Pope Energy

July 29, 2021

Mike Kennealy
Secretary of Housing and Economic Development
1 Ashburton Place, Room 2101
Boston, MA 02108

Email: c/o susan.saia@mass.gov

Re: Saving Ratepayers Hundreds of Millions in Interest

Dear Secretary Kennealy:

Investing in the decarbonization of the Massachusetts economy yields greater than three dollars in economic output for every dollar spent and will create approximately 472,000 job-years over the course of 30 years, translating to an average of 15,000 jobs per year.[1]

But the cost to decarbonize the grid and the electrification of the transportation and building sectors is going to be enormous. Policy makers are being tasked to make transformative decisions based on historically siloed interest. What I am proposing will save ratepayers, and the very kind of industries and business you are looking to retain and attract, hundreds of millions of dollars in decarbonization transition cost; but our proposal cuts across energy policy development and is more aligned with multiple levels of structured finance. To push these concepts through is going to require management to coordinate the multiple levels of regulatory, legal and finance related issues to bond level finance, possibly at tax-exempt rates. Given your personal experience, your responsibility as Housing and Economic Development Secretary and your relationship with the Governor, I am hopeful that possibly you will be that person to lead the cross-departmental effort to bring a structured finance solution to Massachusetts ratepayers.

Pope Energy is a larger-scale solar PV developer located in Boston. We are active in solar policy development as a stakeholder with DOER, an active participant in the D.P.U. 19-55 and D.P.U. 20-75 proceedings, a provider of public comment on the 2030 CECP with EEA, on the energy policy committee at SEBANE and the Massachusetts Sierra Club. Our recommendations will cut across the responsibilities of several secretariats, not to create another pathway for solar advocacy but because the solutions require a multi-level understanding of the pathways to success.

The *Act Creating a Next-Generation Roadmap For Massachusetts Climate Policy* signed by Governor Baker, directs the Department of Public Utilities (DPU) to include emission reductions in everything that the department considers. That means that regulators need to find a way to concurrently reduce emission reductions to 50% by 2030, by electrifying the transportation sector with 750,000 electric vehicles (EVs), electrifying the building sector by converting one million homes to heat pumps from fossil fuels, installing distributed generation assets such as solar on the grid, and planning how to reduce emissions to be 85% net zero by 2050 and how to pay for those upgrades today.

[1] Economic and Health Impacts Report, A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study. December 2020, Page 5, first paragraph

The typical methodology for utilities or Electric Distribution Companies (EDCs) to recover cost from ratepayers is to take a $100-million capital investment that is made up of ten line items of differing useful life equipment assets, aggregate them into one schedule, apply the Shortest Expected Lifespan financial method and end up with a blended depreciation rate billable to ratepayer of 10 percent per year. (Please see a discussion of this as submitted to DPU on Exhibit 1 attached.) If regulators and policy makers must make decisions based upon this old methodology, decarbonization will take a back seat to short-term decision making because the cost will be needlessly high.

The cost to upgrade transmission and distribution level utility infrastructure is going to be in the billions of dollars. Since most upgrade cost will have equipment lives of 30 to 40 years or greater, those assets should be aggregated in one tariff and financed over the useful 30- to 60-year life of those assets. In this way, today's ratepayer will not be paying for tomorrow's emission reduction requirements, but the equipment upgrade improvement will be completed once and not piecemeal at greater cost.

Since decarbonization of the grid is a "public good," these equipment improvements should qualify for tax-exempt debt. We are proposing that 30- to 60-year assets be financed with tax-exempt debt, saving the ratepayer hundreds of millions of dollars in interest expense. We believe a "facility" will need to be set up to act as a conduit to receive funds from ratepayers and disburse funds to the EDCs. The EDCs will design, build, maintain and operate the improved electrical system and will, with DPU's approval, invoice the "facility" to retire the debt from their books. Legal, tax and legislative structuring will be required.

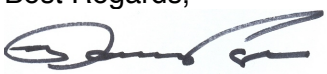
Eversource mentioned in D.P.U. 20-75 filing[2] that their bond rate is 3.37%. There was no further backup nor comparison to tax-exempt rates.

In the D.P.U. 20-75 proceedings, in EDC-5, Eversource refers to a "regulatory asset" being established to deal with FERC compliance issues. Our question is, could that same "regulatory asset" be used to lower the financing cost to ratepayers?

I have spoken with Rebecca Sullivan from MassDevelopment and she has been very helpful, but absent greater engagement by the EDCs, DPU or the executive branch, MassDevelopment will not engage in substantive discussions. There are many tax-counsel rated issues that need to be addressed and perhaps regulatory and legislative structuring as well.

Financing long-term assets for ratepayers at low interest rates is going to take the focus of multiple executive branch secretaries, the AGO, and perhaps the Treasurer's office to bring this concept to fruition. But one executive needs to manage the process. I hope you find this worth your time.

Best Regards,



Doug Pope
President

[2] Eversource D.P.U. 20-75, Attachment 2 of the Eversource System Planning Memorandum, Line 514, based upon the Amended AESC 2018 report by Synapse Energy Economics

Pope Energy

Exhibit 1

As submitted to DPU on December 23, 2020, Re: Public Comments, D.P.U. 20-75 here.

https://www.popeenergy.com/wp-content/uploads/2021/05/POPE_ENERGY_COMMENT_LETTER_DPU_20-75_12-23-2020.pdf

How to Pay for These 30 to 50-Year Grid Modernization Infrastructure Upgrades

In B-4, Page 16, C., the Company describes a $100 million dollar investment costing the ratepayers $12 million to $14 million per year in reconciled cost. This amounts to a 7.1 to 8.3- year amortization of cost. A similar situation exists in D.P.U 18-150 Performance-Based Ratemaking Proposal, September 30, 2019, in one of the filings by the AGO, a weighted average depreciation rate for general asset is 10.198% per year.

[8]

Weighted Average Depreciation Rate for General Assets, 1996

General Assets (In Thousands of Dollars)	Value [1]	% of Total Value	% of Net Value	Lifetime [2]	Declining Balance [1]	Depreciation Rate
Land and Land Rights	$489,443	1.96%		NA		
Structure and Improvements	$7,085,330	28.35%	34.20%	36	0.89	2.5%
Office Furniture and Equipment	$3,744,952	14.99%	18.08%	14	1.65	11.8%
Transportation Equipment	$2,436,285	9.75%	11.76%	9	1.73	19.2%
Stores Equipment	$182,280	0.73%	0.88%	16	1.72	10.7%
Tools, Shop and Garage Equipment	$1,006,533	4.03%	4.86%	16	1.72	10.7%
Laboratory Equipment	$800,097	3.20%	3.86%	12	1.62	13.5%
Power Operated Equipment	$589,718	2.36%	2.85%	16	1.72	10.7%
Communication Equipment	$4,871,143	19.49%	23.51%	11	1.65	15.0%
Miscellaneous Equipment	$371,834	1.49%		NA		
Other Tangible Property	$3,412,124	13.65%		NA		
Total Value	**$24,989,739**	100.00%	100.00%	**20**		**10.198%**
Unknown Life	$4,273,401					
Net Value	$20,716,338					
Percent Unknown	17%					

[1] Source: EIA, Financial Statistics of Major Investor-Owned Electric Utilities, 1996
[2] Source: Department of Commerce, "The Measurement of Depreciation in the National Income and Product Accounts", Survey of Current Business (July 1997)

That is the equivalent of asking ratepayers that own homes to finance those 30 to 50-year assets over 7 to 10 years. The only way to conduct resource planning and grid modernization is to have long-term assets be amortized separately based upon useful life.

See Line 7 above [Structure and Improvements]. These are the substations, street conductors, poles, towers, transformers, switchgear and the cost of labor and material to install the same. Examples:
(FERC) Account 356 (Overhead Conductors and Devices) – 55-year service life

Account 362 (Station Equipment) – 45-year service life, Account 364 (Poles, Towers, and Fixtures) – 45-year service life, Account 366 (Underground Conduit) service life of 50 years.

[8] 4-30-2019 Filer: Attorney General, WP-EconomicDepreciationRatesPowerDX(PEG)assuming33 vs 36, General. xls (tab)
[9] D.P.U. 18-150, Pages 295-302

In order to be able to afford the transformative grid modernization required to meet the GWSA obligations, long-term assets need to be billed to ratepayers over the term of the useful service life of the equipment separately and not billed in a weighted-average fashion or socialized with other utility capital expenses. At a minimum, a future rate case would only allow the billing and depreciation of long-term, grid-modernization assets on the schedule of their useful life.

We are not familiar with the cost of capital of a privately held, publicly traded EDC and what rates of return are expected on internal or borrowed funds. We surmise that the cost of capital is between something greater than the dividend rate to stockholders and equal to the return on assets allowed in the tariff. Those interest rates are greater than tax-exempt rates that could be financed through Mass Development.

{For the record, we have had correspondence with Mass Development, and due to the premature nature of this idea, they are in no position to make comment whatsoever. 12-21-2020}

The “public good” financed by Mass Development would be to support lowering the cost for ratepayers to modernize the electric grid to lower emissions from 1990 levels in compliance with the Global Warming Solutions Act and related laws that requires Massachusetts to have 85% net-zero emissions by 2050.

A rate case would be litigated, a Grid Modernization tariff approved that separated long life span assets for longer recovery/depreciation periods that match the actual service life of the asset. The EDC would complete the work with its own funds and, once complete, the EDC would have the debt funded for that portion of completed work on a tax-exempt basis with Mass Development. The structure of the Mass Development loan would be recognized within the rate case and repayment of the loan would be guaranteed through the sale of delivered electricity to ratepayers.

If there are legal barriers, Mass Development borrower entity size limits, SEC or EDC stockholder objections to long-term obligations, then a finance “Facility” could be set up to hold the assets and liabilities and to receive repayment funds for the loan.

The Facility would be a non-profit entity either independently held or held by the EDCs, AGO, DPU, DOER the Secretary of EEA. The purpose of the Facility would be as a financial conduit to hold debt at tax-exempt rates from Mass Development to finance grid modernization assets with a service life of over 30 years. The repayment stream of revenue would be secured by access to a tariff delivering electrical service to ratepayers.

The EDCs under a grid modernization tariff would build out the transmission and distribution grid network to receive the installed capacity 1 GW of solar and wind per year. Upon completion of the work and “acceptance” by D.P.U., the EDCs could then invoice, recover and access the long-term Structure and Improvements portion of the cost from the Facility. Title to the assets pass to the Facility as collateral against debt. In arrears, on a periodic basis (bi-annually?) to be approved in the rate case, the EDCs could invoice for the current portion of Structure and Improvements portion of the work and recover such cost from ratepayers. The payments received from ratepayer is essentially a pass-through to the Facility to pay off the debt to Mass Development.

The Facility has no performance obligations other than to process and pay off debt. In order to receive the Return on Investment allowed by tariff, the EDCs are contractually obligated to warranty, maintain, replace, insure all of the Structure and Improvements assets without exception. With each periodic payment of debt to the Facility, the current portion of the assets and all of the residual value, returns to the EDC balance sheet.

This concept aligns with the beneficiary pays model as the beneficiaries (the ratepayer) are being billed for cost of the Structure and Improvement assets over the service life of the asset.