

Talquin Electric Cooperative, Inc.

Quincy, Florida

**Initial Comments Regarding
The Two PURPA Standards
In The
Infrastructure Investment and Jobs
Act Of 2021**

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**On Behalf Of
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Introduction

The Infrastructure Investment and Jobs Act of 2021 (“IIJA 2021”) that was enacted November 15, 2021, contains two new federal standards that must be considered for implementation by all electric utilities with annual retail sales greater than 500 million kilowatt-hours during calendar years 2020 or 2021. Those new standards are in addition to the six standards set forth in the Public Utility Regulatory Policies Act of 1978 (“PURPA”), the four standards contained in the Energy Policy Act of 1992 (“EPAct 1992”), the five standards contained in the Energy Policy Act of 2005 (“EPAct 2005”), and the four standards contained in the Energy Independence and Security Act of 2007 (“EISA 2007”). The relevant sections of IIJA 2021 are shown in Appendix A hereto. IIJA 2021 adds two new Federal standards to PURPA Section 111(d):

- (1) Demand-Response Practices, 26 U.S.C. § 2621(d)(20),
- (2) Electric Vehicle Charging Programs, 26 U.S.C. § 2621(d)(21).

The requirements of IIJA 2021 do not mandate that the affected electric utilities implement those new standards; instead, PURPA states that “[e]ach state regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated electric utility shall consider each standard” and then “make a determination concerning whether or not it is appropriate to implement such standard.” 26 U.S.C. 2621(a). Further, “[n]othing in this subsection prohibits any State regulatory authority or nonregulated electric utility from making any determination that it is not appropriate to implement any such standard.” Id.

The “baseline years” for the 500 million kilowatt-hour sales applicability threshold are the one and two calendar years prior to calendar year 2022 during which the standards are being considered. Talquin Electric Cooperative, Inc. (“TEC”) had annual retail sales of approximately

1,023,600,000 kilowatt-hours during calendar year 2020 and 1,031,866,000 kilowatt-hours during calendar year 2021, both well above the threshold of 500 million kilowatt-hours that identifies which electric utilities must consider implementation of the PURPA standards.

TEC is a nonregulated electric utility, which PURPA defines as “any electric utility other than a State regulated electric utility.” 16 U.S.C. § 2602(9). Thus, it is the responsibility of TEC’s Board of Trustees (“Board”) to make its own independent determination regarding whether to implement each of the new PURPA standards. That determination must follow an appropriate consideration of the standards that includes evidence presented during the course of a public hearing.

The purpose of these initial comments is to contribute to the body of evidence used by the Board to make their determination on each of the two new standards based upon findings that are appropriate for the member-consumers of TEC. The federal legislation anticipates that state regulatory authorities and nonregulated electric utilities would need to consider utility-specific conditions and circumstances during their evaluation of the PURPA standards and determine the ability of each utility to accomplish the goals of PURPA via the implementation of the two new PURPA standards. For that reason, with respect to each of the two PURPA standards, the Board may decide to implement the standard as stated in IIJA 2021, implement a modification of the standard, or decline to implement the standard. Subject to the receipt and review of additional evidence, if any, the following comments and recommendations address general considerations regarding each of the two standards and specific issues and circumstances applicable to TEC that the Management and Staff of TEC believe should be a part of the Board’s deliberations.

PURPA Goals

The goals of PURPA continue to be the same as those stated in the original Public

Utilities Regulatory Policy Act of 1978, that is, to encourage (1) conservation of energy supplied by electric utilities, (2) optimal efficiency of electric utility facilities and resources, and (3) equitable rates for electric consumers. The first goal focuses on retail energy users and promotes conservation by end-use consumers. The second goal applies to electric utilities, their use of energy, and the facilities they utilize to deliver energy. The third goal recognizes the need for proper development and administration of retail rates, providing a check and balance relative to the other two goals, so that the programs, policies, and rates employed by electric utilities to achieve the first two goals reflect their associated costs and are not arbitrary, unfair, or unduly discriminatory.

TEC's Board should make its determination regarding each PURPA standard based on whether, given TEC's particular circumstances, that standard will accomplish any one or more of those three purposes, without harming TEC's ability to accomplish the others(s). Thus, if implementation of a standard adversely impacts even one of the three goals, TEC's Board may decline to implement that standard.

Talquin Electric Cooperative, Inc.

TEC has several organizational and operational characteristics that should materially influence the Board's consideration of the PURPA standards. First, TEC is member-owned and thus self-regulated. TEC's member-consumers elect the Board that establishes and oversees TEC's policies, rates, service rules, and regulations. Unlike investor-owned electric utilities, TEC has no third-party investors to satisfy. Thus, there is no conflict of interest between the utility's owners and consumers regarding profitability. In fact, TEC is a not-for-profit organization. Revenues collected in excess of operating expenses (such difference referred to as "margins") are assigned back to TEC's member-consumers as capital credits. Under this form of

organization, all costs associated with the programs, policies, and rates adopted to implement the PURPA standards will be borne in full by TEC's member-consumers.

TEC owns and operates an electric distribution utility. Unlike vertically integrated electric utilities that also own and operate electric generation facilities and transmission lines (together commonly called "bulk power systems"), TEC does not make decisions independently regarding the generation and transmission functions and the related costs incurred to furnish electric energy to TEC's member-consumers. Instead, such bulk power system services are planned and coordinated by TEC and eight other electric distribution cooperatives in Florida through a generation and transmission electric cooperative, Seminole Electric Cooperative, Inc. ("Seminole"). Seminole is governed by a Board of Trustees comprised of representatives from each of those electric distribution cooperatives. It is through that participation on Seminole's Board of Trustees, as a "Member" and owner of Seminole, that TEC has direct input to and an active role in decisions made affecting generation and transmission issues.

In 1975, TEC and the other Members of Seminole executed a long-term "all requirements" wholesale power contract with Seminole that had an initial term extending through the year 2020. An amendment to that contract extended the initial term to the year 2055. Under the terms of that wholesale power contract, TEC is required to purchase from Seminole all of its power requirements, with certain exceptions, for distribution within the State of Florida not otherwise supplied under pre-existing contracts. The majority of such power supplied to TEC under such pre-existing contracts is from hydroelectric generating facilities operated by the Southeastern Power Administration ("SEPA"). In recent years, the energy supplied by SEPA represents less than 8% of TEC's total annual energy needs.

As later discussed herein, TEC's status as a Member of Seminole and its wholesale

power contract with Seminole are significant contributing factors in TEC's consideration of the PURPA standards and impact TEC's ability to implement the standards. Attached hereto in Appendix B are comments prepared by Seminole that reflect Seminole's input regarding TEC's consideration of the two PURPA standards in IIJA 2021. Additional references to Seminole's comments contained in Appendix B are made herein, where appropriate.

Demand-Response Practices Standard

The first of the two new PURPA standards that TEC's Board must decide whether to implement is the Demand-Response Practices standard, which states:

(A) In general. Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.

(B) Rate recovery.

(i) In general. Each State regulatory authority shall consider establishing rate mechanisms allowing an electric utility with respect to which the State regulatory authority has ratemaking authority to timely recover the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

(ii) Nonregulated electric utilities. A nonregulated electric utility may establish rate mechanisms for the timely recovery of the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

26 U.S.C. § 2621(d)(20).

The Board should view Part (A) of this PURPA standard in the context of the role it plays in Seminole's Integrated Resource Planning ("IRP") activities. The IRP process was succinctly described by Seminole on page 2 of its statements in Appendix B of GDS Associates' Initial Comments regarding the Energy Independence and Security Act of 2007 ("EISA 2007") as " a comprehensive planning process wherein electric utilities consider both supply-side (i.e., power plants) and demand-side (i.e., demand management, energy efficiency/energy conservation)

resource options in the course of meeting the current and future system electric demand and energy requirements.” The Integrated Resource Planning process consists of several steps, starting with identification of basic objectives such as reliability of service, quality of service, and meeting peak demand requirements. Next, historical and current data are collected to examine the electric system’s load patterns and trends. Based on that information and other data such as econometrics, demographics, and appliance saturation, a demand forecast is prepared to determine the current and future power requirements. To meet those forecasted power requirements, the IRP process considers and evaluates the utilization and management of two types of resources generally categorized as supply-side and demand-side.

Supply-side resources for Seminole and its Members include central station generating plants, and contracts to purchase power from the wholesale market, including renewable resources. Demand-side resources for Seminole and its Members include active load management of customer appliances, consumer and Member-owned distributed generation, passive load management via time-of-use rates, and energy efficiency and conservation programs.

Demand-response and demand flexibility practices by consumers are facets of demand-side management. Electric utilities have promoted *demand-response practices* for many years, including the examples of both active and passive load management of consumers’ electric loads just described. By comparison, *demand flexibility practices* are relatively new and, as described by the Alliance to Save Energy, focus on “[t]he use of communication and control technologies to shift electricity use across time of day while maintaining (in some cases improving) the quality and value of end-use services.” In that regard, according to The Brattle Group, demand flexibility includes demand-response, but “also more broadly includes new opportunities for

managing load to provide a wider range of grid services following the rapid emergence of consumer-oriented energy technologies such as AMI, smart appliances, electric vehicles, behind-the-meter battery storage, behavioral tools, and automated load control for large buildings.”

The PURPA standard specifies promoting practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand, which TEC is actively doing through several long-standing and new programs:

- A time-of-use rate option is offered to TEC’s residential consumers. The base rate energy charge for electricity consumption during defined off-peak periods is 62% lower than the base rate energy charge applied to electricity consumption during defined peak periods, to encourage a reduction in electricity consumption during those peak periods. The base rate energy charge applied to energy consumed during defined “super off-peak” periods is 77% lower than the base rate energy charge billed for energy consumed during peak periods, and is 40% lower than off-peak base rate energy charge. TEC’s ability to offer this time-based rate alternative is due in large part to Seminole’s wholesale rate structure that bills approximately 31% of TEC’s wholesale power cost on coincident peak demand charges and about 52% of the wholesale power cost on time-of-use priced fuel energy charges.
- A “Cooperative Rewards Smart Thermostat Program” is being promoted to residential consumers with Wi-Fi enabled thermostats as part of a joint pilot program with Seminole that began in 2018. The program is promoted to consumers on TEC’s website and on Facebook and is “designed to help you manage your energy use and reduce strain on the electric grid at times of peak use.” The pilot program phase ran from May 2021 through April 2022 included 71 member-consumers of TEC. It is estimated that the participants reduced their peak demand by an average of 1.5 kW. Analysis of the pilot program results concluded at the end of 2022, and Seminole is now proceeding with a full program in the first quarter of 2023 that provides participants with an annual bill credit of \$20.00, plus an additional \$10.00 bill credit in October for participation in winter/heat controls each October.
- TEC offers an optional High Load Factor Service Rate Schedule HLF to consumers with demands of 2,500 kW or more and monthly load factors of 60% or higher. That rate schedule contains coincident peak demand charge that provide significant incentives for consumers to engage in practices that will reduce their electricity consumption during periods of unusually high demand.
- TEC’s commercial and industrial consumers that meet certain load size and load factor criteria can receive demand response price signals under TEC’s Interruptible Service Rate Schedule INT-3 based on peak load interruption notifications, interruptible demand credits, and coincident peak demand rates that promote and reward reductions in the consumer’s capacity and energy consumption during periods

when “Seminole’s available firm capacity from its own and purchased resources is insufficient to meet Seminole’s firm load requirements at a specific time.” (see page 2 of Appendix B).

Additionally, TEC uses a wide range of ways to educate their consumer-members on the benefits of energy efficiency, which, in turn, promotes reductions in energy consumption during periods of unusually high demand. For example, the “Resources” item on TEC’s website homepage contains the link “Living Efficiently” that leads to “Energy Tips”, “Renewables”, and “Free Energy Analysis” information. In addition to these energy efficiency promotions, TEC participates with other Members of Seminole in developing training and education efforts and implementing energy efficiency measures, as explained on page 3 of Appendix B.

Subpart (ii) is the portion of Part (B) of the Demand-Response Practices standard that applies to TEC. It permits the establishment of “rate mechanisms” that provide the “timely recovery” of costs for promoting the practices described in Part (A). Rate mechanisms can take many forms, including base rates, fees, surcharges, discounts, riders, cost adjustment factors, and so on. The form of the rate mechanism for timely cost recovery will vary depending on the practice being promoted. It should not unreasonably hinder the intended response from the consumer, but it should reflect proper price signals that are aligned with costs, particularly Seminole’s wholesale power costs. If these tenants are followed, along with the other generally accepted principles of retail ratemaking, then demand-response and demand flexibility practices can be promoted in a way that benefits the consumers participating in those practices, while not adversely impacting (and perhaps even benefiting) the non-participants.

Impact on PURPA Goals

Regarding the three stated goals of PURPA, and in particular as to their application to TEC, Part (A) of the Demand-Response Practices standard is consistent with accomplishing the

first two goals of conservation of energy and efficient use of facilities and resources, and Part (B) is consistent with accomplishing the third goal of equitable rates. Furthermore, neither Part (A) nor Part (B) adversely impacts any of the three PURPA goals, and there are no known inconsistencies between that standard and State law.

Summary

In light of TEC's current and planned demand-response and demand flexibility programs, coupled with TEC's continued participation in Seminole's demand-response and demand flexibility programs, the Board should find in its determination of the Demand-Response Practices standard that TEC, to the extent it is able to do so as an electric distribution utility, has already adopted programs that promote demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand. The Board should adopt a finding to that effect.

Electric Vehicle Charging Programs Standard

The second of the two new PURPA standards that TEC's Board must decide whether to implement is the Electric Vehicle Charging Programs standard, which states:

Each State shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that—

- (A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;
- (B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;
- (C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and
- (D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

26 U.S.C. § 2621(d)(21).

Notwithstanding the specific wording that directs each “State” rather than each *utility* to consider the standard, TEC is including this standard in its IIJA 2021 PURPA compliance process, with the caveat that TEC’s ability to implement this standard is limited to its own electric distribution system grid and service area.

To consider this standard, the Board must understand what is meant by “electrification of the transportation sector”. “Electrification” in general is the switching (entirely or in part) from technologies that use fossil fuels to those that use electricity with the primary goal of reducing greenhouse gas (“GHG”) emissions. In regard to the transportation sector, electrification includes replacing fossil fuels with electricity as the means of powering light-, medium-, and heavy-duty vehicles. Electrification of the transportation sector may also provide benefits to electric utilities by improving electric grid stability and providing opportunities for demand flexibility.

Unlike the first PURPA standard addressed in these Initial Comments that specifies action (“shall promote”), this standard is more passive (“consider measures to promote”) in its implementation. Perhaps the standard’s wording is intended to reflect the uncertain and fast-evolving nature of the electrification of the transportation sector, such that if adopted, this standard could mean an ongoing, or periodic, effort to “consider measures.” In that regard, TEC’s Board could make a determination to implement the second PURPA standard and then, after considering several measures to promote greater electrification of the transportation sector, decide only certain of the measures are feasible at the present time.

There are many types of “measures” that could be considered, including consumer education (website, presentations, demonstrations), participation in activities as a Member of Seminole (programs, feasibility studies), partnerships with third parties (businesses, dealerships),

incentives (rebates, loans), and as identified in the standard, rates. Since Parts (A) through (D) pertain specifically to the establishment of rates, the following comments will mostly address that measure. It should be noted that the standard contains several broad terms that may lead to conflicting, or at least competing, objectives. Thus, implementation of the standard might necessitate establishment of priorities for the various objectives therein.

Part (A): Promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure.

Part (A) contains the dual objectives of promoting affordable and equitable options for electric vehicle charging. These objectives emphasize making electric vehicle charging available throughout TEC's service area by employing rates that do not deter consumers from acquiring and operating electric vehicles. Obviously, simply establishing lower rates will promote affordability. To also be equitable, however, rates must still appropriately recover costs, as noted in Part (D) of this PURPA standard.

The dual objectives can be attained by establishing rates that encourage the use of electric service for electric vehicle charging in a manner that is beneficial to both the consumer and TEC. Seminole's wholesale rate structure that includes coincident peak billing demand charges and time-differentiated fuel charges provides opportunities to its Members for the establishment of lower retail rates for energy sold to their consumers during off-peak periods. This time-of-use pricing is particularly applicable to residential consumers since most electric vehicle charging occurs at homes during the evening hours. In fact, such overnight charging at residences is one of the reasons that in 2021 Seminole modified its time-differentiated fuel charges to include "super off-peak periods" that enable its Members to offer the lowest time-of-use pricing for electric vehicle charging during such periods, running approximately from midnight to 6:00 a.m.

Time-of-use pricing in TEC's Residential Time-of-Use Service Schedule RTS promotes charging options for residential consumers, particularly the base rate energy charge during the super off-peak period that promotes affordable and equitable electric vehicle charging options for residential vehicle charging infrastructure.

TEC may possibly consider a similar time-of-use pricing option for its commercial consumers, though they may not be as able as residential consumers to take advantage of lower off-peak and super off-peak charges. An exception, however, is that charging electric vehicle fleets such as trucks and public buses might be manageable to increase their affordability.

TEC's larger commercial (general service) consumers are billed under General Service Demand Rate Schedule GSD (demand \geq 50 kW) and Large Power Rate Schedule GSLD (demand \geq 1,000 kW). Although those rate structures do not include time-based charges, they do utilize demand charges based on the consumer's monthly peak load. Since the demand charges recover a portion of the cost of service to the consumer, the energy charges are lower than they would be without the use of demand charges. The lower energy charges promote affordable and equitable electric vehicle charging options for large commercial consumers able to charge their vehicles at times other than when their own monthly peak load occurs.

Establishing affordable and equitable rates for public electric vehicle charging infrastructure is more difficult because the power requirements are greater and the energy consumption characteristics are difficult to predict. In particular, electric vehicle fast charging stations typically have a high peak demand that requires a significant electric facilities investment but a low energy consumption due to infrequent use. Further, that infrequent use might occur during high cost peak periods. Those electric load characteristics create a high

marginal cost of electric service delivery that challenges the establishment of affordable rates for electric vehicle fast charging stations that are also equitable in terms of cost recovery.

Part (B): Improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles.

Consideration of Part (B) of the standard must begin with recognizing some of the significant aspects of the present customer experience associated with electric vehicle charging, including the cost of charging, managing charging, range anxiety, and charging time. TEC's role with respect to charging cost and management were addressed above in Part (A). As a Member of Seminole, TEC is helping improve the customer experience regarding range anxiety and charging time through Seminole's involvement as a stakeholder in two programs administered by the state of Florida (see pages 3 and 4 of Appendix B hereto).

TEC is currently improving the customer experience associated with electric vehicle charging via the "Charge Finder" link on its website that identifies charging locations, specifies their capabilities, and indicates the costs of charging when available. Also, Seminole has partnered with Yenter Group to create a "Choose EV" dashboard for each Member that presents much information regarding electric vehicle ownership, including public charging location maps.

Part (C): Accelerate third party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles.

As previously stated, Seminole is actively participating in programs that could bring funding for electric vehicle charging infrastructure to the service areas of its Members and, in particular, to those service areas that are economically disadvantaged.

Also, TEC has had discussions with a third party regarding that entity potentially locating one or more large capacity electric vehicle fast charging stations in TEC's service area.

Part (D): Appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

This final part of the standard provides a safeguard to ensure the rates established to meet the objectives of the other three parts are sustainable and do not result in adverse financial impacts. The *marginal* costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure might be higher or lower than the *embedded* costs that electric rates are typically designed to recover. That is why any retail rates established by TEC to promote greater electrification should contain charges that are reasonably aligned with Seminole's wholesale rates and will recover distribution system costs based on the estimated load characteristics. It should be acknowledged that in some cases appropriate recovery of marginal costs may result in rates that lessen to some extent the affordability of electric vehicle charging and hamper the acceleration of third-party investment in electric vehicle charging.

Impact on PURPA Goals

The Electric Vehicle Charging Programs standard that aims to “promote greater electrification of the transportation sector” does not specifically meet the first stated goal of PURPA, which is to encourage “conservation of energy supplied by electric utilities”. However, “electrification” views energy conservation from a broader perspective than merely reduced kilowatt-hours supplied by electric utilities. According to the Electric Power Research Institute, “economy-wide electrification leads to a reduction in energy consumption, spurs steady growth in the electric load, and reduces GHG emissions—even in scenarios with no assumed climate policy.” Thus, given the many benefits of electrification, the Board’ consideration of this standard may include looking beyond the strict meaning of the first goal stated in the original Public Utilities Regulatory Policy Act of 1978.

PURPA's second goal of optimal efficiency of electric utility facilities and resources can be achieved by the Electric Vehicle Charging Programs standard if the measures are considered and implemented with that goal in mind, and not forsaking that goal when addressing specific objectives stated in the standard such as improving the customer experience associated with electric vehicle charging and accelerating third-party investment in electric vehicle charging. Electric utilities have an opportunity to influence how the growing and evolving power requirements of electric vehicles can be met in ways that make more efficient use of electric utility facilities and resources. For example, the efficiency of existing facilities and resources can be enhanced by measures promoting electric vehicle charging that is controlled during peak periods or encouraged during off-peak periods.

The third PURPA goal of equitable rates for electric consumers is contemplated by Part (D) of the standard that states the rates used to promote greater electrification of the transportation sector should appropriately recover marginal costs. This facet of the standard is important in two respects. First, rates that recover marginal costs provide reasonable and meaningful price signals to influence consumer behavior in ways that support the first two PURPA goals. Secondly, recovery of marginal costs precludes the measures implemented to promote greater electrification of the transportation sector from being subsidized by utility consumers through rates that are thereby inequitable.

Summary

The subject matter of the second PURPA standard has been discussed for many years, as evidenced by an Edison Electric report in 2014 regarding electric vehicles and utilities that concluded "The bottom line is that the electric utility industry needs the electrification of the transportation sector to remain viable and sustainable in the long run." Both TEC and Seminole

have already considered measures to promote greater electrification of the transportation sector in their service area. Going forward, adoption of the Electric Vehicle Charging Programs standard does not require a specific action by TEC's Board, other than to *consider measures* to promote greater electrification of the transportation sector. Such potential measures as the Board deems worthy of consideration may take many forms, including the application of rates that appropriately recover marginal costs. In that manner, cost-based measures can provide benefits to both consumers of electric service and electric utilities. Thus, to the limited extent that TEC is able to do so as an electric distribution utility and Member of Seminole, the Board should adopt a finding to that effect.

Conclusion

Based on the foregoing, TEC's Board should consider taking the following action on the two new PURPA standards set forth in IIJA 2021:

Demand-Response Practices Standard—The Board should find in its determination of the Demand-Response Practices standard that TEC, to the extent it is able to do so as an electric distribution utility, has already adopted programs that promote demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.

Electric Vehicle Charging Programs Standard—The Board should find in its determination of the Electric Vehicle Charging Programs standard that TEC, to the extent it is able to do so as an electric distribution utility, TEC itself or as a Member of Seminole, will consider measures to promote greater electrification of the transportation sector, subject to such

measures appropriately recovering the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

APPENDICES

APPENDIX A

Excerpts from The Infrastructure Investment and Jobs Act of 2021

PURPA 111(d) STANDARDS
in the
INFRASTRUCTURE INVESTMENT AND JOBS ACT OF 2021

Demand-response practices (26 U.S.C. § 2621(d)(20))

(A) In general

Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.

(B) Rate recovery

(i) In general

Each State regulatory authority shall consider establishing rate mechanisms allowing an electric utility with respect to which the State regulatory authority has ratemaking authority to timely recover the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

(ii) Nonregulated electric utilities

A nonregulated electric utility may establish rate mechanisms for the timely recovery of the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

Electric vehicle charging programs (26 U.S.C. § 2621(d)(21))

Each State shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that—

(A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;

(B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;

(C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and

(D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

APPENDIX B

**Seminole's Comments to Talquin Electric Cooperative, Inc.
Regarding Their Determination of Implementing the
PURPA Standards Under the
Infrastructure Investment and Jobs Act of 2021**

**Comments to Seminole Electric Cooperative's Members Regarding Their
Determination of Implementing the PURPA Standards Under the Infrastructure
Investment and Jobs Act of 2021**

With the passage of the 2021 Infrastructure Investment and Jobs Act (“IIJA”), all electric utilities with retail sales of over 500 million kWh during calendar years 2020 or 2021 are required to consider whether to implement two new Public Utilities Regulatory Policies Act of 1978 (“PURPA”) standards. Talquin Electric Cooperative, Inc. (the “Cooperative”) meets that kWh threshold, and thus under the IIJA, its Board of Trustees must consider whether to implement each of the new PURPA standards after a public hearing process. The final determination must be in writing, based upon the evidence presented during the hearing process, and made available to the public.

As the Cooperative's all requirements power supplier,¹ Seminole Electric Cooperative, Inc. (“Seminole”) is able to address certain aspects of each of the new standards on the Cooperative's behalf. Seminole is the primary wholesale electric supplier to nine, not-for-profit, electric distribution cooperatives in Florida (its “Members”). The purpose of this document is to provide input regarding those aspects of the standards under Seminole's purview and/or responsibility. The Cooperative may utilize this document as evidence in its hearing process if it deems appropriate.

The two new PURPA Standards are summarized below:

1. *Demand-Response Practices.*
 - (A) In general
Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.
 - (B) Rate Recovery
A nonregulated electric utility may establish rate mechanisms for the timely recovery of the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).

2. *Electric Vehicle Charging Programs.*
Each State shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that:
 - (A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;

¹ In 1975, Seminole and the Cooperative entered into an all-requirements wholesale power contract (“Wholesale Power Contract”) which provides that the Cooperative is required to purchase from Seminole all its power requirements, with certain limited exceptions, for distribution within the State of Florida. The all-requirements Wholesale Power Contract, as amended, has a term through 2055.

- (B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;
- (C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and
- (D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

PURPA Standard: Demand-Response Practices

Seminole and its Members are jointly committed to the active promotion of cost-effective conservation and energy efficiency. Seminole provides firm wholesale electric service under a single wholesale rate schedule. Seminole also provides non-firm service options to its Members under interruptible rate schedules. The price signals contained in Seminole's rate schedules provide a cost-basis for our Members to gauge the cost effectiveness of demand-side management and energy efficiency programs. Seminole's Members assess the viability of these programs in their respective service areas and Seminole's load forecast of power supply needs reflects the effect of its Members' demand-side management and energy efficiency programs.

Seminole's wholesale rate schedule, which applies to the Cooperative's purchases of firm service, contains production demand and transmission demand charges that are applicable to the Cooperative's demands coincident with Seminole's monthly system peak. The production demand charge is a seasonal rate that applies only during peak months. Seminole develops time-differentiated fuel charges (i.e., On-Peak, Off-Peak, and Super Off-Peak Fuel Rates) each year based upon Seminole's incremental fuel price differentials between the on-, off-, and super off-peak periods. In 2021, Seminole modified its time-differentiated fuel charges to include Super Off-Peak periods in addition to the On and Off-Peak Fuel Rates that had been in place for many years. One reason for the implementation of this change was to provide the Cooperative with enhanced pricing signals in anticipation of increased residential electric vehicle charging. The Cooperative may utilize the time differentiated prices contained in Seminole's demand and fuel charges to develop retail rates which track the Cooperative's cost of buying power from Seminole.

Seminole's interruptible rate schedules provide an option for the Cooperative to provide interruptible service to consumers with specific load characteristics. The interruptible rates are discounted from Seminole's firm service rate schedule and are offered to the applicable consumers in exchange for the consumer's agreement to be interrupted in the event that Seminole's available firm capacity from its own and purchased resources is insufficient to meet Seminole's firm load requirements at a specific time.

Seminole promotes demand-side management through two programs made available to its nine Members. Under the Coordinated Load Management Program,

Members may install and operate direct control load management systems (e.g., voltage reduction devices) to reduce coincident peak demand. In addition, Members may offer to their large demand consumers rate schedules that provide coincident peak billing (i.e., the billing demand for the consumer is based upon the consumer's demand at the time of Seminole's peak for the month). The Member routinely provides such consumers notifications of the timing of the monthly Seminole peak so that the consumer may at its option reduce its coincident peak demand. The resulting reductions in Seminole's coincident peak demand from the Member's direct load management systems and from the consumers with coincident peak billing, lower Seminole's requirements for system generating capacity (and associated reserves) and provide demand cost reductions to the participating Members.

Under the Load Management Generator Program, Seminole's Member Systems may install (or partner with their retail consumers to install) distributed peaking generation. These generators serve a dual need: (1) to enhance reliability by providing back-up generation during transmission and/or distribution system outages, and (2) to offset and avoid a portion of Seminole's system peak load generation requirements.

In addition, in 2018, Seminole and its Members initiated a Smart Thermostat Cooperatives Rewards Pilot Program. Retail consumers from all nine of Seminole's Members were able to participate in this "bring your own thermostat" pilot program. Phase II of the pilot program began in May 2021 and concluded at the end of 2022. Seminole has analyzed the data from Phase II and determined that Seminole will proceed with a full program that will begin in the first quarter of 2023.

Seminole is collaborating with its Members to ensure that cost-effective, demand-side management and energy conservation/efficiency alternatives are considered as an alternative resource. Similarly, Seminole and its Members are expanding Member staff training, consumer education, energy efficiency, and conservation programs. The focus of Seminole's joint program with its Members is to facilitate information sharing, evaluate demand-side management/conservation programs, and expand consumer education programs and information related to energy efficiency and energy conservation.

For example, Seminole's training and education efforts for Member staff include classes on infrared thermal imaging, heating, ventilation, and air conditioning (HVAC) analysis, and whole-home duct and envelope tightness analysis. Seminole, in conjunction with the Florida Solar Energy Center, has also hosted solar photovoltaic workshops.

Seminole coordinates with our Members on consumer education by providing energy efficiency videos, and energy efficiency information and materials that are available to consumers in both English and Spanish.

PURPA Standard: Electric Vehicle Charging Programs

Seminole and its Members have been involved in efforts to promote the greater electrification of the transportation sector and the adoption of electric vehicles (EVs). Seminole has been a stakeholder providing input with respect to the implementation of two programs administered by the state of Florida.

The first program was the disbursement of Volkswagen settlement funds allocated to Florida. These settlement funds became available after the company engaged in an elaborate scheme to circumvent emission control standards for their diesel-powered vehicles. Seminole submitted feedback to the Florida Department of Environmental Protection's Division of Air Resource Management, which reflected the interests of its Members as the agency deliberated as to how to award those funds. This input included public comments submitted to the agency wherein Seminole joined its Members, fellow generation and transmission cooperative PowerSouth, PowerSouth's members, and the Florida Electric Cooperatives Association in advocating for the funds to be awarded to areas that are economically disadvantaged and served by electric cooperatives. Furthermore, the comments emphasized that making these funds available to economically disadvantaged communities would assist with the effective and comprehensive deployment of EV charging infrastructure throughout the state. Without these funds, these communities may not have the ability to incentivize private investment in local EV charging infrastructure.

The second program in which Seminole is participating as a stakeholder is the result of the IJJA. The funds provided by the IJJA are allocated to the state of Florida to implement the National Electric Vehicle Infrastructure (NEVI) Program which the Florida Department of Transportation (FDOT) is administering. The NEVI Program will provide FDOT with an estimated \$198 million over five years to address EV charging needs for passenger vehicles and light duty trucks. Funds may be used for the purchase and installation of EV charging infrastructure, operating expenses, purchase and installation of traffic control devices located in the right-of-way, on-premises signage, development activities, and mapping and analysis activities.

Seminole offered input to FDOT that stressed the importance of funding EV charging infrastructure along the Alternative Fuel Corridors located in areas that lack EV charging facilities. Since FDOT announced a first round of funding for areas along interstate highways in the state, Seminole has been engaged with the process by which FDOT awards these funds and has advocated for the development of EV charging infrastructure in areas that would benefit Seminole's Members and their consumers.

Furthermore, Seminole has partnered with the Yenter Group to create a "Choose EV" dashboard website for each Member. The online dashboard provides cost of ownership comparisons for switching from internal combustion engine (ICE) vehicles to EVs, including a monthly savings potential, information on CO₂ reduction, the benefits of switching to an EV, current incentives and events, public charging location maps, and EV facts to inform the public and advocate EV adoption in Florida.

As a part of Seminole's efficient electrification strategy, Seminole has entered into a contract with Sawatch Labs to conduct an EV fleet suitability study for Seminole and its Members. Four of Seminole's nine Members are participating in the first round of the study. This study will provide information to identify how increased EV adoption within the Member EV fleet and community may affect peak demand at specific locations, address EV adoption barriers for fleets, and increasing electricity demand. The study will provide confidence that the vehicles identified for electrification will meet drivers' daily needs, project a cost of ownership savings, identify operational complexity, project charging needs and determine the best infrastructure locations, project peak demand for each day based on actual driving, identify when managed charging will be necessary, and support right-sizing of the charging infrastructure required.

Finally, during the remodeling of Seminole's office in Tampa, Seminole opted to install EV charging infrastructure for employees to use. Currently, employees can charge their EVs using either one of the 2 DC Fast Charger units or 4 Level 2 charging units that are available in Seminole's parking lot.

APPENDIX C

GDS Associates, Inc. Qualifications and Experience

STATEMENT OF QUALIFICATIONS

GDS Associates, Inc. is a multi-service consulting and engineering firm with extensive engineering, project management, and consulting experience. The firm was formed in 1986 and employs a staff of approximately 180 professionals and support personnel. GDS Associates' broad range of expertise focuses on clients associated with, or affected by, electric, gas, water and wastewater utilities. In addition, services regarding electric distribution and transmission design, information technology, market research, and statistical analyses are provided to a diverse client base. GDS Associates is headquartered in Marietta, Georgia, with offices in Austin, Texas; Auburn, Alabama; Manchester, New Hampshire; Madison, Wisconsin; Orlando, Florida; Augusta, Maine; and Redmond, Washington, and serves clients throughout the United States.

J. Steven Shurbutt is a founding Principal of GDS Associates and for more than 30 years held the position of Vice-President for Distribution Services, in which capacity Mr. Shurbutt oversaw most of the financial services performed by GDS Associates on behalf of electric distribution utilities. During the past 45 years, he has conducted retail rate studies, cost allocation studies, financial forecasts, and other financial and rate design services for more than 150 electric utility clients. He has appeared as an expert witness before regulatory authorities in 13 states and has also been involved in technical analyses associated with wholesale rate cases before the Federal Energy Regulatory Commission. Mr. Shurbutt has participated in member/pooling rate studies and rate design on behalf of generation and transmission electric cooperative utilities. He has advised wholesale rate customers on issues regarding interpretation of wholesale rate provisions and price signals, and the incorporation of same into retail rates. His retail rate assignments have included developing innovative rates for various classes of utility service customers and numerous successful power supply contract negotiations with large industrial customers on behalf of utility clients. He assisted more than 20 electric utilities in Florida, Georgia, Texas, South Carolina and Virginia with evaluating the PURPA Standards set forth in the Energy Policy Act of 2005 ("EPAct 2005") and the PURPA Standards set forth in the Energy Independence and Security Act of 2007. Mr. Shurbutt holds an MBA in Finance from Georgia State University and a Bachelor of Industrial Engineering from the Georgia Institute of Technology. He is a registered Professional Engineer and Senior Member of the Institute of Industrial Engineers.