

Memo

To: Joint Committee of the Energy Efficiency Board and the Connecticut Green Bank

From: Bryan Garcia

CC: Isabelle Hazlewood, Emily Rice, Steve Bruno, Ron Araujo, Joel Kopylec

Date: July 29, 2022

Re: Follow-Up from the Joint Committee Meeting of June 29, 2022 – Shared Clean Energy Facilities: Potential Opportunity for Additional Energy Efficiency

Background

In its Final Decision in Docket No. 19-07-01RE01, on September 15, 2021 the Public Utilities Regulatory Authority (“PURA”) provided the following direction:

While PURA is not authorizing implementation of the CGB Proposal at this time, the Authority is interested in engaging stakeholders in future SCEF proceedings to contemplate potential programmatic modifications in line with the CGB Proposal and consider the implications and overlap with other EDC-administered programs (e.g., the Conservation and Load Management Plan, the Residential Tariff Program established in Docket No. 20-07-01, the Electric Storage Program established in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies –Electric Storage, etc.). Accordingly, the Authority encourages the CGB to work with the EDCs, DEEP, and OCC to incorporate any redline edits that would enable the CGB’s modifications to be implemented in a timely fashion, submitting the proposed edits in the appropriate SCEF proceeding.¹

As a follow-up to the request, the Connecticut Green Bank (“Green Bank”) pursued the following:

- **Meeting with DEEP and OCC** – on Friday, June 17, 2022, the Green Bank, in coordination with Eversource Energy (“Eversource”), held an online meeting with the Department of Energy and Environmental Protection (“DEEP”) and the Office of Consumer Counsel (“OCC”) to discuss the PURA suggestion. UI was unavailable to attend this meeting. The Green Bank provided an overview of the proposal that would enable the Shared Clean Energy Facilities (“SCEF”)

¹ The appropriate proceeding will depend on the timing of the submission. At the time of the filing, stakeholders may contact the PURA case coordinator to receive further guidance on the appropriate docket for submission.

program to support additional public policy objectives of the State of Connecticut (e.g., 80% weatherization by 2030). After a long discussion, both DEEP and OCC suggested that the concept be vetted by the Joint Committee,² in response to several questions raised for discussion and consideration.³

- **Meeting with Joint Committee** – on Wednesday, June 29, 2022, the Joint Committee⁴ met at its regularly scheduled quarterly meeting and included a discussion on the Green Bank proposal for SCEF. Eversource provided an overview of the SCEF program, Green Bank subsequently followed with a presentation of the proposal, and a discussion on several raised questions ensued. Following forty-five minutes of discussion several points were raised, including, but not limited to:
 - **Owner-Tenant Problem** – how could the proposal overcome the owner-tenant problem;
 - **Benefit Trade Off** – depending upon the use case, by redirecting the SCEF benefits to investments in a property, the Subscriber may only realize the financial benefits of program participation so long as they continue to reside in the property, as opposed to the full term of the SCEF tariff;
 - **Additional Strain on Budgets** – could additional interest in weatherization from the SCEF proposal cause strain on the resources available through the C&LM programs;
 - **Use of Proceeds** – are there additional measures or use of proceeds (e.g., arrearages), that SCEF resources could be used for besides that which was posed as a use case (e.g., weatherization, including insulation and heat pumps); and
 - **Need for Community Outreach** – the proposal, if pursued, would need a strong community outreach component, including friendly local ambassadors to explain the value proposition to customers.

There was interest from the Joint Committee to continue the discussions on the proposal through a PURA-overseen process.

Proposal Overview

Participants in SCEF

² CGS 16-245m(d)(2)

³ Questions included: (1) what do you think of the concept (i.e., achieve more public policy), (2) would Subscribers have a choice in terms of (a) participation, and (b) use of Subscriber Savings for investment (e.g., arrearages, weatherization), (3) is there a different role for the EDCs where they could more efficiently direct SCEF proceeds to benefit the Subscriber (e.g., direct Subscriber Savings to C&LM), (4) are there other ways to think about this value that can provide more benefits to Subscribers (e.g., direct Subscriber Savings directly to Heat Loan), and (5) if this concept is supported and successful, will more demand for energy efficiency programs cause issues with the C&LM budget?

⁴ For presentation, see pages 12 to 18 – [click here](#). To listen to recorded discussion, see 8:40 to 53:20 – [click here](#).

The Subscriber Savings provided to Subscribers of SCEF, provides an opportunity to raise proceeds to support additional public policy objectives in Connecticut – see Table 1.

Table 1. Estimated Average Subscriber Savings per Subscriber Over 20-Years

Average Monthly Consumption (kWh)	SCEF Subscriber Savings per kWh of Consumption	Average Annual Subscriber Savings	Average 20-Year Subscriber Savings
800	\$0.025	\$240	\$4,800

On average, a Subscriber would receive \$4,800 over 20-years on a nominal basis, and about \$3,000 on a net present value basis (i.e., 5% discount rate). The proposal would allow Subscribers to assign the 20-year value of their Subscriber Savings to their meter, allowing Subscribers to direct those proceeds towards other investments on the property (e.g., weatherization), that would enable the Subscriber to achieve greater energy burden reduction (i.e., greater than the \$240 of Subscriber Savings per year).

Potential Proceeds from SCEF

The number of Subscribers and the total amount of Subscriber Savings resulting from clean energy deployment through SCEF is dependent upon the make-up of clean energy technologies deployed – see Table 2. Under SCEF, starting in Round 3 (i.e., Year 3), up to 50 MW of grid-tied clean energy can be procured each year – as opposed to 25 MW for Rounds 1 and 2 (i.e., Years 1 and 2).

Table 2. Estimate of Annual Subscribers and Subscriber Savings based on Technology Composition

	Eversource	UI	Total	Estimated Number of Annual Subscribers	Estimated Annual Subscriber Savings
Year 1 Procurement Expected Annual Production (Actual)	38,266,877	31,724,076	69,990,953	7,291	\$1,749,774
Year 2 Procurement Expected Annual Production (Actual)	44,281,164	3,391,000	47,672,164	4,966	\$1,191,804
Year 3 Procurement Expected Annual Production (Actual)	45,047,716	40,471,000	85,518,716	8,908	\$2,137,968
Year 4-6 Procurements Expected Annual Production (Estimated) ⁵	183,960,000	45,990,000	229,950,000	23,953	\$5,748,750

Depending upon the make-up of the clean energy projects selected each year (e.g., combination of solar PV and fuel cells), there could be between 5,000-24,000 residential Subscribers receiving between \$1.2 to \$5.8 MM in annual Subscriber Savings – or between \$24 to \$114 MM of Subscriber Savings over 20-years.

Market Potential for Energy Efficiency

Over six (6) years, 225 MW of clean energy will be deployed as a result of the SCEF policy. If SCEF subscribers were provided with an opportunity to direct their Subscriber Savings to the

⁵ Assumes 50% solar PV and 50% fuel cell composition

meter on their property, for the purposes of supporting the weatherization of their home, then depending upon the number of Subscribers who elect to participate, there is potentially a substantial amount of additional resources for energy efficiency – see Table 3.

Table 3. Estimated Annual Subscriber Savings by Technology and Percent of Participation in the Concept

Percent Participation in the Concept	Estimated Annual Clean Energy Production (kWh)	Estimated Number of Annual Subscribers	Estimated Annual Subscriber Savings
100%	535,819,100	55,814	\$13,395,478
75%	-	41,861	\$10,046,608
50%	-	27,907	\$6,697,739
25%	-	13,954	\$3,348,869

It should be noted that this assumes that 60% of the estimated annual clean energy production is directed to Subscribers from the residential LMI market segment.

With strong community-based marketing, the Green Bank would estimate that at least 25 percent of Subscribers would be willing to participate in the proposal providing between \$3.5 MM of additional resources for energy efficiency a year, or \$67 MM over the 20-year period of the Subscriber Savings.

Next Steps

As a follow-up to the Joint Committee meeting, the following are next steps:

- **Redline Edits to Program Requirements** – the Joint Committee supports the redline editing by Eversource and the Green Bank of the SCEF Modified Program Requirements to enable the proposal;
- **Draft Memo** – to accompany the SCEF filing, that this memo be included, including the links to the presentation and recording from the Joint Committee meeting, to provide PURA with additional background; and
- **Recommendation from Joint Committee** – that within the SCEF filing it be indicated that the Joint Committee would support PURA’s efforts to bring together appropriate stakeholders (e.g., Connecticut Equity and Environmental Justice Advisory Council) in a public docket proceeding to discuss how the proposal might be used to support additional public policy objectives.

It should be noted, that even though Eversource participated in these meetings, that its involvement does not constitute endorsement of the proposal.