

RCB 5427 AAC The Shared Clean Energy Facility Pilot Program.
Energy & Technology Committee, March 1, 2016

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Co-Chair Doyle, Co-Chair Reed, Committee Members and staff, my name is Joel Gordes. I am an independent energy consultant. While I served as a Study Advisor to the Connecticut Academy of Science and Engineering (CASE) on their study of Shared Clean Energy Facilities (SCEF), I do not currently represent them.

With some exceptions below, I support this bill to amend last year's bill, SB 928, to allow development of Shared Clean Energy Facilities. These facilities are already underway in ~15 other states without the pilot program status and severe size limitations in our legislation. Many in the environmental community will well-cover the valuable contributions SCEFs can make to furthering environmental goals but I will concentrate on other points and less recognized value streams—such as state budget deficit reductions.

Summary of Major Points:

- 1) This proposed legislation has corrected certain areas for which DEEP asked PURA for a declaratory ruling but was denied. (Note: DEEP should have previously posed such questions had they submitted testimony on SB 928 last year to do so.)
- 2) The 15 year term for the facilities may not be sufficient for developers to take the economic risk. This should be restated as “for the life of the facility” as was the suggestion in the CASE report at p. 62.
- 3) The Committee ought to expand the scope from the 6 MW pilot to an far less limited program with portions tied to reducing the state budget deficit.
- 4) In this legislation or separately, mandate a professionally-conducted value of solar/DG study to end equity issue allegations that PV users are “subsidized” by other ratepayers or actually aid all ratepayers.
- 5) In this legislation, consider provisions for a 1% -5% bonus rate of return for utilities to reward their role in successfully facilitating SCEFs-- if done well, particularly for deficit reduction goals. We have done this for energy efficiency programs under Sec. 16a-49 first enacted in 1988 and it has worked well.
- 6) The core problem faced is inaction to mandate changes to the over 100 year old utility business model. Other states have already begun. The NY *Reforming the Energy Vision* (REV) process, begun by Gov. Cuomo in 2014 after massive damage by Hurricane Sandy, may form one model for this. These skirmishes with utilities in Connecticut will continue until this is reconciled.

With the aforementioned being said, I would like to detail how a proliferation of SCEFs could aid in state deficit reduction and aid low-income populations.

The Deficit Reduction Connection: In 1990, Connecticut had a large budget deficit. One step taken to alleviate it that did not entail a tax increase or budget cut was Public Act 90-221. All it did was changed all light bulbs in state buildings from conventional bulbs to the then-new compact fluorescents using one quarter of the energy. It was able to save \$4 million (possibly as much as \$12 million) in the first year and was projected by Northeast Utilities to save \$130 million dollars by year 2000. This would equal approximately \$236 million in today's dollars.¹

¹ [Bureau of Labor Statistics CPI Calculator](#)

While the savings from SCEF operations would not be available for this immediate year's deficit, in reports referencing OPM Secretary Ben Barnes, it appears we are in an era of perennial deficits and, if not delayed further, some of these SCEF-induced savings could likely be available within a year.

One similar application of SCEFs has already taken place in Massachusetts, another state serviced by Eversource. It allows low-income housing tenants to save \$60 million over 20 years by use of SCEFs with the bill credits going to the 16 housing authorities which reduces that state's funding for energy.²

It is also noteworthy that Massachusetts with only twice Connecticut's population has five times the amount of installed solar capacity (ranking #2 nationally) to Connecticut which placed at #16.³ The cited source went on to say that they, "...found Connecticut lagging far behind Massachusetts in the number of state buildings using solar power to generate electricity." SCEFs provide a way to increase state building use of solar PV and at a cost savings. But it is NOT just state buildings that can play a role in deficit reduction by buying lower cost power via SCEFs. The state provides aid to innumerable entities including towns, libraries, group homes, half-way houses, museums, schools, nursing homes, railroads ...and the list goes on ad infinitum. All of them use electricity. Lowering their energy cost with SCEF-provided power could bring about significant savings allowing the state to cut some portion of their aid proportionate to those savings without affecting operations.

Another Vision: How Shared Facilities May be Employed for Low-Income Populations: Equity issues dictate there must be a concerted effort to benefit low-income citizens. While we have a winter moratorium on shut-offs of electricity, the rest of the year we do not and a certain number of people suffering economic hardship lose access to power. The utilities do their best to minimize this dire action. But too often, those who are shut off resort to candles for lighting and there are myriad accounts of candles tipped over with ensuing fires and loss of life; many time with children involved. In a nation that guarantees life, liberty and the pursuit of happiness, it is almost unthinkable such punitive action can deprive life in this way.

SCEFs could mitigate this unfortunate situation. One vision is that groups like Operation Fuel, which already aids people to pay electric bills and AARP could use contributions to buy or invest in SCEFs or benefit from Crowdfunding to do so. This would provide electric bill relief to those who may be facing an imminent shut off. This cannot take place under the utility clean energy model as structured.

In closing it is hoped that, instead of opposing a new business model(s), our utilities will follow suit and even profit from it. Almost five years ago, in a published OP-ED concerning microgrids I wrote:

...but the key to successful implementation will be to compensate utilities with equal or better rates of return so they cooperate in installation of these systems. We have taken similar steps for their involvement in energy efficiency programs since 1988. Only by making the utilities monetarily whole can a secure, reliable distributed generation plan become a reality.⁴

This also holds true for the shared solar program as well. Thank you for your attention in these matters.

² Trabish, Herman K. [How Virtual Net Metering Will save Low Income Massachusetts Residents \\$60 Million](#). UtilityDIVE 12/9/14

³ Hladky, Gregory B. [State 2nd in Region for Solar Jobs](#). February 11, 2016.

⁴ Gordes, Joel N. [Smaller Electric Grids Safe, Reliable](#). The Hartford Courant. September 4, 2011. P. C1.