To: Somerville City Council

From: Oliver Sellers-Garcia, Director; Bob Ross, Energy Manager

Date: March 19, 2021

Re: Energy Stabilization Fund creation and funding proposal

Background and purpose

This memorandum presents a proposal to create an Energy Stabilization Fund (ESF) for the implementation of projects that reduce carbon emissions and energy costs for City operations.

To continue reducing our carbon footprint, the City needs to invest in more complex energy efficiency and electrification measures in its building portfolio. The City has reduced its buildings emissions nearly 20%, mostly through state grant-funded LED lighting upgrades. Beginning in 2021, because of an expected reduction in state grant funding and utility incentives for such low-hanging fruit projects, there will be a greater need for City investment in the next generation of projects, such as heat pumps, automated building controls, and ductwork upgrades. The ESF would provide a new, sustainable source of funding to meet the City's ambitious commitment carbon neutral City operations by 2035.

Funding and tracking

Where savings from energy projects have historically reduced the City's overall operating budget, the ESF will allow the City to invest these savings into additional carbon emissions reduction. The ESF will use savings or revenue from solar net metering credits (SNMC), demand-response program incentive payments, and other efficiency and renewable energy projects to reinvest into greenhouse-gas reduction measures in our buildings. At the outset, we propose to fund the ESF through free cash in the amount equivalent to savings and revenue from 2019-present (listed below). In subsequent years, annual savings will be calculated, and requests will be made for free cash appropriations to the fund based on the prior year's energy cost savings and revenue, thus rapidly growing the fund every year.

Project	Year	Savings/Revenue	Annual Dollar Savings
JFK School Lighting and Controls	2019	Estimated savings	\$14,467
Edgerly Steam Traps	2019	Estimated savings	\$11,577
ESCS LED Tubes and Ballasts	2019	Estimated savings	\$13,876
Capuano LED Tubes and Ballasts	2019	Estimated savings	\$19,319
DPW Steam Trap Survey	2020	Estimated savings	\$9,830
Argenziano LED and Controls	2020	Estimated savings	\$17,569
SNMC FY19 total	2019	Verified savings	\$12,248
SNMC FY20 total	2020	Verified savings	\$110,844
SNMC FY21 to Date	2021	Verified savings	\$81,569
Demand-Response Incentive	2021	Revenue	\$3,100
Total			\$294,399

Appropriation Request

We are requesting an initial free cash appropriation of \$294,399. These funds will be used for the few remaining low-cost/short-payback lighting projects, as well projects that eliminate and reduce fossil fuel combustion in City buildings.