

PROJECT NO. 2008-TX100-0001

PROCEEDING TO CONSIDER AND DETERMINE	§	
WHETHER TO IMPLEMENT THE FEDERAL	§	
RATEMAKING STANDARDS FOR INTEGRATED	§	
RESOURCE PLANNING, RATE DESIGN	§	BLUEBONNET ELECTRIC COOPERATIVE, INC.
MODIFICATIONS TO PROMOTE ENERGY	§	BASTROP COUNTY, TEXAS
EFFICIENCY INVESTMENTS, CONSIDERATION OF	§	
SMART GRID INVESTMENTS, AND SMART GRID	§	
INFORMATION PURSUANT TO 16 U.S.C.	§	
§2621(d)(16), (17), (16) AND (17) AS AMENDED	§	
BY PUB. L. NO. 110-140, 121 STAT. 1492 (2007)	§	
	§	

[STAFF DRAFT FOR CONSIDERATION AT JUNE 23, 2009 BOARD MEETING
FOR BOARD MODIFICATION OR APPROVAL TO POST AND REQUEST COMMENTS]

**PROPOSAL FOR IMPLEMENTING PURPA RATEMAKING STANDARDS
RELATING TO INTEGRATED ENERGY EFFICIENCY RESOURCE PLANNING,
RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS,
CONSIDERATION OF SMART GRID INVESTMENTS, AND SMART GRID INFORMATION**

Bluebonnet Electric Cooperative, Inc. (Bluebonnet or Cooperative) proposes four new policies to address: 1) integrating energy efficiency resources into resource planning and making cost-effective energy efficiency a priority resource; 2) modifying rate designs to promote energy efficiency investments; 3) assessing investments in smart grid technologies before investing in non-advanced technologies; and 4) making smart grid information available to members. These proposed policies would implement modified versions of the four new ratemaking standards that federal law requires the Cooperative to consider pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA), as amended by the Energy Independence and Security Act of 2007 (EISA), 16 U.S.C. § 2621(d)(16), (17), (18) and (19), Public Law No. 110-140, 121 Stat. 1492 (2007) (hereinafter, PURPA EISA).¹

The Public Utility Regulatory Policies Act, as amended, requires Bluebonnet to consider the EISA Standards and determine whether to implement them at the Cooperative. In making this

¹ Due to a drafting error, PURPA EISA 2007 contained two standards assigned the number 16 and two standards assigned number 17. In the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 408, Congress corrected those errors by re-designating PURPA EISA Standard 16, relating to consideration of smart grid investments, as Standard 18, and re-designating PURPA EISA Standard 17, relating to consideration of smart grid information, as Standard 19. The style of this proceeding will not be changed because notice has already been given, but the corrections have been made in the body of this determination.

determination, Bluebonnet must examine the effect that implementing the standards would have on the members, and examine whether implementing the standards would fulfill one or more of PURPA's three purposes, which are to encourage: a) the conservation of energy supplied by the cooperative; b) the optimal efficiency of cooperative facilities and resources; and c) equitable rates for cooperative members (the PURPA purposes). The Cooperative may decline to implement one or more of the standards if it determines that implementation would not be in the best interest of the members, even if implementation would fulfill one or more of the PURPA purposes.

NOTICE OF PUBLIC HEARING

Cooperative Staff will conduct a public hearing and take comments on this proposal on July 14, 2009, at 12:00 p.m. at the Cooperative's Headquarters located at 650 Hwy. 21 East in Bastrop, Texas, 78602. Written comments on the proposal may also be submitted to the Cooperative at P.O. Box 729, Bastrop, Texas, 78602 or by e-mail to Jessica.pantano@bluebonnetelectric.coop, no later than July 8, 2009. Comments that have been previously submitted are on file in this project and do not need to be resubmitted. The Cooperative will consider and respond to all comments in writing in the Final Determination, which will be issued at the conclusion of this project.

A. PURPA EISA STANDARD 16 - INTEGRATED RESOURCE PLANNING

Under PURPA EISA Standard 16,² the Cooperative must decide whether to: a) integrate energy efficiency resources into its integrated resource planning; and b) adopt policies establishing cost-effective energy efficiency as a priority resource. The term "integrated resource planning" generally refers to a comprehensive planning process intended to systematically consider appropriate supply and demand resources to meet current and future load requirements within the context of the Cooperative's policy goals and objectives.³ The term "energy efficiency" refers to efforts that allow

² The Standard states: (16) INTEGRATED RESOURCE PLANNING.—Each electric utility shall—(A) integrate energy efficiency resources into utility, State, and regional plans; and (B) adopt policies establishing cost-effective energy efficiency as a priority resource. 16 U.S.C. § 2621(d)(16), 121 Stat. 1665.

³ PURPA defines integrated resource planning as a planning and selection process for new energy resources that evaluates the full range of alternatives, including new generating capacity, power purchases, energy conservation and efficiency, cogeneration and district heating and cooling applications and renewable energy resources in order to provide adequate and reliable service to electric customers at the lowest system cost. PURPA requires that the

consumers to use less energy without changing their behavior or that replace existing energy-consuming devices with newer models that consume less energy.

Regarding the integration of energy efficiency resources into the Cooperative's integrated resource planning, Bluebonnet is a distribution cooperative and neither owns nor operates any generation facilities. Instead, the Cooperative purchases all of its power from the Lower Colorado River Authority (LCRA). Therefore, Bluebonnet does not directly conduct resource planning. By contract, LCRA is responsible for providing Bluebonnet's resource needs and for performing all related planning. LCRA is a river authority that provides generation and transmission service and serves Bluebonnet, other distribution cooperatives, and municipally-owned utilities. Because LCRA serves no retail load directly, its resource planning is essentially the sum of the resource needs of each of its wholesale customers.

The Cooperative participates in LCRA's annual power requirement forecast. The forecasts, which are used to determine the wholesale customers' current and future capacity and energy needs, examine all aspects of projected future needs, including the regional economy, customer growth, business cycles, and other relevant information. Therefore, although Bluebonnet does not directly control its own resource planning, its energy efficiency measures and programs are included in LCRA's resource planning and are very much a part of moderating LCRA's future resource requirements.

LCRA also provides a pricing signal to Bluebonnet through its wholesale rates to indicate when the Cooperative can improve its energy efficiency and conservation efforts. The wholesale rate Bluebonnet pays LCRA includes a very small capacity charge related to transmission service, and is essentially an energy-only wholesale rate design. Consequently, Bluebonnet receives no incentive to improve its load factor as a method of increasing its energy efficiency. While LCRA provides an optional billing method indicating that power cost varies seasonally, the difference between LCRA's highest and lowest energy rates is relatively small, although this option does provide at least some seasonal and time-based differentials in wholesale power cost. Since LCRA's wholesale rate is predominately energy and there is relatively little difference among the block periods, it sends a pricing signal primarily to

process take into account necessary features for system operation, such as diversity, reliability, dispatchability, and other risk factors; consider the ability to verify energy savings achieved through energy conservation and efficiency and the projected durability of such savings measured over time; and treat demand and supply resources on a consistent and integrated basis.

encourage conservation, defined as reduction in kWh usage as opposed to peak shaving or load management.

Regarding the adoption of policies that establish cost-effective energy efficiency as a priority resource, Bluebonnet does not currently have specific energy efficiency objectives, although the Cooperative funds and has implemented a number of projects and programs with the specific goal of improving energy efficiency and conservation. Bluebonnet currently offers or participates in direct assistance and informational programs specifically designed to improve energy efficiency and conservation. The direct assistance programs include:

1. Offering Apogee Interactive's online home audit tool and energy calculator, which incorporate Bluebonnet's rate information to allow members to estimate the retail savings impact of different energy saving measures;
2. Offers energy conservation tips from Bluebonnet's web site;
3. Transitioning its outdoor security lighting to higher efficiency fixtures;
4. Participating as a member of the National Rural Electric Cooperative Association (NRECA). NRECA's research arm Cooperative Research Network (CRN) has a wide variety of programs in the areas of energy efficiency and demand response, information management and telecommunications, and renewable and distributed energy; and
5. Instituting a five year work plan that contains electrical distribution projects, including voltage conversion and re-conductoring projects intended to reduce line losses and increase operational efficiency. The five year plan is reviewed and revised annually for changing conditions

Bluebonnet will consider instituting energy efficiency programs presented as a result of staff and consultant work. Options include creating programs targeted toward providing efficiency services directly or providing financial incentives. Bluebonnet also partners with LCRA in their PowerHouse Program, an energy investigation program that teaches middle school students and their families about the effects of energy use on natural resources and the environment. Bluebonnet sponsors the program for schools within its service area. The Cooperative also educates members about energy efficiency by providing information in press releases, on Bluebonnet's *myHOME* web page, through personal contact with employees, and through customer feed-back and information request options.

Bluebonnet's direct assistance and informational programs are factored in to LCRA's power requirement study, which has the effect of reducing Bluebonnet's future energy and capacity requirements. When combined with similar studies from other LCRA wholesale customers, LCRA will see an over-all reduction in future capacity or energy requirement needs. LCRA encourages its wholesale customers to adopt energy efficiency programs and provides a pricing signal to encourage them to reduce energy requirements. LCRA offers the following programs:

1. PowerHouse Program
2. Solar for Schools
3. Energy Efficiency Working Group
4. Water Conservation Programs – Water Conservation Task Force & Conservation Plan

Bluebonnet and its members benefit from all of the programs discussed above in three ways. First, as Bluebonnet's energy efficiency programs mitigate LCRA's need for future increased capacity, Bluebonnet members will see reductions in future purchased power costs related to additional capacity. Second, as Bluebonnet continues to promote energy efficiency, Bluebonnet members will pay lower power costs. Third, Cooperative members will benefit from any accompanying environmental improvements.

At present, Bluebonnet personnel provide the programs to Cooperative members and the program costs were included in the Cooperative's expenses when its most recent rates were developed. Therefore, program costs are being recovered from members under existing rates. It should be noted, however, that any resulting decrease in the cost of purchased power or the average cost per kWh of purchased power, does not increase the Cooperative's margins. The cost of purchased power is passed directly to members through Bluebonnet's power cost recovery factor (PCRF). Therefore, the cost of any future energy efficiency programs adopted by the Cooperative will not be recovered from members through rates until the Cooperative again revises its retail rate structure.

Including Bluebonnet's energy efficiency programs in LCRA's resource planning encourages the conservation of energy supplied by the Cooperative and the optimal use of the Cooperative's facilities and resources, which are two of the PURPA purposes. Implementing a modified version of the integrated resource planning standard alongside Bluebonnet's existing energy efficiency programs will further encourage those two purposes.

Bluebonnet has promoted energy efficiency for many years and will continue to do so through existing programs, including its goal of reducing the growth of system capacity needs. The Cooperative will also consider new programs, but will weigh their costs against the potential benefits to members and the potential reduction in Cooperative margins. For the reasons discussed above, the Cooperative proposes implementing a modified version of PURPA EISA Standard 16 through the following board policy:

Board Policy on Integrated Resource Planning

Bluebonnet Electric Cooperative, Inc. will cooperate with its power supplier so that its power supplier can integrate energy efficiency resources into its resource plans, and will adopt policies establishing cost-effective energy efficiency as a priority resource.

Bluebonnet has procedures in place to implement this policy, which include 1) adopting a menu of programs designed to improve energy efficiency, 2) including those programs as a part of the Cooperative load forecast and 3) providing that forecast to its power supplier so that, when coupled with similar forecasts from other wholesale customers, LCRA's capacity needs are mitigated.

B. PURPA EISA STANDARD 17 – RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS

Under PURPA EISA Standard 17,⁴ Bluebonnet must decide whether the rates it charges will align utility incentives with the delivery of cost-effective energy efficiency and will promote energy efficiency investments. In making that decision, the Cooperative must consider six policy options to:

⁴ The Standard states: (17) 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 non-regulated 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; (iii) including the impact on adoption of energy efficiency as 1 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. § 2621(d)(17), 121 Stat. 1666.

1. remove the throughput incentive and other regulatory and management disincentives to energy efficiency;
2. provide utility incentives for the successful management of energy efficiency programs;
3. include the impact of adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;
4. adopt rate designs that encourage energy efficiency for each customer class;
5. allow timely recovery of energy efficiency related costs; and
6. offer home energy audits, offer demand response programs, publicize the financial and environmental benefits associated with making home energy efficiency improvements, and educate homeowners about all existing federal and state incentives, including the availability of low-cost loans that make energy efficiency improvements more affordable.

As a distribution cooperative, Bluebonnet encounters special challenges when considering rate design to promote energy efficiency in general. Bluebonnet does not own or operate generation resources. Therefore, Bluebonnet's costs for generation and wholesale delivery of power are not the actual direct costs of building and operating a power plant. Rather, Bluebonnet's power supply costs result from the wholesale power billing it receives from LCRA. Bluebonnet must respond to the pricing signal LCRA provides in its wholesale rates.

The current LCRA wholesale rates provide two generation billing options from which Bluebonnet can select. One option is essentially all energy at a flat wholesale rate. The other option is all energy with time-based periods. But because the differential between the time-based rates is relatively small, if Bluebonnet offered a rate that passed through this pricing signal, it would provide little incentive for the end-use customer. Both rates allow an option for the direct pass-through of fuel costs known as the Pay-Go option. This option provides for a more immediate cost signal and more transparency with regard to fluctuations in fuel costs but is only calculated monthly.

As a result of the wholesale rate design, LCRA has not provided the Cooperative with a pricing signal to offer members load management, peak shaving or other demand-side management programs. Offering such programs with its existing wholesale rate would have the potential to result in significant reductions in energy sales revenue without accompanying reductions in wholesale rate costs. LCRA has

indicated that it will work with Bluebonnet and other wholesale customers in studying the potential advantages of implementing such programs in the future and Bluebonnet will continue to partner with LCRA in studying those programs. If LCRA revises the structure of its wholesale rates in the future, Bluebonnet should reconsider its retail rate structure and the viability of load management and peak shaving programs.

Regarding the alignment of utility incentives with the delivery of cost-effective energy efficiency, for many years the primary design objective in the Cooperative's tariffs has been the recovery of the costs of providing service to each rate class. Rates have generally been designed to reflect the wholesale demand and energy costs as well as to recover the distribution demand and customer-related costs necessary to provide service. The design of electric rates based on the cost of providing service normally promotes the use of energy in an efficient manner because rates tend to be in line with how costs are incurred. For example, the Large Power rate is a demand design that provides a price signal which promotes the improvement of load factor. Improved load factor leads to a more efficient use of energy resources.

Regarding the establishment of rates that promote energy efficiency investments, certain provisions of the Cooperative's tariffs do not promote energy efficiency initiatives and investments. Bluebonnet's residential customer class represents the majority of the load on the Cooperative's system. Effective energy efficiency programs would have to include this customer class. Only a portion of the fixed distribution costs of providing service are recovered in the customer charge component of the residential rate. The costs that are not recovered in the customer charge are instead recovered in the energy component of the rate. This creates a disincentive with respect to the Cooperative's promotion and participation in energy efficiency or conservation programs, which by their nature are intended to reduce the amount of energy sold. As energy efficiency and conservation efforts reduce the number of kWh sold, Bluebonnet's ability to recover costs is reduced and, its margins are then also reduced. A good example of this result is the distribution of Compact Florescent Light bulbs (CFLs).

Replacing standard incandescent light bulbs with CFLs directly reduces the amount of energy consumed. When consumption goes down, the Cooperative's purchased power energy costs are reduced. For the adjusted test year included in Bluebonnet's most recent cost of service study, power

costs averaged approximately \$0.059027 per kWh sold (plus or minus any current Power Cost Recovery [PCRF] Charge). Since Bluebonnet' wholesale power is purchased from the LCRA, and since the LCRA wholesale rate is almost exclusively an energy rate with only a very small transmission demand component, the total power cost is far more closely aligned to the wholesale energy rate than is the case with other distribution utilities.

But CFLs do nothing to reduce the Cooperative's costs of providing distribution service. As the member installs CFLs to reduce his or her billing, the result is a reduction in energy usage. The Cooperative's distribution costs of providing service are not, however, affected by the use of CFLs. Therefore, the only cost reduction associated with the promotion of CFLs is the reduction in power costs. In short, the use of CFLs results in a loss of revenue from the reduction in kWh sold. The loss of revenue is equal to the energy charge for the adjusted test year plus the power cost recovery charges for the adjusted test year. For the general service rate class, the energy charges in the adjusted test year total \$0.080353 per kWh sold are reduced (plus or minus any current PCRF charges). The decrease in revenue is greater than the decrease in cost; therefore, the Cooperative's margins go down.

Notwithstanding this negative impact on the Cooperative's margins, CFLs are promoted because they reduce the amount of energy consumed, and therefore reduce the amount of fossil fuels needed to generate power. An energy efficiency benefit is realized at the wholesale generation level even though there is a cost issue at the distribution level. To eliminate the disincentives to energy efficiency and conservation, the main change Bluebonnet could make to its rate structure would be to increase the customer charge or the demand charge component of its retail rate. As the customer or demand charge is increased, less of the distribution cost recovery is dependent on the sale of energy. This would have the effect of reducing the disincentive of promoting energy efficiency. As the fixed cost component becomes a larger component of the rate, energy efficiency and conservation efforts would have a smaller impact on the Cooperative's margins.

Regarding Policy Option 1, a throughput incentive is another customer disincentive to energy efficiency and conservation. An example of a throughput incentive would be a declining block energy rate, which provides a lower energy charge for consumption over a certain level. A typical declining block rate design might have the first 1,000 kWh at a rate of \$0.10 per kWh and all excess kWh at \$0.09

per kWh. The lower cost over 1,000 kWh provides an incentive for the consumer to use more energy, which is counter to the energy efficiency and conservation initiative. Bluebonnet does not have any declining block rates. Bluebonnet also does not face any regulatory or management disincentives to energy efficiency. The Cooperative has included the cost of current energy efficiency programs in its existing rates structures.

Regarding Policy Option 2, Bluebonnet, through LCRA's Community Development Partnership Program (CDPP), provides grant assistance for energy efficiency projects. The grants help support non-profit organizations, namely schools, libraries, and volunteer fire departments, with their conservation-related projects that benefit the public. Bluebonnet is currently working with a consultant to develop a comprehensive and cost-effective energy efficiency/conservation plan. Bluebonnet is investigating a range of successful energy efficiency programs. Additionally, Bluebonnet has an incentive-based bonus plan that provides a set of standards and criteria on which to grade the Cooperative. One criterion, energy conservation, has three categories consisting of reimbursable mileage, fleet fuel consumption, and energy consumption. Beyond that, Bluebonnet does not provide itself with incentives to manage energy efficiency programs.

Regarding Policy Option 3, the primary impact of adopting energy efficiency as one of the goals of rate design is in the structure of the rate design itself. Promoting energy efficiency requires that the fixed component of the rates be increased and any throughput incentives be removed. Adopting energy efficiency as a priority requires that a high degree of attention be placed on rate design to ensure that the Cooperative's margins are not adversely affected. This was the case in the Cooperative's most recent rate design and cost of service study.

Regarding Policy Option 4, Bluebonnet's existing rates provide a pricing signal to members indicating that reductions in energy usage result in decreased monthly billing. In fact, since the Cooperative recovers a portion of its distribution wires cost of providing service through energy rates, it is actually providing members with a stronger pricing signal to promote conservation than is justified based strictly on passing through reductions in power cost.

Regarding Policy Option 5, any costs incurred for energy efficiency programs or investments should be recoverable from the appropriate rate class. The Cooperative will carefully consider the costs of implementing and operating energy efficiency programs in comparison to the benefits that are produced by such programs before recovering the costs from the Cooperative's rate classes.

Regarding Policy Option 6, Bluebonnet has several programs that promote energy efficiency. Bluebonnet continues to consider other programs as part of its on-going energy efficiency efforts.

Adopting a modified version of this standard will fulfill the three PURPA purposes, first by promoting the conservation of energy by removing disincentives to energy efficiency in the rate design. Second, removing disincentives also encourages the optimal efficiency of the Cooperative's facilities and resources. Third, recovering energy efficiency costs from the appropriate members and increasing the customer component of the retail rates will promote equity in the rate design.

For the reasons discussed above, Bluebonnet proposes implementing a modified version of PURPA EISA Standard 17 through the following policy:

**BOARD POLICY ON RATE DESIGN MODIFICATIONS TO PROMOTE
ENERGY EFFICIENCY INVESTMENTS**

Bluebonnet Electric Cooperative, Inc.'s retail rates will, in general, align utility incentives with the delivery of cost-effective energy efficiency and promote energy efficiency investments.

To accomplish that general approach, Bluebonnet will consider:

- (i) removing any throughput incentive and other regulatory and management disincentives to energy efficiency;
- (ii) providing incentives for the successful management of energy efficiency programs;
- (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.

To implement this standard, the Cooperative should continue to consider the advantages of aligning utility incentives with promoting energy efficiency improvements and increased conservation through its retail rate designs and other programs.

C. PURPA EISA STANDARD 18 – CONSIDERATION OF SMART GRID INVESTMENTS STANDARD

Under PURPA EISA Standard 18,⁵ each State must consider whether to require a regulated electric utility to demonstrate that it has considered an investment in a qualified smart grid system before investing in non-advanced grid technologies. Although this standard is not specifically directed to non-regulated utilities, and Bluebonnet cannot direct state action or implement this standard for other utilities, the Cooperative has nonetheless decided to consider similar investment strategies because the factors in the standard are prudent and applicable to its business.

Bluebonnet is currently conducting research to develop a business plan for investing in further smart grid technology. Corporate technology, field technology, member technology and financial aspects will be explored to justify the investment. Bluebonnet currently uses smart grid technologies by the deployment of:

- a. Advanced Metering Infrastructure (AMI);

⁵ This Standard states: (18) CONSIDERATION OF SMART GRID INVESTMENTS.—

(A) IN GENERAL.—Each State shall consider requiring that, prior to undertaking investments in nonadvanced 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), 121 Stat. 1791.

- b. A SCADA system that monitors amps, voltages, controls all substation reclosers, and monitors, and controls a few downstream (in the field) reclosers;
- c. An Aclara TNS system that pulls daily reads, blink counts and kWh. The Proasys software from Aclara allows Bluebonnet to monitor voltage on distribution lines hourly. The software will automatically notify the system operator if out of tolerance; and
- d. Milsoft Outage Management software that is interfaced with the TNS system to ping meters for outage notifications.

Because the Smart Grid Investments Standard identifies factors that Bluebonnet considers prudent and relevant to grid investment decisions, Bluebonnet proposes implementing a modified version of PURPA EISA Standard 18 through the following policy:

BOARD POLICY FOR CONSIDERATION OF SMART GRID INVESTMENTS

Prior to undertaking investments in non-advanced grid technologies, Bluebonnet Electric Cooperative, Inc. (Bluebonnet) will generally consider 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.

Rate Recovery. Bluebonnet will consider the factors to recover from members any capital, operating expenditure, or other costs of Bluebonnet relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of Bluebonnet for the deployment of the qualified smart grid system.

Obsolete Equipment. Bluebonnet will consider deploying 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.

The Cooperative has existing procedures in place to implement this standard. Bluebonnet should continue to consider the advantages and costs associated with smart grid technology before making investments and should deploy smart grid technology where appropriate.

D. PURPA EISA STANDARD 19 – CONSIDERATION OF SMART GRID INFORMATION STANDARD

Under PURPA EISA Standard 19,⁶ the Cooperative must decide whether to provide its members with direct access, in written or electronic machine-readable form as appropriate, to information from the Cooperative that includes:

1. time-based electricity prices in the wholesale electricity market and time-based electricity retail prices or rates that are available to the purchasers;
2. the number of electricity units, expressed in kWh, purchased by them (Usage);
3. updates of information on prices and usage offered on not less than a daily basis, including hourly price and use information, where available, and a day-ahead projection of such price information to the extent available (Intervals and Projections);
4. written information annually to both members and interested persons 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 (Sources); and
5. access to a member's own information at any time through the Internet and on other means of communication elected by the Cooperative for Smart Grid applications; and
6. access by other interested persons to information not specific to any purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.

⁶ The Standard states: (19) 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 purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser. 16 U.S.C. § 2621(d)(19), 121 Stat. 1792.

Implementing the Smart Grid Information Standard would require Bluebonnet to make available to its members information concerning energy rates, members' energy usage, sources of power, and other energy-related information. This information would be readily available to members to enable them to evaluate energy conservation practices.

Bluebonnet currently provides its members with the following information:

- Monthly kWh usage data and a 12-month usage graph for each metered location printed on the customer's monthly bill.
- Information related to residential rates provided on the Cooperative's website; in the member handbook; and in hard copy at each Retail Center upon request. The information includes:
 - **Residential Rates:** Bluebonnet's rate for residential electric service is divided into two line item charges on the bill: Wholesale Power Cost and Bluebonnet Residential Service. Wholesale Power Cost is the cost Bluebonnet has to pay its power provider for generating and delivering electricity to Bluebonnet's electric substations. Bluebonnet Residential Service is the cost of delivering electricity to each member's home. The following example is for the residential rate:
 - The Wholesale Power Cost consists of:
 - Power Supply - (5.96 cents per kWh) – cost of purchased power, plus
 - Power Cost Recover Factor (PCRF) – variable, per kWh, rate based on fluctuations in generating costs.
 - The Bluebonnet Residential Service cost consists of:
 - Energy Charge - (2.0753 cents per kWh) - electric system expenses, and
 - Member Charge (\$17.50 per month) - monthly expense for each meter including meter reading, billing, payment processing, etc.
 - The following equation shows how these elements add up to a member's Total Charges:
 - Wholesale Power Cost = A
 - Bluebonnet Residential Service = B
 - Member Charge = C
 - X = kWh used
 - $AX + BX + C = \text{Total Charges}$
- Bluebonnet provides information related to commercial rates, PCRF, and the entire rate schedule on its website at all times.

Bluebonnet faces challenges in providing its members with the type of information identified in PURPA EISA Standard 19. As a distribution cooperative, Bluebonnet's cost of power supply capacity and energy is determined, not by cost of service, but indirectly through the wholesale rate structure. The Cooperative's ability to provide the information identified in this standard is, therefore, limited by its ability to readily obtain such data from its power supplier or the extent to which the wholesale power rate provides correct pricing information. Because LCRA's wholesale rate is not hourly-based, the Cooperative's ability to provide time-based information to members is limited. As LCRA provides this information to Bluebonnet in the future or structures its wholesale rate to provide such a pricing signal, additional information can be provided to members. Should LCRA provide Bluebonnet with information about the greenhouse gas emissions associated with each type of generation for the purpose of dissemination to the public, the Cooperative will provide this information to its members.

Technology exists to permit Bluebonnet to provide its members with the information identified in the standard. But the Cooperative must weigh the potential advantages of such technology against the potential costs to the members. Moving to more advanced technology, such as home digital displays or computer interface access, adds additional costs. In addition to personnel and installation cost, operation and maintenance upkeep and other costs, and the installation of pre-paid metering or other similar technologies is prohibitively expensive for a Cooperative. Nevertheless, as discussed in other sections, Bluebonnet will continue to review the advantages of installing such technology.

For the reasons discussed above, a modified version of the Smart Grid Information Standard should be implemented through the following policy:

BOARD POLICY FOR SMART GRID INFORMATION

Bluebonnet Electric Cooperative, Inc. will provide to its members direct access, in written or electronic machine-readable form as appropriate, to the following information to the extent practicable and applicable to the member:

Prices. Members and other interested persons will be provided, to the extent practicable and applicable, with information on time-based electricity prices in the wholesale electricity market, and time-based electricity retail prices or rates that are available to the purchasers.

Usage. Members will be provided, to the extent practicable and applicable to the member, with the number of electricity units, expressed in kWh, purchased by them.

Intervals and Projections. Updates of information on prices and usage will be offered, to the extent practicable and applicable to the member, on not less than a daily basis; will include hourly price and use information, where available; and will include a day-ahead projection of such price information to the extent available.

Sources. Members and other interested persons will be provided, to the extent practicable and applicable, 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.

Access. Members will be able to access, to the extent practicable and applicable to the member, their own information at any time through the Internet and on other means of communication elected by that utility for Smart Grid applications. To the extent practicable, other interested persons will be able to access information not specific to any purchaser through the Internet. Information specific to any purchaser will be provided solely to that purchaser.

Modifying the standard in this way is important because residential members are currently billed on a flat energy rate. Because the energy charges for residential customers do not vary by usage, giving members hourly information on pricing will not assist them in making conservation decisions. Should LCRA move to wholesale rates that reflect more discrete daily or “real time” information, Bluebonnet could in turn develop retail rates that would also be time-based. Then, Bluebonnet would provide information to members to allow them to take full and effective advantage of any retail rates so developed. Until time-based wholesale rates are available, providing time-based information to members would not be useful. Moreover, the schedule for deploying technology will dictate the availability of the information. As Bluebonnet continues to deploy technology which collects information that would assist the members’ conservation efforts, and as the Cooperative develops the interface technology to allow members to access that data, such information will be made available to extent practicable.

To implement this modified standard, Bluebonnet should continue to provide existing information to members. As additional information is available from the Cooperative’s power supplier—that is, as wholesale and retail rates are developed that would allow members to take

advantage of time-based rates, and when such information can be provided on a cost-effective basis— Bluebonnet will provide such information to members to enable them to take full advantage of those rates.

CONCLUSION

These policies are proposed pursuant to Section 2621(d) of the Public Utility Regulatory Policies Act of 1978 and Sections 41.055 and 41.061 of the Public Utility Regulatory Act, TEX. UTIL. CODE ANN. §§41.055 and 41.061 (Vernon 1998 & Supp. 2005), which give the Cooperative exclusive jurisdiction and authority to consider the PURPA EISA standards and implement policies or tariffs appropriate for the Cooperative's members.

ISSUED IN BASTROP, TEXAS ON THE ____ DAY OF _____ 2009
BY BLUEBONNET ELECTRIC COOPERATIVE, INC.
JAMES B. KERSHAW
SECRETARY-TREASURER