

Yes, in South Carolina, some customers are willing to pay more for their energy – or pay more in order to displace their *grid* electricity purchases with renewable energy purchases – as evidenced by the green power programs operated by Santee Cooper and PaCE. The real question is this: how elastic is this *demand*? How many customers are willing to pay more and, if so, how much more?

## **Third-Party Sales of DG as Related to Utility's Legal Obligation to Serve**

### **Electrical Services Through Distributed Resources**

The franchise monopoly system was established when large-scale centralized plants were the only efficient and effective option for distribution of electricity. In today's environment with solar, wind power and other forms of electrical generation growing exponentially, changes in the law to allow for participation of other service providers is an urgent need. Climate change, peak demand and ever-rising costs to consumers are being addressed by innovations in microgrids, energy storage and other modular technologies. One hundred percent clean energy is already a reality in some countries and with existing technology possible to account for eighty percent in the United States. Expanding the opportunities for clean energy providers, while providing fair compensation for the infrastructure and services of legacy providers must be addressed in the immediate future.

In considering the possibility of *distributed generation* of electricity through *various service providers* ~~third-party sales of electricity~~ in South Carolina, one should examine 1) the historical reasoning behind a utility's legal *obligation to serve* and 2) the impact that DG through multiple service providers ~~third-party sales~~ would have on the legal *obligation to serve*.

### **Historical Reasoning Behind a Utility's Legal Obligation to Serve in South Carolina**

As noted earlier in this report, the historical basis for a utility's *obligation to serve* in South Carolina arises generally from the theory that electric service is most appropriately provided through a natural monopoly and that such a monopoly must be economically regulated. In a basic sense, a natural monopoly exists where the costs and/or delivery of a particular product or service will be most efficiently accomplished through a single provider, such that any duplication of the development and *distribution* of the product will be inefficient.

Based on this reasoning, *electric service providers* are given both the *exclusive service franchise* opportunity and a corresponding *obligation to serve* customers located within their assigned territories. All such franchises have the effect of an indeterminate permit that may be terminated by operation of law (*e.g.*, statutes providing for revocation upon determination by the *Public Service Commission of South Carolina* (PSC) that the service rendered by the provider has been inadequate after the provider has been given an opportunity to cure the inadequacy) or by lawful forfeiture by the provider holding the franchise (*e.g.*, the utility ceases conducting business in the State).

In exchange for the grant of exclusive franchise, an *electric service provider* is subject to some measure of state regulation including, in the case of IOUs, economic rate-of-return regulation by the PSC. This conceptual exchange or trade-off, particularly in the economic context, is generally referred to as the *regulatory compact*. Pursuant to this *compact*, the service

provider is compensated for taking on the *obligation to serve* all customers located within an *assigned service territory* with recovery – including an opportunity to earn a reasonable rate of return – of the costs incurred to meet that obligation.

Although required to act in accordance with various federal and state regulations that dictate standards for safety and *reliability* and the acceptable basis for a utility's rate schedules (*e.g.*, cost of service principles, non-discriminatory rates, just and reasonable rates), the primary responsibility of an *electric service provider* is to fulfill its obligation to provide electricity service to all customers within its *assigned service territory*. This obligation includes 1) planning and building *generation* facilities and the infrastructure required for their deployment and 2) connecting *generation* facilities with customer *loads* to supply electricity to all customers (*e.g.*, *transmission* and *distribution lines*, *substations*, transformers, and meters).

The *obligation to serve* is intended to ensure the public has uniform and non-discriminatory access to an essential service. The obligation also features economic development aspects because the *service provider* holding the franchise rights and responsibilities is responsible for planning and preparing to serve its service territory's entire needs, now and in the future. The *obligation to serve* requires *service providers* to make themselves available to provide service on reasonable terms to all who desire service within the utility's assigned territory. This means that *electric service providers* are not free to choose to serve only those customers who are convenient or profitable to serve. If providing service to a customer within the utility's service territory is possible and can be accomplished on a reasonable basis, the utility is required to make arrangements to do so.

In summary, the *regulatory compact* is simultaneously an exclusive right enjoyed by the *service provider* to *service load* in its assigned territory and a corresponding *obligation to serve* that *load*, making whatever investments might be required to accomplish that. While the conceptual framework of the *obligation to serve* is fairly clear, this legal mandate entails several different facets that affect the way *service providers* operate in light of its requirements. As part of the required IRP process (discussed earlier in this report), utilities must make plans to meet present and future customer *demands* by designing their *generation mix* to make reasonably priced electricity adequately available on a reliable basis. The obligation to plan their *generation* carries over into the utilities' obligation to build or purchase the *generation* necessary to serve all of their assigned customers. In addition, *public utilities* have an obligation to build *transmission* and *distribution* networks, to supply electricity to meet market *demand*, and to deliver electricity to customers. These planning obligations would encompass taking into account the deployment of DG as sought by customers seeking greater control over their energy production and use.

### **What impact would distributed generation through ~~third-party~~ competing provider sales have on electric utilities' legal obligation to serve?**

Supplying electricity on a reliable basis depends greatly on having a clear understanding of which entity holds the legal *obligation to serve* customers and, therefore, has the authority to control sources of *generation* that can be deployed to meet *demand*. A clear assignment of franchise rights and obligations within service territories also works to keep costs of service down.

As noted earlier, under current South Carolina law, only the franchised *electric service providers* are permitted to sell power directly to retail customers within their assigned service territories. Customers may install their own *generation* and consume any power they produce or alternatively send the power back into the respective utility's *distribution system*, pursuant to applicable net metering or power purchase arrangements between the customer and that utility.

The following two points are central to this discussion:

1. The continued growth and proliferation of *distributed generation* subject to current South Carolina law and regulation would not alter in any way, absent a change in law, the regulatory construct within the State or any utility's corresponding *obligation to serve* any customer electing to participate in available *distributed generation* options.
2. However, any change to current law that would result in allowing ~~third~~ *multi parties* to serve retail customers directly in lieu of their being served exclusively by franchised utilities, pursuant to some form of purchased power agreement or operating lease, would change the balance of interests underpinning the *regulatory compact*.

The prospective and actual impact of the authorization and proliferation of *distributed generation* owned and operated by ~~third parties~~ competing providers – such as customers or electric power suppliers other than the State's franchised monopoly *service providers* – will depend upon the specific parameters of any legislation enabling ~~third-party~~ competing providers, non-incumbent, electric power suppliers to sell electricity at retail directly to South Carolina customers.

In developing any such new policies, many key questions must be considered, including the following:

**Will ~~third parties~~ competing providers be permitted to sell power directly to customers?**

In the event that direct sales to retail customers are permitted from ~~third-party~~ multi-party *electric power suppliers*, the exclusive relationship between the franchised utility and its customers as currently defined is altered. Policymakers should address if the possible removal of exclusivity in *service provider* would affect the franchised utility's obligation to provide service to the participating customer including removing, in whole or in part, that obligation.

**Will ~~third parties~~– service providers be permitted to lease systems to customers?**

In the case of lease arrangements–whereby changes in state law would allow the customer to lease generating equipment from a *third party*, operate it, and consume that generated electricity–the relationship between the franchised utility and retail customer would remain intact. The *third party* in this arrangement would merely provide the means for the customer to self-generate electricity without having to make the significant upfront capital investment in the equipment. If allowed, such an arrangement would not put the *third party* in the place

of the franchised utility because it would not be selling electricity to the customer; rather, it would be providing the means for the customer to generate the electricity for his own use.

### **What types of generation resources will be eligible for use in selling power directly to retail customers?**

*Distributed generation resources* can take several forms and use a variety of fuels. From a policy perspective, if lawmakers want to allow some level of retail choice for electricity, they will need to identify whether all or certain types of *generation resources* can be used by ~~third parties~~ service providers to sell electricity to the State's customers. For example, if the State desires to promote renewable energy development, such an opportunity could either be open to all or limited to some sub-segment of renewable resources.

### **Which power suppliers, if any, will carry the obligation to serve South Carolina's retail customers?**

If the exclusive right to serve were altered by policymakers, they might consider whether it is also appropriate to alter the related *obligation to serve*. To the extent that franchised utilities retain an *obligation to serve* customers who elect to take service from *third parties*, consideration should be given to fairly addressing the challenge that such incremental *demand* places on utilities. Such consideration could include possible adjustments to rates and pricing for service to such customers.

### **Which power suppliers will be subject to regulatory oversight at the PSC, and to what extent?**

The PSC provides an important consumer protection function relating to electric rates and service. Should that function be diminished in the context of any proposed policy changes relating to *distributed generation*?

### **What should be done about any costs incurred by the franchised utilities that are stranded due to customers' election to participate in other distributed generation options?**

In instances where net costs are incurred when customers formerly served exclusively by a franchised utility have chosen to receive electric service from another supplier, pursuant to a legal change allowing for retail choice, the utility's costs incurred to serve those particular customers would not be recovered from those customers. Current regulations allow that, if such costs were prudently incurred, the utility is entitled to recover them from its other customers. Any change in policy that allows some measure of retail choice for electricity in South Carolina should also address the recovery of the franchised utility's stranded costs, to the extent they exist. Not all situations would result in a stranded cost to the utility.

### **How should a utility's costs to provide standby or backup capacity and energy to competing ~~third-party-served~~ customers be priced and allocated to those customers?**

A customer electing to take part or all of his electric service from a *third-party power supplier* may need the franchised utility to back up the *third party* to ensure that the customer's service is not disrupted, in the event that the *third-party supplier* fails to meet its obligations. Under current law, the relevant utility must plan its resources accordingly to provide this service in the event of a *third-party supplier's* default or inability to perform. Providing this type of back-up service has a cost, and policymakers should determine whether the costs exceed the

benefits afforded by customers who provide DG to the *system*, and how those costs and benefits should be allocated.

**How should the potential benefits of distributed generation to the grid be quantified and allocated?**

It is important to note, as stated in the RMI study, “Mechanisms are not in place to transparently recognize or compensate service (be it monetized *grid* services like energy, *capacity* or balancing supply and *demand*, or less consistently monetized values, such as carbon emissions savings) provided by the utility or the customer. To the utility, revenue from DER customers may not match the cost to serve those customers. To the customer, bill savings or credit may not match the value provided.”

This series of questions illustrates the considerations that policymakers must address in weighing and adopting changes to South Carolina law relating to *distributed generation* and possible other service providers ~~third-party~~ involvement in the provision of retail electric service to customers within the State. Changes to the existing regulatory framework in South Carolina will have significant consequences, both intended and unintended. Therefore, any such policy changes should attempt to fairly and practically solve for those consequences in a comprehensive fashion, to the extent possible.

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