QUESTIONS FROM THE GEORGIA SOLAR ENERGY ASSOCIATION FOR ALL 2018 PUBLIC SERVICE COMMISSION CANDIDATES

April 17, 2018

Section I - Power Resource Allocation

- A. Do you think the current factors used to determine the resource mix for power generation (i.e. capital investment, operations and maintenance, taxes) are sufficient? What additional factors air quality impacts, water quality and water use, and land use impacts, for example should be included in managing Georgia's power generation decisions?
 - Current factors are necessary but not sufficient. The PSC should also consider:
 - Economic factors job creation (direct and indirect jobs created by investments in new resources); rural economic impact associated with new investments and plant retirements; etc.
 - Environmental factors water use; air quality impact (direct emissions and changes to the emissions profile of the full generation fleet); etc.
 - Energy Security factors resource diversity; grid resilience; etc.
- B. What role does solar, both on-site and large-scale, play in the future generation mix for Georgia?
 - Solar will be an essential component of a diverse, reliable, low-cost future generation mix for Georgia.
 - Large-scale solar is becoming one of the most cost-competitive resources for meeting the demand of our growing economy. This resource will also remain an important tool in Georgia's efforts to recruit new industries to the state, and to help both existing and new businesses meet their sustainability goals (e.g., Facebook coming to Georgia).
 - On-site (residential) solar will remain, in the near-term, a resource that enables consumers to reduce their environmental impact and control their energy costs. Over time, on-site solar will also make critical contributions to the reliability and resiliency of Georgia's distribution networks, and will emerge as an important alternative to traditional T&D investments for addressing localized capacity constraints.

Section II - Rate Structure

- A. What is the appropriate way to assess the value of on-site solar in the future generation mix for Georgia?
 - States all over the country are working to value on-site solar. There are varied innovative models and no one-size-fits-all approach.

- We have a rapidly changing marketplace with a surge in demand and decreasing costs – the market exists, we just need to connect the dots.
- Traditionally, on-site solar in Georgia was valued and compensated based on Georgia Power's "avoided cost" of energy. In 2017, the PSC took an important step forward by approving a new benefit-cost framework that incorporates the avoided capacity cost, thereby increasing the assessed value of on-site solar.
- As a Public Service Commissioner, one of my priorities will be to open a docket aimed at a developing a comprehensive framework for assessing the "true" value of on-site solar in Georgia. This docket will consider the findings of the many solar (and storage and EV) cost-benefit frameworks developed by other states, and it will feature a stakeholder process in which input is solicited from a broad cross-section of industry experts and interested Georgians.
- If on-site solar is to be fully and fairly valued, the benefit-cost framework must also account for non-energy operational benefits such as outage avoidance, improved system restoration, avoided plant O&M costs and other tangible, quantifiable benefits. We also need to be forward-looking and acknowledge that solar alone looks different than solar plus storage or solar plus EV. Our models need to be flexible and adaptive.
- B. What additional measures should be taken to support consumers' private investment in on-site solar in Georgia?
 - I support the following measures to facilitate consumers' investment in on-site solar:
 - Rate reform that reflects the true cost of delivering electricity to each consumer.
 - Fair compensation for excess solar output delivered to the grid (based on a comprehensive benefit-cost framework)
 - Streamlined permitting and interconnection processes
 - Expedited permitting and interconnection on feeders with sufficient "hosting capacity" – as determined by transparent, publicly-available "hosting capacity analyses".
 - More transparency in the siting process for solar (e.g., hosting capacity analysis).
- C. Do you support on-bill financing for solar installation?
 - I support all measures that help consumers overcome the up-front cost of investing in on-site solar and other beneficial solutions (e.g. energy efficiency improvements).
- D. As customer adoption of on-site solar grows in Georgia, how should that impact rate design?
 - Rate design must change across the electricity sector, including here in Georgia, due to a range of market and technological forces that are fundamentally reshaping the utility business model. The growth of on-site solar is only one of these forces.

- Flat volumetric rates the traditional means by which consumers pay for their electricity service contribute to inefficient investments and grid operations, and can result in cross-subsidization between and within difference customer classes.
- We need to move towards rate design that is more reflective of the locational and temporal cost of service and that encourages energy efficiency and other forms of demand side-management. Our rates need to recognize that there are valuable costs to distribution as there are to generation. They need to be data-driven.
- More reflective rate design will improve the overall economic and operational efficiency of Georgia's grid. Just as importantly, it will also provide consumers with the incentives and ability to better control their energy costs, and will help consumers to unlock the full value of on-site solar and other technological investments.
- E. How should solar be treated compared with other demand-side energy investment, such as energy efficient lightbulbs, in rate design?
 - A fair, efficient, reflective rate design will ensure that consumers realize the full value of on-site solar and other distributed energy resources.

Section III - Power Consumer Protection

- A. What would you do to protect Georgia consumers from steep rate hikes to pay for the completion of Units 3 and 4 at Georgia's nuclear Plant Vogtle?
 - Plant Vogtle has been a bad deal for Georgia. We have socialized the costs and privatized the gains. Consumers bear a disproportionate and outrageous amount of risk. That can never happen again. We need to pay attention to how we handle risk, going forward.
 - If elected to the PSC, I would take the following three actions to protect consumers from excessive rate hikes associated with Plant Vogtle Units 3 and 4:
 - Closely scrutinize future VCM filings for evidence of additional delays or cost increases beyond those approved in the December 2017 order, and carefully consider the PSC staff's recommendations regarding the reasonableness of any additional costs;
 - Consider changes to the terms of the December 2017 order if evidence emerges of additional delays or cost increases. Such changes may include further reductions to the authorized ROE or a cap on recoverable construction costs;
 - Ensure transparency and accountability in the post-construction prudence review, and stand ready to disallow cost recovery for any expenditures found by PSC staff to be imprudent, even if those costs were previously determined to be reasonable.
- B. What are the lessons to be learned about the regulatory process that managed the construction of Vogtle?

- I believe there are 3 lessons to be learned from the regulatory process surrounding Voqtle Units 3 and 4:
 - All the risk has been on consumers. We need to ensure:
 - Independence. Georgia needs independent-minded Public Service Commissioners who are willing to fully consider all evidence and make decisions that are in squarely in the public interest (and not narrowly in the interest of regulated utilities or other special interests).
 - Accountability. Georgia needs Public Service Commissioners who are willing to hold regulated utilities accountable for the consequences of their decisions, and enforce this accountability through a more balance approach to risk allocation in capital projects.
 - Courage. Georgia needs Public Service Commissioners who are brave enough to weather the intense political pressure and emotions associated with a high-profile project like Plant Vogtle Units 3 and 4, and are willing to stand up and make decisions that are in the public's interest. We cannot continue to cave to special interests.
- C. What changes should be made to the regulatory process to incorporate these lessons for future commission deliberations?
 - The changes need to occur in the voting booth.

Section IV – Utility Industry Regulation

- A. How should the PSC's role change or the regulatory process change as customers, accustomed to many options in other aspects of living, increasingly seek a range of choices regarding their energy provider, rate schedule and energy source?
 - Above all else, the PSC must come to view the distribution grid as a "platform" for the many emerging technologies and services that can fundamentally change how consumers use, save and produce electricity.
 - As to what regulatory changes should flow from this recognition, there is no simple
 or commonly accepted answer. Instead, the PSC should embark on a structured
 stakeholder process that seeks to do the following:
 - Develop a vision for the future of Georgia's distribution grid that includes an articulation of the "core" services to be provided by the regulated utility in a rapidly-changing market and the role of 3rd-party service.
 - o Identify the technological needs to transition.
 - Identify and develop proposed changes to Georgia's regulatory process that can facilitate the creation of the correct markets for transition.
- B. How should the PSC's role or the regulatory process change in an era of growing adoption of on-site distributed energy and increasing adoption of electric vehicles?
 - If elected to the PSC, I will support the following measures to better align our state's resource planning and ratemaking procedures so they better reflect the increasing penetration of distributed energy resources (DER):

- Create a vision for the future grid and identify the value of DERs.
- Move towards the inclusion of an Integrated Distribution Resource Plan (IDRP) as part of the triennial Integrated Resource Plan (IRP). The IDRP should: forecast DER adoption; identify optimal locations for the deployment of DER (utility-owned or consumer/3rd party-owned); include engineering assessments of the potential for different feeders/circuits to host DER (hosting capacity analysis), identify capital investments that can facilitate further deployment of consumer/3rd party-owned DER; and ensure the results of the IDRP are fully incorporated into the IRP such that the energy, capacity and systems benefits of these resources are fully accounted for.
- Transition to more time and locational variant rate designs in order to: encourage more efficient utilization of existing infrastructure; provide utilities with a stable mechanism for generating and transitioning in this emerging marketplace; and enables consumers to capture the full value of DER investments.
- Encourage Georgia Power and 3rd parties to work together to invest in innovative and emerging DER (e.g., grid-tied battery storage; Level 3 EV charging stations; grid-tied distributed solar with advanced controls; etc.) to demonstrate the technical capabilities and system benefits offered by these technologies and determine their value, and to help industry lead in the commercialization of these technologies.
- C. How should the role of the utility adapt to an era of decreasing or flattening energy demand?
 - Stagnant load growth is but one of many market, technological and political forces converging on utilities and forcing a rethink of the traditional utility business model.
 - Ultimately, the regulated electric utility must evolve from a commodity supplier whose business model favors capital investment, to a service provider whose business model revolves around achieving outcome-based performance targets.
 - To support this evolution, the PSC should consider alternatives to the traditional costof-service regulatory model. Specifically, the PSC should explore outcome-based performance models that:
 - aligns utility investment strategies with state and federal policy objectives;
 - o supports investments that deliver long-term value to customers;
 - o encourages innovation and rewards utilities for superior performance;
 - o incentivizes operational efficiency and cost-savings, and;
 - o accommodates emerging public policies and utility business models.

Section V – General (Ethics, transparency, constituent service, staff management and input)

- A. What is the proper relationship between Georgia Public Service Commission members and industry stakeholders such as utility executives, industry vendor companies and paid lobbyists?
 - Above all else, Commissioners serve the public interest.

- Commissioners should make themselves available to industry stakeholders subject to applicable laws and PSC rules. Importantly, Commissioners should strive to avoid showing preference for any one set of stakeholders, particularly if doing so disadvantages or deprives other stakeholders of the same opportunities.
- B. In considering the input of the PSC staff on rate-making, resource allocation and other decisions, what latitude should the PSC Commissioners apply in deviating from staff recommendations?
 - Staff is a critical resource and their expertise is paramount to the regulatory process.
 - That said, Commissioners, as elected public officials, should always retain the ability to exercise their independent judgment.