PROJECT NO. 2008-TX088-0001

PROCEEDING TO CONSIDER AND DETERMINE WHETHER TO IMPLEMENT THE FEDERAL RATEMAKING STANDARDS FOR INTEGRATED RESOURCE PLANNING, RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY 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)	**§**	**NUECES ELECTRIC COOPERATIVE, INC. NUECES COUNTY, TEXAS**

[STAFF'S DRAFT PROPOSED DETERMINATION FOR BOARD CONSIDERATION AT MAY 26, 2009 BOARD MEETING]

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

Nueces Electric Cooperative, Inc. (Nueces 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 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 Nueces to consider the EISA Standards and determine whether to implement them at the Cooperative. In making this determination, Nueces 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

[1] Due to a drafting error, PURPA EISA 2007 contains two standards assigned the number 16 and two assigned number 17. In the American Recovery and Reinvestment Act of 2009, Congress corrected the error 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 smart grid information as Standard 19. The style of this proceeding will not been changed because notice has already been given, but the corrections have been made in the body of this proposal.

optimal efficiency of cooperative facilities and resources; and c) equitable rates for cooperative members (PURPA purposes). Nueces 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, notwithstanding that implementation may fulfill one or more of the PURPA purposes.

Cooperative Staff will conduct a public hearing to hear comments on this proposal from members and interested persons on Friday, June 19, 2009, at 12:00 p.m., at the Richard M. Borchard Regional Fairgrounds Conference Center, Meeting Rooms A and B, located at 1213 Terry Shamsie Blvd., Robstown, Texas, 78380. Written comments on the proposal may also be submitted to the Cooperative at P.O. Box 1032, Robstown, Texas, 78380-1032, or by e-mail to sfisher@nueceselectric.org, no later than June 17, 2009.

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

Integrating Energy Efficiency Resources. Nueces is an electric cooperative participating in customer choice, which means that: 1) Nueces provides distribution wires service to customers who

[2] (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 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.

purchase their power supply needs from the Cooperative's Retail Division; 2) Nueces provides distribution wires service to customers who purchase their power needs from other retail energy providers over the Cooperative's distribution wires; and 3) the Cooperative's Retail Division sells power through other utility distribution lines to non-wires customers. Nueces neither owns nor operates any generation facilities; instead Nueces purchases 100% of its power needs from its power supplier, South Texas Electric Cooperative (STEC). As a result, Nueces does not directly conduct resource planning.

STEC is completely responsible for providing Nueces's resource needs and for all related integrated resource planning. STEC's resource planning is based on the total resource needs of Nueces and each of STEC's other wholesale customer. STEC conducts a power requirements study or load forecast approximately every three years to determine current and future capacity and energy needs. The most recent study was completed October 2007 and updated September 2008. The study examined all aspects of projected future needs, including the regional economy, customer growth, business cycles and other related information. Nueces's energy efficiency activities, both current and proposed, are included in the study. Therefore, although Nueces does not directly control resource planning, its energy efficiency measures and programs are indirectly included in its power supplier's resource planning, and are very much a part of moderating its STEC's future resource requirements. In addition, STEC is willing to cooperate with Nueces to consider and evaluate demand-side and supply-side alternative resource options in conjunction with the resource planning process.

STEC provides a pricing signal to Nueces through its wholesale rates to indicate how Nueces can benefit financially through increased energy efficiency. The wholesale rate Nueces pays includes a capacity and an energy charge. As Nueces improves its energy efficiency, the Cooperative sees a decline in both its total purchased power cost and its average cost of purchased power. The peak demand STEC uses for billing is based on the peak in ERCOT, not STEC's own system peak. This method, which matches the distribution cooperative demand reduction efforts to the entire region and not just to the power supplier's generation, provides Nueces with a greater opportunity to improve energy efficiency and lower costs. Nueces also encourages STEC to identify renewable generation resources to supplement new power needs at a cost that is comparable to STEC's current non-renewable portfolio resources. Discussions currently underway with STEC may result in the Cooperative working to identify new generation resources for the retail-only consumers.

Adopting Policies Establishing Cost-Effective Energy Efficiency as a Priority Resource. Nueces has adopted a policy governing energy conservation entitled *Corporate Policy IV-6: Energy Conservation*. Under the policy, Nueces has identified the following objectives:

A. To establish a policy concerning the use and conservation of energy by the Cooperative.

B. To establish a policy concerning the use of energy by customers of the Cooperative, with particular emphasis on conservation and efficient use of energy.

C. To assure that the needs of the consumers are given prime consideration in carrying out the utility responsibilities of the Cooperative.

The Cooperative has a full menu of specific energy efficiency programs, which consists of direct assistance and educational programs. The direct assistance programs include:

a) on-site, simple walk-through energy audits performed by the Retail Division;

b) online energy audits available through the Touchstone Energy web site;

c) an online energy efficiency store through Energy Federation Incorporated (EFI) Consumer Division which offers a 10% discount to Nueces members;

d) a time-of-peak rate through the Retail Division offered to cotton gins to incent off-peak use (Tariff 203.13);

e) energy efficient lighting gifts, such as Compact Fluorescent Light (CFL) bulbs and Niagara energy efficiency kits, provided to members at the annual meeting;

e) providing energy efficiency tips in regular monthly features in Texas Co-op Power magazine;

f) economically sizing conductors on the distribution system to minimize line losses and working with customers to encourage them to correct their power factor, which has resulted in reductions in Nueces's system losses; and[4]

[4] Nueces's distribution system is generally designed to achieve a minimal level of losses. Additional reductions in system loss lead to improvements in Nueces's energy efficiency, which in turn result in improvements in STEC's energy efficiency. *System loss* is defined as the difference between the kilowatt hours (kWh) purchased and the kWhs sold. As old conductors and transformers are replaced with new, more efficient and properly sized

g) a wide variety of programs in the areas of energy efficiency and demand response, information management, and telecommunications and renewable and distributed energy through the National Rural Electric Cooperative Association's (NRECA) research arm, Cooperative Research Network (CRN).

The educational programs Nueces's offers include:

a) providing information about appliance usage and energy savings; and

b) participating in a nation-wide partnership of electric cooperatives through Touchstone Energy Cooperative, which promotes energy saving, energy efficiency, CFL installation and other lighting energy efficiency improvement, renewable energy and other programs.

Nueces further provides its members with educational material, online energy usage information, online energy audits, and customer feed-back and information request options through a web interface. Specific energy efficiency information is also communicated to members in the Cooperative's monthly publications, trainings, handouts, materials provided to local groups and schools, and new member information packets. As discussed above, those programs are considered in the resource planning process because Nueces's power requirement study includes its energy efficiency measures. Factoring those measures into the study has the effect of reducing Nueces's future energy and capacity requirements. When combined with similar studies, STEC will also see an over-all reduction in future capacity or energy requirement needs.

Nueces continually studies the possible addition of new energy efficiency programs. STEC does not have any specific standard energy efficiency promotional programs currently in place, such as load management or control, but the power supplier encourages its distribution wholesale customers to adopt energy efficiency programs and provides a pricing signal to encourage cooperatives to lower capacity requirements. As discussed above, STEC is willing to work with Nueces to study and implement new energy efficiency programs. Should Nueces determine that it is in the best interest of its members to do so, the Cooperative could implement a load management program into its menu of energy efficiency and conservation programs offered to members.

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equipment, for example, the Cooperative can reduce the amount of kWhs it must purchase and the power supplier can reduce the kWhs wasted through system losses.

Nueces will receive several benefits from continuing and expanding such programs. Nueces members will see reductions in future purchased power costs related to additional capacity as STEC's need for future capacity is mitigated through Nueces's energy efficiency programs. Current power costs that Nueces members pay, both total power cost and average cost of power, will be reduced as Nueces and other wholesale customers continue to promote energy efficiency. Nueces members will further benefit from any accompanying environmental improvements.

Nueces staff currently administers the existing energy efficiency programs. The costs of those programs were included in the Cooperative's last rate design and cost of service process. Some of the costs incurred by Nueces or Nueces Retail include:

a) approximately $40,000 spent to promote energy efficiency for the online energy store and the online energy audit program, and in the cooperative monthly magazine, Texas Co-op Power;

b) a $50 per month fee for the online energy store;

c) approximately $1,500 in the last 3 years on the labor to perform energy audits (approximately 3-5 audits per year);

d) approximately $2,000 in the last 3 years to train Customer Service Representatives (CSRs) on energy efficiency tips to help members lower their electric bills; and

e) $12,000 on CFLs distributed in 2006 and energy efficiency kits in 2007 for attendance at annual meetings.

Any decrease in the cost of purchased power or the average cost per kWh of purchased power from such programs does not necessarily increase cooperative margins. The cost of purchased power is generally passed through to members. Therefore, any future energy efficiency programs adopted by Nueces and implemented through the Retail Division rates will entail expenses that will not be directly or immediately offset by reduced power costs.

For the reasons discussed above, Cooperative Staff recommends that Nueces implement a modified version of the PURPA EISA standard for integrated resource planning through the following policy:

INTEGRATED RESOURCE PLANNING POLICY

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

Implementing this modified standard would fulfill two of the PURPA purposes by encouraging the conservation of energy supplied by the Cooperative as well as the optimal use of the Cooperative's facilities and resources.

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

Under PURPA EISA Standard 17,[5] the Cooperative 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:

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 on 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.

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[5] (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.

The primary design objective in the Cooperative's tariffs for many years has been 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 a recovery of the distribution demand and customer-related costs necessary to provide service. Cost of service rate design generally promotes the use of energy in an efficient manner because rate charges are normally in line with how the costs are incurred. For example, the Large Power and Cotton Gin distribution wires rates include demand charges that provide a price signal that promotes the improvement of load factor. Improved load factor provides a more efficient use of distribution facility and energy resources. However, there are other provisions of the tariffs that do not promote energy efficiency initiatives and investments.

Nueces is similar to other cooperatives in that the residential customer class represents the majority of the load on the 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. The reduction in kWh sold resulting from energy efficiency and conservation reduces the ability of the Cooperative to recover costs and, therefore, reduces margins.

A good example of the disincentive is the impact of providing CFLs. Replacing standard incandescent light bulbs with CFLs directly reduces the amount of energy consumed. CFLs, 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 costs issue at the distribution level. The impact of this disincentive on Nueces's distribution wires service and Nueces's retail division must be discussed separately.

- **Nueces's Distribution Wires Service**

Under its last cost of service study, Nueces's general service single phase rate (Phase 3) included a customer charge of $17.50 per month and an energy charge of $0.018 per kWh. These rates do not include billing for energy. They are designed to recover the Cooperative's distribution customer and capacity-related costs of operating its distribution system, including billing, meter reading, and other

similar costs. Nueces's distribution costs of providing service are not immediately affected by the use of CFLs. Therefore, the Cooperative does not see any reduction in its distribution wires costs as the customer reduces his or her usage; it only sees a reduction in distribution wires revenues and margins.

- **Nueces's Retail Division**

For its Retail Energy customers, Nueces' retail division recovers its wholesale power cost through retail energy charges. As a result of the reduction in energy consumed by installing CFL lighting, the Cooperative reduces its purchased power energy costs. But because the total purchased power cost also includes capacity costs based on kW usage that may or may not be reduced at the same rate as energy, the Retail Division may or may not see a savings in wholesale power cost that equals the reduction in revenue and margins. Typically, the Retail Division's margins would also be negatively impacted.

The primary change Nueces can make to the distribution wires rates would be to increase the customer charge or demand charge component of the retail rate. As the customer or demand charge is increased, less of the distribution cost recovery is dependent upon the sale of energy. This would have the effect of reducing the disincentive of promoting energy efficiency. As the fixed cost component becomes a large component of the rate, the Cooperative's margins are less impacted by the promotion of energy efficiency and conservation efforts. Another possible solution would be to consider a factor, similar to the Cooperative's PCRF factor, to recover the cost of implementing energy efficiency programs or lost revenue.

In its most recent rate change, distribution wires rates were, in fact, changed to reflect this principle. Nueces implemented a Three Phase strategy of increasing the Residential Customer Charge, for example, from $12.25 per month to $17.50 per month. Large Power and Cotton Gin customers will also see phased increases in customer charges, along with phased increases in demand charges. In all cases, these changes will more closely align rates with how costs are incurred and reduce the Cooperative's financial disincentive to promote conservation and efficiency.

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 $0.13 per kWh and all excess kWh at $0.11 per kWh. The lower cost above 1,000 kWh provides an incentive for the consumer to use more energy, which is counter to the energy efficiency and conservation initiative. Nueces's distribution wires rates do not have declining blocks.

The Retail Division offers a Time-of-Peak rate for cotton gins to incent off-peak use. As discussed earlier, Nueces continues to work with STEC to determine how best to promote energy efficiency through such possible methods as load management, time-of-use, peak shaving and other programs. As that collaborative process develops, the Nueces Retail Division may implement changes to its rates or optional new rates to implement such programs for other rate classes.

It should be noted that Nueces Retail Energy customers are not limited in their energy choices by their distribution wires provider. They are free to shop for any Retail Energy Provider (REP) providing service in the area for energy service products that meet their needs. These needs can certainly include energy efficiency, conservation, promotion or renewable energy and other considerations.

Nueces believes that the strongest incentive for the successful management of energy efficiency programs is the pricing signal it provides to members. The primary impact 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.

Nueces should continue to pursue rate designs that encourage energy efficiency for each customer class. Nueces's existing rates were designed based on balancing a variety of considerations. Those considerations included fair and non-discriminatory rates, minimized impact of rates on customers, rates providing a proper pricing signal, understandable rates and rates that encourage proper usage. The efficient use of energy was one of the elements considered for proper usage.

During its next cost of service and rate design, Nueces should review its rate structure in detail to continue to determine that its rates provide the appropriate pricing signal to members to promote the most efficient use of energy without creating throughput incentives or disincentives. Any costs incurred for energy efficiency programs or investments should be recoverable from the appropriate rate

classes. The Cooperative should carefully consider the costs of implementation and operation of energy efficiency programs in comparison to the benefits that are produced by such programs.

Nueces has several programs that promote energy efficiency, such as providing on-site energy audits. Other programs could be considered by Nueces as part of their energy efficiency efforts. Considering such programs does not obligate Nueces to implement them. Analyzing the costs and benefits of all programs should be included in any consideration process.

Implementing the rate design modifications standard promotes the conservation of energy by helping remove disincentives to energy efficiency in the rate design. The optimal efficiency of electric utility facilities and resources is encouraged by the removal of disincentives to energy efficiency in the rate design. The objective of equitable rates between rate classes is also promoted. Recovering energy efficiency costs from the appropriate members and increasing the customer component of the retail rates promotes equity in the rate design.

For the reasons discussed above, Cooperative Staff recommends implementing a modified version of this standard through the following policy:

RATE DESIGN MODIFICATIONS POLICY TO PROMOTE ENERGY EFFICIENCY INVESTMENTS

Nueces 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, Nueces 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.

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

Under PURPA EISA Standard 18,[6] 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 Nueces cannot direct state action or implement this standard for other utilities, the Cooperative has nonetheless decided to consider similar investment strategies because Nueces thinks the factors in the standard are prudent and applicable to its business. Therefore, implementing this standard only reinforces the Cooperative's support for smart grid technology.

Nueces recognizes, however, that it must also consider whether such investments are appropriate for the members. The Cooperative already considers total costs, cost-effectiveness, improved reliability, security system performance, and societal benefit when determining whether to make investments in approved smart grid technologies as opposed to making investments in non-advanced grid technologies. As an example, in 2007 Nueces looked at expanding its IDR (interval data recorder) metering for the ERCOT/PUCT Load Research Program. The analysis indicated that the cost-effectiveness for the consumer was not worthwhile.

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[6] (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)(16), 121 Stat. 1791.

Current smart grid investments at Nueces include the near complete (80%) installation of a Cannon Automated Metering Infrastructure (AMI) System with full system installation by early 2010, and the installation of an automated capacitor control system using a combination of STEC's SCADA system and Nueces's Cannon system. Implementing a version of this standard reinforces the Cooperative's support for smart grid technology while balancing appropriate investments for Nueces's members.

For the reasons discussed above, Cooperative Staff proposes implementing a modified version of this standard through the following policy:

CONSIDERATION OF SMART GRID INVESTMENTS POLICY

> Prior to undertaking investments in non-advanced grid technologies, Nueces Electric Cooperative, Inc. 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.
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> **Rate Recovery.** Nueces will consider the factors to recover from members any capital, operating expenditure or other costs relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures by Nueces for the deployment of the qualified smart grid system.
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> **Obsolete Equipment.** Nueces 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.

Nueces has existing procedures in place to implement this modified standard. Where appropriate, the Cooperative should continue to consider the advantages and costs associated with smart grid technology before investing in and deploying such technology.

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

Under PURPA EISA Standard 19,[7] 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:

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[7] (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:

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);

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;

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.

Implementing this standard would require Nueces to make available to its members information concerning energy rates, members energy usage, sources of power, and other energy related information. The members would have readily available and unencumbered information to evaluate potential energy conservation practices or offerings.

Nueces currently provides its members with the following information:

- Residential & Small Commercial pricing via an Electricity Facts Label (EFL) in English & Spanish that meets the requirements under the Public Utility Commission of Texas's (PUCT) customer protection rules (PUC Substantive Rules 25.475 and 25.476)

(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)(17), 121 Stat. 1792.

- All retail energy providers in both the Nueces delivery area and other competitive electric delivery service areas of Texas must provide information in accordance with PUCT rules.

Because Nueces purchases its power supply under contract from STEC, Nueces's cost of power supply capacity and energy is determined, not by cost of service, but indirectly through the wholesale rate structure. Nueces's wholesale rate is not time-based. Therefore, Nueces's ability to provide its members with the information identified in this standard is limited by both its ability to readily obtain such data from its power supplier, and the extent to which the wholesale power rate provides correct pricing information. As STEC provides such information to Nueces in the future or structures its wholesale rate to provide such a pricing signal, additional information can then be provided to members.

The Cooperative must continue, as is contemplated in the two smart grid standards, to weigh the potential advantages of such technology against the potential costs for the customer. Nueces has installed AMI to permit it to remotely obtain meter readings. But its existing system is limited in its ability to provide the type of two-way communication that some time-based retail rates would require. Moving to a 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, many cooperatives find that installing pre-paid metering or other such technologies is prohibitively expensive. Nevertheless, as discussed in other sections, Nueces continues to review the advantages of installing such technology.

But Nueces is a small utility by Texas standards. The complications inherent in its existing billing, accounting and data management systems by the nature of being a Texas Retail Energy Provider (REP) and providing customer choice to members are already taxing for a small utility. Therefore, Nueces must carefully consider the cost of implementing energy efficiency programs requiring changes to its technology.

Based on the discussion above, Cooperative Staff recommends implementing a modified version of the standard through the following policy:

SMART GRID INFORMATION POLICY

Nueces 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 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. 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.

The modification states that Nueces will provide information to its member as that information becomes available and applicable to its members. As an example, Nueces plans to implement an Internet-based service that would allow consumers to view their monthly usage and also forecast their future usage based on several factors, such as weather, usage history, and residential requirements. As technologies advance and become more affordable, Nueces will re-evaluate the costs to implement systems that provide more frequently updated energy usage information to further promote members' ability to manage their own energy use. In its planning, Nueces has and continues to include consideration of the balance between providing such information to members versus the cost of implementing the technology.

Two examples further explain this modification. First, the Retail Division residential members are currently billed on a flat energy rate. Because the energy charges for residential customers do not

vary by usage, giving the member hourly information on pricing will not assist them in making conservation decisions. Should STEC move to wholesale rates that reflect more discrete daily information, Nueces could in turn develop retail rates that would also be time-based daily. In that event, Nueces would provide information to members to allow them to take full and effective advantage of any retail rates so developed. Until daily time-based wholesale rates are available, providing time-based information to members would not be useful. Nueces distribution wires rates do not and should not reflect time-based differences in wholesale power costs – they only recover the Cooperative's distribution wires expenses. Second, the technology deployment of the smart grid is another consideration. As Nueces continues to deploy technology that collects information which would assist the members in taking conservation measures and as the Cooperative develops the interface technology to allow customers to access that data, the information will be made available to extent practicable.

Nueces should continue to provide existing information to members. As additional information is available from Nueces'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—Nueces should provide such information to members so that they may take full advantage of those rates. Nueces will continue to obtain information from its power supplier concerning the greenhouse gas emissions associated with each type of generation and provide this information to its members and the public annually.

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 members.

ISSUED IN ROBSTOWN, TEXAS ON THE __26___DAY OF __May___ 2009
BY NUECES ELECTRIC COOPERATIVE, INC.
DAVID ROSSE
SECRETARY-TREASURER