GreyStone Power Corporation

Hiram, Georgia

Direct Testimony
of
J. Steven Shurbutt, P.E.

Regarding PURPA 111(d) Standards
in the
Infrastructure Investment and Jobs
Act of 2021

Prepared By
J. Steven Shurbutt, P.E.
Executive Consultant
GDS Associates, Inc.

On Behalf of
The Management And Staff
of
GreyStone Power Corporation

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Introduction

The following testimony is hereby submitted by J. Steven Shurbutt, P.E., Executive Consultant with GDS Associates, Inc, an engineering and consulting firm located in Marietta, Georgia, on behalf of the management and staff of GreyStone Power Corporation ("GSPC," or the "Cooperative"). A summary of the qualifications and experience of GDS Associates, Inc. and Mr. Shurbutt is contained in Appendix B hereto.

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, 16 U.S.C. § 2621(d)(20),

(2) Electric Vehicle Charging Programs, 16 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." 16 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 retail sales applicability threshold are the one and two calendar years prior to calendar year 2022 during which the standards are being considered. GSPC had annual retail sales of approximately 2,778 million kilowatt-hours during calendar year 2020 and 2,883, million 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.

GSPC 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 GSPC's Board of Directors ("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 testimony presented during the course of a public hearing.

The purpose of this testimony 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 members of GSPC. There is no requirement for GSPC to further consider previously enacted PURPA standards. 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 GSPC that the Management and Staff of GSPC 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.

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

GreyStone Power Corporation

GSPC has several organizational and operational characteristics that should materially influence the Board's consideration of the PURPA standards. First, GSPC is member-owned and

thus self-regulated. GSPC's members elect the Board that establishes and oversees GSPC's policies, rates, service rules, and regulations. Unlike investor-owned electric utilities, GSPC 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, GSPC is a not-for-profit organization. Revenues collected in excess of operating expenses (such difference referred to as "margins") are assigned back to GSPC's members 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 GSPC's members.

GSPC 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"), GSPC does not make decisions independently regarding the generation and transmission functions and the related costs incurred to furnish electric energy to GSPC's members.

GSPC is one of thirty-eight electric distribution cooperatives that comprise the membership of Oglethorpe Power Corporation ("Oglethorpe"), a not-for-profit power supply cooperative that manages electric generation assets and contracts to help its members meet their long-term capacity and energy needs. GSPC also has supplemental long-term power supply contracts with Morgan Stanley Capital Group, Inc. ("Morgan Stanley"), Constellation Energy Commodities Group ("Constellation"), and Georgia Power Company (Georgia Power"). The Southeastern Power Administration ("SEPA") supplies power produced by hydroelectric generating facilities to GSPC. Renewable energy is purchased by GSPC from Green Power EMC.

Generated power is delivered to GSPC via a statewide transmission network called the

Integrated Transmission System ("ITS") that is owned, planned, and operated jointly by Georgia Transmission Corporation ("GTC"), Georgia Power Company, MEAG Power, and Dalton Utilities. GSPC is one of thirty-eight electric distribution cooperatives in Georgia that receive transmission service from GTC, also a not-for-profit cooperative formed for such purpose in 1997. GSPC is also a member of and receives system operations services from a third not-for-profit organization, Georgia System Operations Corporation ("GSOC"). The services provided by GSOC include monitoring and controlling the generation and transmission assets of Oglethorpe and GTC, respectively, to ensure their reliable and cost-effective operation. GSOC also establishes the amount of generation capacity that each of its members must provide for purposes of reliably meeting future peak demands. As later discussed herein, GSPC's relationship with these affiliated organizations and service providers, and the provisions of their respective bulk power service agreements must be given due consideration in GSPC's determination of whether to implement the new PURPA standards.

Demand-Response Practices Standard

The first of the two new PURPA standards that GSPC'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).

16 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 GSPC's resource planning activities. GSPC's planning process considers appropriate supply and demand resources to meet its current and future load requirements.

GSPC's 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, and balancing those objectives with meeting the power requirements of GSPC's members at the lowest possible cost. 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 GSPC's current and future power requirements. To meet those forecasted power requirements, the resource planning process considers and evaluates the utilization and management of two types of resources generally categorized as supply-side and demand-side.

Supply-side resources include participation in central station generating plants, contracts to purchase power from the wholesale market, and renewable resources. Demand-side resources include passive load management via time-of-use rates and coincident peak demand pricing, and energy efficiency and conservation programs. During the resource planning process, both supply-side and demand-side resource options are given, as far as practicable, equal consideration in meeting the power requirements of GSPC. While supply-side decisions must often be coordinated with other members of Oglethorpe, demand-side resources can generally be

independently evaluated and implemented by GSPC. Additionally, all resource plans are considered within applicable requirements set forth in the power supply agreements between GSPC and its wholesale power suppliers.

Demand-response and demand flexibility practices by utilities and consumers are facets of demand-side management. Electric utilities nationally, and GSPC in particular, have promoted *demand-response practices* for many years, including the examples of both active and passive load management of consumers' electric loads just described. According to the US Department of Energy, Office of Electricity, demand response measures reduce or shift electricity usage during peak periods in response to time-based pricing or other forms of financial incentives. Examples of such measures are time-of-use rates and direct load control programs that provide utilities the ability to cycle air conditioners and water heaters on and off during periods of peak demand in exchange for a financial incentive and lower electric bills. 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 demand response standard specifies promoting practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand, which GSPC is already doing through several long-standing programs:

1. Smart Thermostat Rebates - GSPC offers "instant rebates" (usually $100) to residential members for the installation of specified smart thermostats. Eligible members can receive up to three rebates at their service location. GSPC estimates that there are approximately 4,000 rebated smart thermostats installed on the system. GSPC does not actively control the smart thermostats to reduce load during peak periods, but reduced electricity consumption during periods of unusually high demand is likely to occur due to members adjusting their smart thermostat settings in response to GSPC's system peak alerts.
2. System Peak Alerts – The issuance of system peak alerts just mentioned is a longstanding GSPC demand response program in which members voluntarily reduce their electricity consumption during periods of unusually high demand. The alerts are issued on GSPC's social media and by email. The use of smart thermostats to reduce energy consumption related to air conditioning is one of several actions that members take to lower their power requirements. Other actions include not operating certain large appliances such as clothes washers and dryers, and dishwashers, and foregoing the use of electric stoves and ovens by cooking outdoors. It is estimated that member response to system peak alerts reduces GSPC's system peak by roughly 26,000 kW.
3. Energy Efficiency Loan Program – GSPC provides prescreening and an interest rate buy-down to members for HomePlus loans from GoEnergy Financial Credit Union to improve the members' energy efficiency. Eligible home improvements include Energy Star heating and cooling systems, insulation, and Energy Star windows and doors. These home improvements will reduce the members' overall energy

consumption, and especially their electricity consumption during periods of unusually high demand.

4. Residential Electric Vehicle Service – GSPC's Schedule "EV" offers a rate structure to members containing time-of-use price signals that promote reduction of electricity consumption during periods of unusually high demand. The base rate energy charge for electricity consumption during defined off-peak periods is 70% 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 80% lower than the base rate energy charge billed for energy consumed during peak periods, and is 33% lower than off-peak base rate energy charge
5. GSPC offers Schedule "LM" as an alternative to Schedule "GS". The Coincident Peak Demand Charge of $15.00 per kW in that rate schedule, established during Peak Notification Hours specified by GSPC, provides a significant incentive for commercial consumers to engage in practices that will reduce their electricity consumption during periods of unusually high demand.
6. For many years, GSPC has employed cost-based, customer-specific contract rates applicable on a case-by-case basis to large power and industrial members that include coincident peak demand charges, which strongly encourage those members to reduce their electricity consumption during peak periods.
7. GSPC also uses a wide range of ways to educate their members on the benefits of energy efficiency, which, in turn, promotes reductions in energy consumption during

periods of unusually high demand. For example, the "Member Benefits" item on GSPC's website homepage contains the link "Energy Efficiency" that contains information on Energy Savings Tips, Energy Audits, Rebates, the *Together We Save* energy savings guidebook, and links to other websites that provide valuable information.

Subpart (ii) is the portion of Part (B) of the Demand-Response Practices standard that applies to GSPC. 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 GSPC'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 members 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 GSPC, 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 GSPC's current demand-response and demand flexibility programs, the Board should find in its determination of the Demand-Response Practices standard that GSPC, 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; and further that GSPC will continue to evaluate its current programs and opportunities for other such programs in the future to ensure that demand response practices provide benefits to GSPC and its members. The Board should adopt a finding to that effect.

Electric Vehicle Charging Programs Standard

The second of the two new PURPA standards that GSPC'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.
>
> 16 U.S.C. § 2621(d)(21).

Notwithstanding the specific wording that directs each "State" rather than each *utility* to consider the standard, GSPC is including this standard in its IIJA 2021 PURPA compliance

process, with the caveat that GSPC'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 this testimony 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, GSPC'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 with other Georgia electric distribution cooperatives (programs, feasibility studies), partnerships with third parties (businesses, dealerships), incentives (rebates, loans), and as identified in the PURPA standard, retail 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. For example, the term "affordable" in Part (A) implies a focus on consumers' ability to pay regardless of the utility's cost of service, whereas the direction in Part (D) to "appropriately recover the marginal costs of delivering electricity" recognizes the importance of the utility recovering the cost to provide service. 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 GSPC'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 GSPC. GSPC's wholesale power supply arrangements include coincident peak billing demand charges from GTC and requirements established by GSOC for generation capacity to be sufficient to meet GSPC's projected demand plus planning reserves during Oglethorpe's summer and winter peak demand periods. In addition, GSPC's purchase power agreement with Morgan Stanley contains various provisions that include price signals promoting reduced energy consumption during peak load periods. It also should be noted that GSPC's electric distribution

system has been planned and constructed to provide sufficient capacity during peak load conditions. The combination of these power supply arrangements and distribution system planning requirements provides the impetus and opportunity for GSPC to establish lower retail rates for energy sold to members during off-peak periods.

This time-of-use pricing is particularly applicable to residential members since most electric vehicle charging occurs at homes. Analyses developed by other utilities show that if the residential electric vehicle owner's energy consumption is not subject to TOU pricing, then there is a significant amount of EV charging during on-peak hours. Those analyses also show there is an increased amount of EV charging during off-peak hours when TOU pricing is employed, indicating that residential EV owners do in fact respond to time-based price signals. This demand response behavior is one of the reasons GSPC implemented its Residential Electric Vehicle Service Schedule "EV" in October 2019, which contains a low Super Off Peak Energy Charge applicable to energy consumed during the period from 11:00 pm to 7:00 am, thereby promoting affordable and equitable electric vehicle charging options for residential vehicle charging infrastructure.

GSPC is currently considering time-of-use pricing options for its commercial members as well, though they may not be as able as residential consumers to take advantage of lower 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.

Most of GSPC's larger commercial consumers are billed under its General Service Schedule "GS". Although that rate structure does not include time-based charges, it does utilize energy charges based on the consumer's monthly load factor, which is driven by the consumer's peak load. The energy charges decline as the consumer's peak load decreases (and load factor

increases). The lower energy charges promote affordable and equitable electric vehicle charging options for GSPC's 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, such 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. However, GSPC is currently considering potential retail rate structures and charges that address the balancing of those objectives.

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. GSPC's role with respect to charging costs and management were addressed above in Part (A).

To learn more about its members' electric vehicles, GSPC is conducting an online survey that provides information regarding the type of EV, make and model, and battery size. GSPC also uses its website to provide a description of its Residential Electric Vehicle Service Schedule "EV" under the Services link and enables members to request that rate schedule online.

GSPC is currently improving the customer experience associated with electric vehicle ownership and charging via the "Member Benefits - Value Center – Electric Vehicle" site on its website that provides a significant amount of information, including benefits, facts about EVs, a savings calculator, commute savings, EV models, and CO_2 reduction. The site also includes a "Charge Finder" link that identifies EV charging locations, specifies their capabilities, and indicates the costs of charging when available. In addition to these website-based resources, GSPC frequently educates its members about electric vehicles in its monthly newsletter and through social media channels such as My Cooperative Power Line Podcasts.

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

GSPC is actively participating in programs that are designed to bring funding for electric vehicle charging infrastructure throughout the state and to its service area. GSPC already provides service to commercial charging stations at three locations. Data are currently being collected for the purpose of developing pricing alternatives that will promote third party investment in electric vehicle charging, while still recovering the appropriate marginal costs.

In addition, GSPC has participated in discussions with third parties regarding additional potential commercial charging station locations and power requirements.

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 GSPC to promote

greater electrification should contain charges that (1) are reasonably aligned with its power suppliers' wholesale rates and billing provisions, and (2) will recover GSPC's distribution system costs based on the estimated load characteristics and perhaps with the inclusion of a contribution in aid of construction ("CIAC"). 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. The Board's consideration of this standard's impact on the third PURPA goal of equitable rates should acknowledge the benefits of cost-based TOU rates applied to EV charging service that reflect the higher cost of charging during on-peak periods, as well as an appropriate line extension policy that includes a CIAC for the installation of both residential and commercial EV charging facilities.

Summary

GSPC has already considered and implemented 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 GSPC'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. GSPC, to the extent it is able to do so as an electric distribution utility, has already implemented a residential electric vehicle charging rate that is available to the majority of its members, provided an opportunity for off-peak commercial electric vehicle charging, is considering an affordable and equitable rate for Level 3 charging, and has provided resources to its members to promote greater electrification of the transportation sector. Further, GSPC will continue to evaluate its current programs and consider opportunities for future electric vehicle charging programs that promote greater electrification of the transportation sector, while implementing such measures subject to the recovery of the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure. The Board should adopt a finding to that effect.

Conclusion

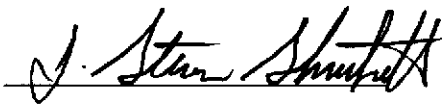
Based on the foregoing, GSPC's Board should consider taking the following action on the two new PURPA standards set forth in IIJA 2021:

Demand-Response Practices Standard—The Board should find in its determination of the Demand-Response Practices standard that GSPC, 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 GSPC, to the extent it is able to do so as an electric distribution utility, has already adopted programs that promote greater electrification of the transportation sector, and further, GSPC will consider evaluating additional

measures regarding this PURPA standard, subject to such measures appropriately recovering the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

I affirm that the foregoing testimony was prepared by me or under my direct supervision.



June 17, 2023

J. Steven Shurbutt, P.E.

Executive Consultant

GDS Associates, Inc.

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 (16 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 (16 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

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.