources into its IRP process and has already implemented policies establishing cost-effective energy efficiency as a priority resource, including consumer education and efficiency programs. The Board further directs that, when existing or new programs to promote energy efficiency are presented, Jackson EMC's staff evaluate, for the Board's ultimate consideration, whether such programs can be offered pursuant to equitable rates and in a cost-effective, resource-efficient manner.

B. Rate Design Modifications to Promote Energy Efficiency Investments (The Rate Design Standard)

1. Overview

The Rate Design Standard provides as follows:

RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS

A. IN GENERAL

The rates allowed to be charged by any electric utility shall:

- i. Align utility incentives with the delivery of cost-effective energy efficiency, and
- ii. Promote energy efficiency investments.

B. POLICY OPTIONS

In complying with subparagraph (A), each state regulatory authority and each nonregulated utility shall consider:

- i. Removing the throughput incentive and other regulatory and management disincentives to energy efficiency;
- ii. Providing utility incentives for the successful management of energy efficiency programs;

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- iii. Including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;
- iv. Adopting rate designs that encourage energy efficiency for each customer class;
- v. Allowing timely recovery of energy efficiency-related costs, and
- vi. Offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.

16 U.S.C.A. § 2621(d)(17).

2. Consideration

(i) Removing the throughput incentive and other regulatory and management disincentives to energy efficiency.

The Board believes that, because Jackson EMC is a non-profit cooperative owned by its consumers, there is not a “management disincentive” creating a bias against energy efficiency, as there might be in a for-profit, investor-owned utility where profit was the motivating factor. The primary objective of the cooperative is to provide reliable, lowest cost electric service consistent with sound business practice. Furthermore, because Jackson EMC’s retail rates are not regulated by the Georgia Public Service Commission (PSC), but are established instead by a Board of Directors elected from, and by, its consumers/members, Jackson EMC does not have a “regulatory disincentive” to energy efficiency. Jackson EMC already periodically performs cost of service analyses to examine costs and evaluate the appropriateness of the retail rate design to recover those costs. The Hearing testimony demonstrates that the retail rates already contain design features to recover fixed and variable costs in ways that reduce the adverse impact of reduced margins resulting from lower energy sales, to the greatest extent practical and in compliance with Jackson EMC’s obligations as a public utility.

Moreover, the retail rate structure includes charges to recover costs in a cost-effective manner to consumers/members. For example, a retail rate includes a segregated Facilities Charge to recover fixed costs. Also, the wholesale power cost adjustment provision enables tracking and recovery of changes in average cost of purchased power,

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including changes resulting from energy efficiency impacts. Also, the wholesale power cost adjustment includes the costs of credits paid to participants of the load management program. These features lessen the adverse impact of energy efficiency programs on Jackson EMC's margins.

(ii) Providing utility incentives for the successful management of energy efficiency programs.

The Board believes that the Hearing transcript demonstrates that Jackson EMC has a number of active programs designed to provide appropriate incentives to promote energy efficiency, including, but not limited to, direct financial incentives for the following member investments in efficiency and conservation:

- a. Energy Star new home construction program
 1. Education and training of builders and realtors
 2. Right Choice New Home Certification
 3. New Home assessment by Home Energy Rating System technicians
 4. Energy efficiency rebates
 5. 3-year energy usage warranty for heating and cooling
- b. Residential Energy Advantage Rate Schedule
- c. Time-of-use rates (all customer classes)
- d. Low interest loans for weatherization and energy efficient heating and air conditioning equipment replacement
- e. Right Choice Sun Power Rebate Program (solar power conversion and rebates for home installations and water heaters)
- f. Switch to Savings load management program (credits for load management)

(iii) Including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives.

Hearing testimony indicates that several major customer classes in Jackson EMC's retail electric rate tariff (including residential, general service, large general service, school load management and outdoor lighting) already have a rate design structure which promotes energy conservation, including time-based charges, critical peak pricing or demand response price signals. Moreover, energy efficiency is promoted through the Residential Energy Advantage Service schedule, under which customers whose homes meet the Right Choice certification requirements are billed a lower energy charge than the standard residential rate. Jackson EMC offers time-based

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pricing alternatives to all customer classes. Also, the cooperative already incorporates seasonal and inverted block designs in the residential rate structure for peak demand months, the effect of which is to encourage reduced usage for months where energy usage is generally highest. The Board finds that these retail rates demonstrate that Jackson EMC's rate design balances the objective of promoting energy efficiency with other appropriate objectives.

(iv) Adopting rate designs that encourage energy efficiency for each customer class.

Hearing testimony indicates that retail rates which incorporate methods to encourage energy efficiency are available for all customer classes. As mentioned, several residential rate schedules already incorporate seasonal and inverted energy block designs, whereby the charge per kilowatt-hour increases above a set consumption threshold. The effect of inverted block pricing is to encourage reduced usage in particular during months where energy usage is generally highest and system peak demands occur. Also, Jackson EMC offers optional time-of-use rates for all classes of consumers. Even though the wholesale power cost is not as sensitive as in the past, the Board agrees with the Hearing testimony that maintaining a degree of time-based pricing in the retail rate schedule will promote cost-effective energy efficiency and investments by consumers. The Board finds that these retail rates demonstrate that Jackson EMC's rate design encourages energy efficiency in each customer class.

(v) Allowing timely recovery of energy efficiency related costs.

Jackson EMC is a non-profit cooperative owned by its members/consumers. Because Jackson EMC has no separate class of investor-owners, the Board of Directors is elected by the members/consumers. Cost recovery schedules are determined by the members/consumers in accordance with the requirements of the Cooperative's credit facilities. Also, as previously mentioned, Jackson EMC already periodically performs cost of service analyses to examine costs and evaluate the appropriateness of the retail rate design to recover those costs. The retail rates already contain design features to recover fixed and variable costs in ways that reduce the adverse impact of reduced margins resulting from lower energy sales, to the greatest extent practical and in compliance with Jackson EMC's obligations as a public utility.

(vi) Offering home energy audit and demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing federal and state incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.

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The Hearing testimony demonstrates that Jackson EMC has a number of active marketing, education and demand side management programs designed to promote energy efficiency efforts and make energy efficiency improvements more affordable, including, but not limited to, direct financial incentives for the following member investments in efficiency and conservation:

- a. "Right Choice" consumer marketing and education program to promote energy efficiency.
- b. Right Choice Home Performance Energy Star Audit
- c. Low interest loans for weatherization and energy efficient heating and air conditioning equipment replacement
- d. Energy Star new home construction program
 1. Education and training of builders and realtors
 2. Right Choice New Home Certification
 3. New Home audit by Home Energy Rating System technicians
 4. Energy efficiency rebates
 5. 3-year energy usage warranty for heating and cooling
- e. Energy Advantage Rate Schedule
- f. Energy Efficiency Box Kits (free CFLs, Air-filter air-flow whistles and education materials)
- g. Right Choice Home Check-up Service (energy education and rebates; On-Line Home Analyzer, Do-It-Yourself Home Analyzer; Energy Audit by marketing representatives)
- h. Right Choice Sun Power Rebate Program (solar power conversion and rebates for home installations and water heaters)
- i. Switch to Savings load management program (credits for load management)

3. Determination

For the foregoing reasons, the Board finds that Jackson EMC's current retail rate design methodology serves the three (3) purposes of PURPA, and the Board directs that Jackson EMC continue utilizing such factors in designing retail rates. The Board also finds that, because its current rates are compliant with the Rate Design Standard, and because of its unique structure as a member-owned, member-governed cooperative, it is not necessary for Jackson EMC to modify its current retail rates, or to formally adopt the Rate Design Standard as set forth in EISA.

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C. Consideration of Smart Grid Investments.

1. Overview

The Consideration of *Smart Grid Investments* Standard provides as follows:

CONSIDERATION OF SMART GRID INVESTMENTS

A. IN GENERAL

Each State shall consider requiring that, prior to undertaking investments in non-advanced grid technologies, an electric utility of the State demonstrate to the State that the electric utility considered an investment in a qualified smart grid system based on appropriate factors, including:

- i. Total Costs;
- ii. Cost-effectiveness;
- iii. Improved reliability;
- iv. Security;
- v. System performance; and
- vi. Societal benefit.

B. RATE RECOVERY

Each State shall consider authorizing each electric utility of the State to recover from ratepayers any capital, operating expenditure, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system.

C. OBSOLETE EQUIPMENT

Each State shall consider authorizing any electric utility or other party of the State to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid system, based on the remaining depreciable life of the obsolete equipment.

16 U.S.C. § 2621(d)(18)

2. Consideration

Although the wording of the Smart Grid Investments standard directs each "State," rather than each utility, to consider this standard, Jackson EMC has decided to consider subsection (A) during the current PURPA

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review. Jackson EMC is not considering subsections (B) and (C) because they are not applicable given the cooperative's organizational structure and that the cooperative is not a State. Jackson EMC's consideration of the Smart Grid standard is also given with the caveat that the cooperative is limited to its own electric distribution system grid.

Jackson EMC has already made extensive investments of over \$20.8 million in smart grid technologies. The cooperative utilizes a Supervisory Control and Data Acquisition (SCADA) system, GIS mapping, Outage Management System, smart meters, smart sensors and other advanced system communication capabilities. Moreover, Jackson EMC already plans to extend its implementation of Smart Grid technologies in the near future. The cooperative currently plans a multi-million dollar project to install Advance Metering Infrastructure (AMI) beginning in the next few months and to be completed over the next three years. The new AMI system will incorporate many additional features of a Smart Grid, including hourly reporting data, outage notification and restoration times, storage of time-of-use energy, storage of information about energy and power quality, blink counts, flagging tampering and remote programming/reading/connection/disconnection features, among others. These capabilities will provide improved system reliability, security, system performance and societal benefit by allowing quicker detection and repair of outages, fault location and improved anti-theft security measures.

3. Determination

For the foregoing reasons, the Board finds that Jackson EMC's current SCADA system and planned AMI system installation serve the three (3) purposes of PURPA consistent with the Smart Grid Investment Standard subsection (16)(A) as it may apply to Jackson EMC. The Board further directs that Jackson EMC continue to evaluate smart grid investments based on appropriate factors, including the PURPA factors listed above in subsection (16)(A), in particular the cost effectiveness and cost factors, and to deploy such investments if and when Jackson EMC determines that the member-consumers will receive sufficient value therefrom. The Board also finds that, because its current SCADA system, planned AMI system and methods of considering smart grid investments are already consistent with the with the Smart Grid Investments Standard subsection (18)(A), therefore it is not necessary for Jackson EMC to formally adopt the Smart Grid Investment Standard as set forth in EISA. Further, subsections (18)(B) and (C) are inapplicable to the cooperative's organizational structure.

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D. Smart Grid Information (The Smart Grid Information Standard)

1. Overview

The Smart Grid Information Standard provides as follows:

SMART GRID INFORMATION

A. STANDARD

All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).

B. INFORMATION

Information provided under this section, to the extent practicable, shall include:

i. PRICES

Purchasers and other interested persons shall be provided with information on:

I. Time-based electricity prices in the wholesale electricity market, and

II. Time-based electricity retail prices or rates that are available to the purchasers.

ii. USAGE

Purchasers shall be provided with the number of electricity units, expressed in kWh, purchased by them.

iii. INTERVALS AND PROJECTIONS

Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly price and use information, where available, and shall include a day-ahead projection of such price information to the extent available.

iv. SOURCES

Purchasers and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

c. ACCESS

Purchasers shall be able to access their own information at any time through the Internet and on other means of communication elected by that utility for Smart Grid applications. Other interested persons shall be able to access information not specific to any

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purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.

16 U.S.C.A. § 2621(d)(19).

2. **Consideration**

Hearing testimony indicates that most of the information required to be made available to consumers and others under the Smart Grid Information Standard is simply not currently available because the cooperative does not currently have the technology infrastructure in place to provide the information, or providing the information would violate the terms of pre-existing wholesale power contracts to which Jackson EMC is a party. Jackson EMC's current long-term wholesale power supply contracts prohibit the disclosure of the price of purchased energy, including time-based prices. Furthermore, time-based retail pricing information on a day-ahead or daily basis is neither available under current retail rates nor feasible under the wholesale power cost structure.

Although Jackson EMC's current infrastructure does not allow disclosure of usage information "on not less than a daily basis," once the planned AMI system is implemented, it may be possible for the cooperative to provide consumers with this information.

Hearing testimony does, however, indicate that it is practicable for Jackson EMC to provide customers and other interested persons with information on the sources of generation and the associated greenhouse gas emissions (GHG) via a potential link to an article on the matter available on the website of Oglethorpe Power Corporation (OPC), one of the power suppliers used by Jackson EMC.

3. **Determination**

Jackson EMC is not yet capable of providing most of the information specified in the Smart Grid Information Standard. Consequently, the Board finds that it should not, and hereby specifically does not, adopt the Smart Grid Information Standard. However, once Jackson EMC implements the new AMI system, the cooperative should reconsider the Hearing testimony and any new information and capabilities available in determining whether to provide purchasers with usage information on at least an hourly basis. Also, if the wholesale power contracts permit, and Jackson EMC implements metering and communications technology that enables hourly pricing information for consumers, then the Board finds that it should, once this supporting technology has been deployed, reconsider the Hearing testimony and any new information provided by the staff and its consultants, and

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make a determination whether it would serve the purposes of PURPA and other legitimate goals and objectives of Jackson EMC, to begin providing such pricing information to consumers. Additionally, the Board finds that providing customers with (a) estimates of power source, (b) type of generation, and (c) associated average greenhouse gas emissions (herein defined as "Generation Data") is more likely than not to serve the three (3) stated purposes of PURPA. Consequently, the Board hereby directs that, to the extent Jackson EMC's staff has access to such Generation Data that is deemed to be reasonably accurate, Jackson EMC should adopt a practice of providing a posting of or link to such Generation Data on its publicly accessible website, such as through a link to the OPC webpage detailing this information.

IV. Conclusion and Certification

This Board, having considered the testimony presented at the Hearing, the purposes of PURPA, and both federal and state laws, hereby adopts this document by unanimous vote of the Board on **August 7, 2009**.

Jackson Electric Membership Corporation

By: _____

Otis P. Jones, Chairman

Attest: _____

Rodney Chandler, Secretary

[CORPORATE SEAL]

JACKSON ELECTRIC MEMBERSHIP CORPORATION

PURPA DETERMINATION

RESOLUTION

WHEREAS, in 2007, the United States Congress approved and the President of the United States signed into law the Energy Independence and Security Act of 2007 (the “Act”); and

WHEREAS, the Act contained several amendments to the Public Utility Regulatory Policies Act of 1978 (“PURPA”); and

WHEREAS, PURPA, as amended by the Act, requires certain covered electric utilities, including electric cooperatives, whose rates are not subject to regulation by a state regulatory authority, to consider and determine whether they will implement three (3) new standards relating to energy policy and rate structures (the “new PURPA standards”); and

WHEREAS, PURPA, as amended by the Act, requires covered electric utilities to hold a public hearing for the consideration of the standards; and

WHEREAS, PURPA, as amended by the Act, requires that consideration and determination be made after public notice and hearing; and

WHEREAS, Jackson Electric Membership Corporation (“Jackson EMC”) meets the covered utility threshold of PURPA, and Jackson EMC’s Board of Directors (the “Board”) approved a process consistent with the Act to provide notice to Jackson EMC’s members and others and to hold a public hearing; and

WHEREAS, Jackson EMC’s public hearing was held on March 6, 2009 (the “PURPA Hearing”) pursuant to prior public notice; and

WHEREAS, the transcript of the PURPA Hearing is now closed (the “Transcript”); and

WHEREAS, the staff of Jackson EMC has provided a copy of the Transcript to the Board and the Board has completed its review and consideration of whether the adoption of each of the new PURPA standards will serve the three (3) purposes of PURPA¹, in reliance upon the facts, opinions, conclusions and other information derived from this careful review of the Transcript; and

¹ The three purposes of PURPA are: (i) to encourage the conservation of energy; (ii) to optimize the efficient use of energy facilities and resources; and (iii) to encourage equitable consumer rates. 16 U.S.C.A. § 2611.

WHEREAS, after giving due and thoughtful consideration to applicable federal law, state law, the unique circumstances of non-profit, member-owned cooperatives in general, and to the specific circumstances of Jackson EMC in particular, the Board does herein state its finding as it relates to the consideration of the new PURPA standards.

NOW THEREFORE, BE IT RESOLVED, that the Board does hereby adopt the document titled "Board of Directors' Written Determination With Respect To PURPA Standards" (the "Determination") as the written, public determination of Jackson Electric Membership Corporation with respect to each of four (4) standards that Jackson EMC was required to consider pursuant to the Energy Independence and Security Act of 2007 (the "EISA") which amended the Public Utility Regulatory Policies Act of 1978 ("PURPA"); and

BE IT FURTHER RESOLVED, that the Determination shall be, and it hereby is, adopted pursuant to Rule 15 of Jackson EMC's PURPA Rules and pursuant to 16 U.S.C.A. § 2621(b).

This Resolution is adopted this the 7th day of August, 2009.

CERTIFICATION

I, Rodney Chandler, Secretary of Jackson Electric Membership Corporation, do hereby certify that the above is a true and correct excerpt from the minutes of the meeting of the Board of Directors of the Jackson Electric Membership Corporation of Jefferson, Georgia, held on the 7th day of August, 2009, at which meeting a quorum was present.

Rodney Chandler, Secretary

(SEAL)