

Final Recommendations from the Financing the Transition Focus Area Work Group

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Introduction

The Financing the Transition (FTT) Focus Area Work Group (FAWG) submits this draft report to the Energy Transformation Advisory Board (ETAB). The FTT FAWG's analysis finds that a strategic portfolio of alternative financing mechanisms can help mitigate the electric bill impacts associated with the grid investments required in the coming years to support economic growth and advance the clean energy transition in Massachusetts.

Accordingly, the FTT FAWG recommends that policymakers consider one or more comprehensive packages of solutions that combine multiple alternative financing and funding mechanisms. These mechanisms should be appropriately scaled and designed to operate synergistically to maximize overall benefits to ratepayers.

Alternative financing mechanisms can represent practical opportunities to mitigate bill impacts and should be considered as part of a larger, integrated effort to address customer affordability. To have a greater impact on ratepayer bills, these financing tools should be paired with measures that leverage additional, non-ratepayer sources of funds to directly finance infrastructure investments, and/or that reduce the need for such investments altogether. This includes strategic actions designed to reduce the need to expand the grid's electric capacity by lowering overall and peak electric demand.¹

Policymakers should therefore prioritize identifying, quantifying, and advancing strategies that both (1) develop and diversify funding sources other than revenue from electric ratepayers and (2) reduce total and peak electric demand — especially in areas where such reductions may defer or avoid distribution system investments. These efforts should be intentionally targeted to benefit historically disadvantaged and environmental justice communities and meet state policy goals.

¹ For context, Massachusetts Electric Distribution Company (EDC) total financing costs make up approximately 5.5% of the average EDC customer's electric bill.

The FAWG's Assessment Process

Massachusetts must modernize the local electric distribution grid to support economic growth, clean energy deployment, and electrification while maintaining affordability for all customers. The FAWG was chartered with a specific mandate:

"To identify alternative mechanisms for financing/funding electricity distribution system infrastructure upgrades necessary to achieve the Commonwealth's clean energy and climate mandates that minimizes impacts on consumers' electricity bills, while providing an affordable, sustainable, and timely source of revenue to support investments."²

To ensure its recommendations incorporated a range of perspectives and breadth of expertise, the FAWG convened stakeholders from across labor, business, finance, environmental justice (EJ), clean energy, consumer advocacy, investor-owned utilities (IOUs), technology providers, and affordable housing development, among others. The focus of the discussions was on non-traditional ways to finance distribution system investments made by Electric Distribution Companies (EDCs) in the Commonwealth, and not on transmission or generation investments made by entities in Massachusetts or in the region.

Operating under Chatham House Rules to encourage candor, the group followed a structured, three-phase analytical process:

Phase I: Clarifying the Baseline. The group began by reviewing present-day best practices for utility financing of distribution system upgrades. This FAWG found that given the scale of distribution upgrades needed to support growing electric demand and the energy transition, relying solely on traditional ratemaking may not minimize the cost of capital investments borne by ratepayers. The FAWG focused on reducing ratepayer costs via a range of innovative financing and funding mechanisms. FAWG members identified an initial set of seven alternative mechanisms, as well as a set of criteria for assessing them relative to traditional forms of utility investment financing and added two additional member-suggested concepts to the initial list of seven alternatives later in the process.

Phase II: Assessing Alternatives. The group refined and finalized a comprehensive Assessment Framework of 23 distinct criteria. The group used the Assessment Framework criteria to test each option across three dimensions:

1. **Financial Impact:** Ability to reduce the weighted average cost of capital (WACC), "smooth" rate impacts, create and secure new sources of capital, reduce the

² The FAWG's mandate did not include evaluating other cost drivers impacting electric bills, like the costs of energy supply and public benefits programs. While potentially valuable areas of inquiry, those drivers were beyond the scope of the FAWG's work.

amount or pace of capital investment required, and positively impact LMI customers/EJ communities, among other factors.

2. **Implementation Pathway:** Including legislative hurdles, administrative complexity, and timelines, among other implementation issues.
3. **Other impacts:** Including impacts on utility credit ratings and the ability to attract capital.

The FAWG analyzed the following specific alternative mechanisms:

- Securitization
- A State Revolving Fund
- Clean Energy Tariffs
- Government-issued Energy/Environmental Transition Bonds
- Public Private Partnerships
- Distribution Entitlements Leases
- A Carbon or Fossil Fuel Fee
- A Climate Superfund Program
- Distributed Energy Resource (DER) Aggregation

An overview of each alternative is provided in the sections below. The framework and assessment results for each alternative are available in full in Appendix C.

Phase III: Strategic Synthesis. The FTT FAWG evaluated how these individual mechanisms could function together as a cohesive "portfolio" to balance immediate relief with long-term sustainability, and developed and synthesized an illustrative quantitative comparison of each alternative, which is available in Appendix B. The overall goal of this portfolio approach is to reduce the ratepayer burden of costs associated with distribution system investment, both today and into the future, as electric demand grows and the energy transition continues to unfold.

Primer on Current Utility Ratemaking and Alternative Approaches

This section provides background on traditional utility financing, and the kinds of alternative financing and funding approaches the FTT FAWG explored.

Traditional Ratemaking

Utilities operate under a "cost-of-service" model, which provides them the opportunity to recover costs associated with building, operating, maintaining, and financing the electric distribution system. Rates traditionally reflect the utility's cost to provide service during a "test year," with actual rates varying by type of customer (e.g., residential versus commercial versus industrial). Rates take into account: (a) operating costs (such as labor, fuel used to operate utility trucks, energy supply costs, maintenance of equipment, depreciation expense, property taxes, and income taxes), on which the utility does not charge a mark-up for profit, and (b) capital costs

(such as the cost to construct power lines and substations), on which the utility has the opportunity to earn a return of its capital (through the depreciation expense) and a return on its capital (through the overall rate of return). The sum of those operating and capital costs is the utility's "revenue requirement."

In a rate case, the DPU decides which expenses and investments to allow into rates and whether to adjust amounts originally proposed after an adjudicatory proceeding with testimony and evidence provided. Rates are designed so that expected sales of electricity will produce revenues sufficient to cover the utility's costs (i.e., the revenue requirement, which includes a return of and a return on capital).

To finance investment, utilities raise capital through two principal sources:

- **Long-Term Debt:** Utilities borrow from commercial lenders and institutional lenders through loans and the issuance of bonds, at predetermined rates to repay the loan plus interest.
- **Common Equity:** Utilities sell ownership shares in their companies through the issuance of common stock (the value of which can vary over time).³

While debt investors have a contractual right to receive their principal and interest payments, stock owners have no such right and are paid dividends only after debt payments have been made as part of the capital stack.

When the DPU determines the amount of dollars to be included in the utility's revenue requirement and customer rates, they determine: 1) the appropriate capital structure — i.e., the ratios of debt and equity, respectively, to total capital; 2) the cost of debt; and 3) the cost of equity, which is referred to as the allowed return on equity (ROE) — i.e., shareholder profit a utility has the opportunity to earn on deployed capital.⁴ These three elements constitute the overall rate of return (ROR) which is incorporated into the utility's revenue requirement and collected in rates. For example, in National Grid's recently approved 2024 electric base rate case (D.P.U. 23-150), the DPU authorized a capital structure with an equity ratio of 52.83% and an allowed ROE of 9.35%, which, factored alongside the utility's cost of debt of 4.56%, resulted in an approved ROR of 7.09%.

In a given year, how much money a utility is allowed to recover for an investment (including its profit) depends on the rate at which that investment loses value over time (i.e., its rate of depreciation).

³ In practice, there are varying form of both debt and equity, each designed to address a specific financing need or investor requirement.

⁴ Just as the cost of debt is the return debt investors require, the cost of equity is the return equity investors require.

When the asset is first put into service (i.e., use), it has an expected useful life, for example 30 years. The asset's value is depreciated over that useful life. In its revenue requirement, the utility may recover the annual depreciation expense (in the case of a 30-year lived asset, 1/30 of the original cost) and the overall rate of return on the asset's undepreciated value. Over time, as the asset ages and depreciates, the asset's undepreciated value decreases, and the return (the cost of debt and equity) the utility may earn on the asset falls. This is also known as the rate of depreciation.

Alternative Approaches

In evaluating ways in which to pay for the energy transition, it is helpful to distinguish between *financing* and *funding*, as used in this report. **Financing** here refers to the capital (debt and equity) raised to build or upgrade infrastructure. **Funding** here refers to the ultimate source of revenue used to pay for those investments or to repay the financing over time (e.g., ratepayer dollars, taxpayer dollars).⁵

Broadly speaking, the FAWG investigated three approaches for reducing the ratepayer bill impact of electric distribution investments:

1. Identifying non-ratepayer **sources of funding** (i.e., dollars that are not provided by the utility through cash flows from operations or the raising of debt and equity through traditional means) for distribution system investments.
2. Reducing the overall **size and/or pace** of the distribution infrastructure investment.
3. Reducing the **costs of financing** distribution system investments below the utility's WACC.

Regarding the first category — non-ratepayer sources of **funding** — the FTT FAWG looked at measures to raise and deploy additional public and private sector dollars to support necessary distribution infrastructure investments, including direct cost allocation and raising revenues from other non-ratepayer sources.

For the second category — reducing the **overall size** of the infrastructure investment required — the FTT FAWG reviewed measures to reduce and shift peak electric demand and increase utilization of the existing distribution system infrastructure to avoid or defer additional investment.

For the third category — reducing **financing costs** — the FAWG looked at a range of measures to reduce the financing costs as compared to today's WACC. These included: 1) reducing the overall cost of debt (i.e., securing lower interest rates), and 2) identifying potential alternative lower cost sources of financing. Some measures have other potentially beneficial impacts as

⁵ The utility financing cycle typically involves raising **financing** to pay for up-front investments, then **funding** the cost of that financing along with operational costs through ratepayer bill revenues (or other sources of revenues). As such, higher financing cost also equates to higher funding need (i.e. ratepayer burden). In this report, we treat those two concepts of financing and funding as distinct levers for intervention to promote affordability.

well, such as smoothing the cost recovery associated with an asset to reduce near-term bill impacts/volatility, enabling dedicated measures to support equity, and assigning the costs of infrastructure upgrades more directly to the entities benefitting from those investments (as opposed to these costs being borne by the rate base as a whole). Different measures aim to achieve one or multiple of these bill reduction impacts. It should be noted that FTT FAWG members have different perspectives on the ability to achieve these goals and the impacts various measures have on the utility's financing costs for other investments.

Shared Goals and Understanding

The FTT FAWG members come from diverse professional backgrounds, have different priorities, experiences, training, and areas of focus, and have different perspectives on the benefits and costs of different alternative financing approaches. Despite these differences, members are aligned on the following shared goals and foundational understanding, and recommend they guide the Commonwealth in its strategy for financing some of the electricity distribution system investment needed to enable the energy transition:

- Pursue a range of alternative mechanisms to mitigate the magnitude and "lumpiness" of potential future rate impacts. Alternative mechanisms can help by lowering the cost of debt, carving out assets from the portion of the rate base on which utilities earn a profit, smoothing rate adjustments, assigning costs to beneficiaries in more direct and tailored ways, reducing overall investment costs, and identifying other sources of revenue to support investments.
- Be intentional and ensure benefits accrue to LMI customers and [environmental justice \(EJ\) populations](#), recognizing that, historically, the capital-intensive nature of electric distribution operations have often had a regressive impact due to financial market and rate design considerations, and the reality that electricity bills tend to have a high burden on low-income populations as compared to the incidence of income taxes on such households.⁶
- Limit unintended consequences or negative side effects of alternative mechanisms, such as negative impacts to taxpayers and utilities' credit ratings, and/or other risks that could affect the ability of utilities to affordably raise capital to make necessary investments. Likewise, the Commonwealth should carefully consider the tradeoffs when utilizing mechanisms that would result in non-bypassable charges to customers.
- Identify approaches that work synergistically and address the range of investment needs, and ensure transparency on short- and long-term benefits, costs, and bill impacts.

⁶ See Massachusetts Department of Public Utilities (DPU) Docket No. 24-15 (Inquiry into Energy Burden with a Focus on Energy Affordability). In February 2026, the DPU issued a Phase I Order in this docket directing electric and gas utilities to implement six tiered discount rates for low-income customers to better target and reduce energy burdens. The DPU is also actively exploring the development and implementation of a moderate-income discount rate within this same proceeding.

- Advance measures that are implementable in the next one-to-three years recognizing government capacity constraints, while simultaneously exploring and pursuing longer-term reforms that could include more substantial public involvement and ability to reduce/avoid utility spending on distribution system infrastructure.

Members differ on whether reducing the speed of growth in the portion of the rate base on which utilities earn a profit should be a goal in and of itself. Some members believe achieving this goal is essential to reducing overall costs to customers. Utility representatives caution against the extensive use of alternative financing mechanisms out of concern that this approach would have a negative effect on overall utility creditworthiness, thereby raising the cost of financing other investments and negating presumed benefits. More detail on these different perspectives is provided in the sections below.

Core Strategic Findings

The FTT FAWG recommends the Commonwealth consider the following core findings in advancing a strategy for financing and funding the build-out of the electricity distribution system.

Finding 1: A Portfolio Approach Is Needed

The various alternative financing approaches the FAWG considered serve fundamentally different functions and have different benefits and limitations. Policymakers should consider the goals they want to accomplish and their associated timelines, taking care to distinguish between **near-term transitional approaches** (e.g., immediate- to mid-term bill savings) and **longer-term structural measures** (e.g., avoided investment and/or reduced rate base growth). The FAWG also recommends that the clean energy transition be framed as a long-lived public investment cycle, not a series of short-term fixes. That framing favors tools that lower lifetime system costs, even if they require more upfront discipline. The sections below outline how various alternative measures could advance different goals on different timelines, depending on policymakers' priorities.

Finding 2: Non-Traditional Financing Alternatives Can Mitigate Bill Impacts, But the Impact of Financing Techniques Alone Is Limited

The alternatives considered reduce ratepayer costs in different ways. Some reduce financing costs, while others reduce the total amount funded by ratepayers, and/or some combination of both. Among these approaches, many of the non-traditional financing alternatives aim to substitute lower-cost debt (e.g., municipal or state bonds, securitized bonds) for higher-cost utility equity, thereby lowering the overall carrying costs of new distribution infrastructure investments. While such alternatives would not reduce the actual cost of the infrastructure investment itself (e.g. the cost of transformers or wires) or overall utility spending on these assets, they may reduce the total financing costs paid by ratepayers.

The FTT FAWG's analysis suggests that these non-traditional financing approaches have the potential to reduce the amount of revenue utilities recover from customers, thereby putting downward pressure on the average ratepayer's monthly bill. The level of savings for a typical customer depends largely on how much investment is financed this way and over what time period. Savings will vary based on the scale of the investment and how costs evolve over time for each specific measure.

While these alternative financing approaches can positively impact customer bills, they are not transformative on their own and may have unintended effects when implemented. For example, managing utility investments and capital structures requires careful balancing to attract affordable capital for other investments. The FAWG's quantitative analysis in Appendix B includes key assumptions that, depending on the financing market environment at the time of implementation, could alter potential savings. Key assumptions include the cost of debt, bond duration, and whether the use of alternative financing approaches for some assets would increase the utilities' financing costs for their other assets.

Nonetheless, these alternative approaches represent a step towards addressing the scope of the affordability challenge. Incremental savings, particularly for energy-burdened customers, are important, so these measures should be considered, especially through a calibrated portfolio approach.

Finding 3: New Revenue Sources Have Larger Bill Impacts, But Face Hurdles to Implementation

Measures that deploy new sources of non-traditional capital or revenue to fund distribution infrastructure investments directly have the potential to reduce customer bills more than pursuing non-traditional financing mechanisms alone. If these measures are designed in ways that attend carefully to how funds are raised and deployed (i.e., who pays and who benefits), they also have the potential to advance equity. Measures like public-private partnerships, a carbon or fossil fuel fee, or climate superfund can generate revenue to support distribution infrastructure investments directly (e.g. as grants), rather than simply reducing the financing costs paid by ratepayers. They may also be used to directly offset costs for energy burdened communities within the Commonwealth.

The potential impact of such direct investments can be substantial. For example, a \$100 million investment by a municipality in a \$300 million public-private partnership would reduce the portion of the rate base on which the utilities earn a profit and impact all ratepayers. At the same time, these measures face hurdles to implementation. Public-private partnerships could impact overall bonding caps of a municipality and, therefore, local taxpayers. Other approaches like a Climate Superfund are facing litigation in both states where they have been enacted — Vermont

and New York — suggesting the approach may not be a viable near-term solution in Massachusetts.⁷

Finding 4: Measures to Support Demand Reduction (Non-Wires Alternatives) Can Avoid Traditional Utility Distribution Investment, and Need Additional Analysis

The FAWG sees significant potential in using demand reduction to avoid distribution infrastructure spending. It explored the use of financing tools to support deployment of distributed energy resources (DER) to potentially defer or eliminate the need for some infrastructure upgrades. FTT FAWG members suggested that demand-side investments should be treated as long-lived infrastructure with measurable avoided system costs. The FTT FAWG believes these investments deserve analysis parity with generation and transmission investments, and that customer-owned assets should be considered in lieu of utility distribution infrastructure investment if they meet the need more cost-effectively while maintaining an equivalent level of system and local reliability.

The FTT FAWG began analyzing a specific proposal to support geographically targeted financing for DER. Like the revenue generating approaches noted above, this approach could result in reductions to ratepayer costs by bringing in new sources of private capital (in this case, from building owners installing DER). Experience from [other jurisdictions](#) and analysis conducted by [DOER](#) and [MassCEC](#) suggest that DER-enabled demand reduction can potentially defer necessary infrastructure upgrades and that distribution infrastructure deferral has substantial economic value in the near- and mid-term. In addition, FTT FAWG members suggested that targeted DER investments, if designed effectively, can ensure equity is engineered into the system. The FAWG believes a DER aggregation program can be implemented in the near- to medium-term, by leveraging pre-existing programs and institutions (e.g. Mass Save, the Massachusetts Community Climate Bank), and ensuring incentives and/or cost recovery structures are built into utility business models.⁸

Alongside this specific proposal, other relevant areas of interest include integrating demand reduction into utility integrated energy planning (IEP). A full, detailed analysis of these and other demand reduction approaches is essential for better understanding the potential of DERs to avoid distribution infrastructure investments but is beyond the scope of the FTT FAWG. The FTT FAWG is also aware that demand reduction is an area of interest in both the Everett Marine Terminal FAWG and the Decarbonizing the Peak FAWG. The FTT FAWG therefore recommends that OET support a detailed analysis of alternative demand-side investments and

⁷ A Massachusetts Climate Superfund Bill introduced in the 2025-26 legislative session (H.1014/S.588) did not advance out of committee.

⁸ Analysis from the Pew Charitable Trust suggests that “Fully leveraging existing and future DERs through [virtual power plants], including providing appropriate compensation for DER owners, could deliver power during peak demand at 40%-60% of the cost of traditional solutions.”

non-traditional infrastructure solutions, potentially through convening a separate FAWG with a specific focus on this area.

Finding 5: Policymakers Must Understand and Prevent Unintended Consequences of Alternative Financing Mechanisms on Utility Business Practices, Where Demonstrated

Even as the potential benefits of a “portfolio” of measures increases with its overall scale, so too do the unknowns and the potential for impacts on utilities’ business model, credit rating, and overall ability to raise relatively low-risk, low-cost capital through traditional means.

FAWG members differ in their level of concern on this issue. Some members believe securitization has the potential to become a core, scalable tool to reduce the financing costs of grid assets and reduce the variability of rate increases. Others, including those representing utilities, are skeptical that securitization and other similar mechanisms intended to reduce the cost of financing grid investments can significantly reduce the cost of capital for utility operating assets, as a whole. They suggest that if these mechanisms are used to finance a substantial quantity of infrastructure assets, then the financing costs associated with the utilities’ other assets could increase, negating overall savings. This increase in financing costs could occur because the utilities and their investors will incur the operational risk of owning, managing, and maintaining assets financed through alternative mechanisms, but cannot earn an associated equity return to compensate for that risk, a phenomenon that would be viewed negatively by debt and equity markets and credit rating agencies. The utility representatives therefore suggest that measures like securitization be reserved for things like recovery of large storm costs, major one-off events, stranded assets, or non-operating assets/investments on which a utility does not already earn a return and for which it bears no operational risk.⁹

For the FTT FAWG members who look more favorably on securitization as a scalable tool note that these concerns should be understood in the context of a rapid expansion in the utilities’ planned infrastructure investments and associated project and financing costs passed on to ratepayers. Any marginal reductions in the assets subject to the utilities’ return on equity that these mechanisms might achieve should be understood in the context of a growing overall rate base, mitigating utilities’ revenue loss concerns. In addition, while limited in the EDC context, securitization of operating assets is used in other industries including aviation, retail, rail, and

⁹ Among other concerns, they argue, specifically, that if alternative financing approaches are embraced at scale: 1) The cost of the utilities’ remaining equity will increase by a proportional amount because it is taking on the risk that the new debt is avoiding; and 2) The risk of default on the utilities’ remaining debt (and therefore its carrying costs) will increase because there are higher fixed interest payment obligations and less equity earnings to support them. The net result, they argue, could be to simply add transaction costs and complexity into the system, leaving ratepayers little or no better off, or to increase the cost of capital by forcing utilities to take on a suboptimal amount of business and financial risk. They further suggest that requiring equity investors to bear operating and financial risk without being compensated for that risk may be opposed to the relevant legal standards governing how regulators set utility rates.

maritime transportation.¹⁰ Members have different perspectives on the relevance of securitization within these other industries, suggesting that additional research could help clarify lessons from these other sectors and their relevance to the EDC context.

Despite these differences, members agree that at some level of overall investment it is likely that the use of alternative financing mechanisms will have diminishing or potentially negative returns. Policymakers should commit to carefully monitoring all financing mechanisms to ensure that they do not diminish a utility's ability to raise capital or create other unintended consequences.

Finding 6: Social Equity Must Be Engineered In¹¹

Energy is essential to human health, well-being, and participation in modern life, but households find it increasingly unaffordable. Energy affordability issues are an issue for households across the Commonwealth, ranging from low-to-moderate income households, environmental justice communities, and beyond.

Alternative financing measures would positively impact LMI households and EJ communities primarily by reducing bills. These households and communities face higher energy burdens than others across the Commonwealth and would benefit from even marginal bill reductions.

Some measures (such as the distribution entitlement lease) can be specifically designed to benefit LMI households and EJ communities, and others may have complex implications where the social equity impacts are less clear, such as by pushing costs into the future while reducing bills immediately, or by moving some financial burden from ratepayers to taxpayers (which broadens the base over which costs are socialized, but does not eliminate them). Any chosen mechanism must include careful and explicit analysis of social equity impacts, including disaggregation of bill impacts (e.g., by customer class) so that impacts on different communities over time are visible and can be adjusted accordingly.

In addition, the FTT FAWG recommends that social equity should be engineered *ex ante*. Policymakers and program managers alike must consider who fronts the capital, who bears the associated risks and externalities, and who receives its associated benefits across the lifetime of that solution. Many historical equity mechanisms that rely primarily on after-the-fact credits tend to be weaker and more prone to future adjustments/elimination. Overall, alternative financing is one tool, but insufficient on its own to achieve the affordability and social equity we need to prioritize.

¹⁰ For example, operating asset securitizations have become a well-established mechanism for financing discrete, tangible physical assets—such as commercial aircraft and aircraft engines (aviation), passenger and industrial railcars (rail), and shipping containers (maritime). In these equipment and transportation sectors, the securitization relies heavily on the original company remaining as the manager or servicer to continually re-lease, remarket, and maintain the assets without disrupting day-to-day operations. The FAWG has not determined the degree to which these uses translate to a utility ratemaking framework.

¹¹ For clarity, this report distinguishes “social equity” from “financial equity.” The former refers to the fair and just management of resources, while the latter refers to the monetary value of an asset, property, or company. See the Glossary for full definitions.

Analysis of Specific Alternatives

This section provides background information on each of the alternative financing approaches the FTT FAWG reviewed (in no particular order).

Clean Energy Tariffs

This approach is similar to a capital investment project (CIP), an existing regulatory framework in Massachusetts whereby ratepayers are reimbursed over time from fees charged to a subset of customers who benefit from specific system upgrades. Instead of the utility-led CIP, this process would be initiated by a large load customer. Customers seeking to connect significant electric load to the grid on an expedited basis, when met with hurdles related to system upgrade requirements in a particular area, can use this mechanism to accelerate the upgrade schedule by providing targeted financing.

Under a clean energy tariff, a large-load customer (or a cluster of customers) could voluntarily approach the utility to identify and pay for specific system upgrades necessary to meet their needs. The design of the tariff would identify the types of projects and services that could be undertaken, along with schedules for planning and installation, and could be structured to include recovery of both the capital costs and ongoing delivery costs. It could also be structured differently than a CIP, in which there is no recovery risk placed on other ratepayers: if the benefits of upgrades or new infrastructure accrue to others in addition to the initiating large load customer, tariff costs would be allocated to both the initiator and later beneficiaries. Under this approach, the utility still maintains ownership and operational control of the upgraded distribution system, but the investment costs are borne only by the subset of customers benefiting from the asset and are not included in the broader rate base.

The approach is not currently available in Massachusetts, though clean-energy tariffs are being explored elsewhere for customers interested in rapidly accessing advanced clean-energy generation technologies. Such a tariff could be developed for distribution-related investment and then reviewed and approved by the DPU and does not necessarily require enabling legislation. It does, however, need both short-term and long-term cost and benefits analysis.

Securitization

The general intent of securitization, which can take many forms, is to lower the utility's borrowing costs (and hence ratepayer bills) and spread the costs over a longer period (i.e., levelizing cost recovery), such that recovery costs remain constant over time. This tool is not currently deployed in Massachusetts for distribution system upgrades, but it has been used in other contexts such as generation-related "regulatory assets" (such as unrecoverable market costs of power plants or contracts). It has also been used around the country for financing new equipment (such as pollution control equipment), storm related costs, excessive fuel costs, and program costs (including resilience).

Authorizing legislation is required, after which the DPU would identify specific costs to be securitized and a special-purpose entity (either within or outside the utility structure) would be established to manage the transaction and its cost recovery. Once a financing order is signed, future regulators cannot change the recovery terms, which provides the security needed for low market rates. The relevant investments would be financed through revenue-backed, special purpose bonds with repayment collected by the utility through a dedicated charge on customers' bills. Investments funded via securitized capital would not earn an equity return by the utility. The utility would continue to own and operate any existing assets under current regulatory oversight and structures and would recover operations and maintenance costs associated with those assets.

Non-Utility Distribution Entitlement Lease

Under this approach, a third-party nonprofit organization would enter into an agreement (a "distribution entitlement lease") with the utility to lease some of the utility's distribution assets. This is similar to renting a lane on a highway and ceding operational control and usage back to the entity that owns/operates the highway. Rather than having the utility take on debt and/or issue equity to support all its relevant distribution system investments, the third-party leaseholder would pay for a portion of the investment costs in exchange for the right to recover these costs through DPU-authorized rates charged to customers (akin to drivers who use the highway lane paying a toll to the leaseholder). The non-profit leaseholder would then use a portion of the profits it receives from this cost recovery (i.e., after it pays back any debt and related costs) to provide, for example, bill credits or other programs in support of customers of the utility (e.g., community benefits programs, programs to support LMI customers or EJ communities).

The approach requires legislative authorization and would be subject to DPU approval. The distribution rate for the lease entitlement would not be permitted to have a cost of capital that is higher than the utility's cost of capital. The utility would continue to own and operate the equipment, and distribution customers would see no difference in service or costs. This alternative has not been used in Massachusetts and has not been implemented for distribution assets, though it has been used in California for transmission assets.

Public-Private Partnerships

Public-private partnerships can be constructed in a variety of ways. In general, a public entity (which could be a municipality, public authority, or a state) contributes a percentage of the cost of distribution projects. For example, to increase the resilience and reliability of the District of Columbia's (the District's) distribution system, the District's Department of Transportation (DDOT) and the local utility entered a public-private partnership (known as DC PLUG). The District provided financing through a low-cost revenue-backed public bond, which is repaid via a charge on ratepayers' bills and DDOT took on the necessary civil work (e.g., non-utility specific work such as road excavation, repaving) for undergrounding targeted distribution networks.

The utility would continue to own and operate the distribution assets and system. Such public-private partnerships would require legislation and new action by the DPU.

Environmental/Energy Transition Bonds

Public entities, municipality or state, could issue lower-cost, special-purpose public bonds to provide lower cost capital to finance distribution investments carried out by the utility. Massachusetts uses state bonds to finance many infrastructure and other capital projects but has not yet funded utility distribution infrastructure investments.¹² If Massachusetts were to move forward with this approach, the bonds could be secured against a fee or payment on ratepayers' bills. The utility would retain ownership and operation of the distribution infrastructure.

Such bonding capacity would likely have to be authorized through legislation for bond markets to provide appropriate capital to the issuing entity, and the DPU would need to take new action. While the bond would not affect the bonding cap of the utility, it might be included in the public entity's bond cap, depending on how it is structured, and therefore pose an opportunity cost for financing of other public needs.

State Revolving Loan Fund (SRF)

Revolving loan funds have been used for many decades for water infrastructure in Massachusetts. However, they have not been used for electricity infrastructure. Under this approach, the legislature could authorize and appropriate initial seed funding for a distribution system SRF (note: a state-administered fund could also be created that is seeded by third-party investors, compliance fees, etc.). A state entity would need to administer the fund, issuing low-cost loans to utilities to debt-finance high-priority projects that meet criteria typically set out by the legislature or the administering agency, with loan-repayment over time through customers' rates. Repayments of principal and interest back to the fund would in turn allow for the recycling of public funds to finance new projects and/or issue credits back to ratepayers. Risks to the public would likely be minimal and such SRFs would not be included in the state's bond cap. Legislation would be needed to initiate the SRF and establish associated governance parameters.

Climate Superfund

A superfund is a "polluter pays" policy designed to require companies with large historic GHG footprints to pay into a state-managed fund, based on their relative contribution to emissions. Capital collected from past GHG emitters is then used for climate adaptation and mitigation purposes. Similar to the model of federal waste cleanup laws, this mechanism takes a backwards-looking approach that ensures those most responsible for significant past

¹² An energy transition bond (ETB) is a type of debt instrument designed to fund projects that are high-emission and support the transition towards lower-carbon operation(s). They often target carbon-intensive industries (e.g., fossil fuels, mining, manufacturing, etc.) that struggle to meet strict "green" criteria but are committed to environmental performance. Unlike green bonds, ETBs are designed to fill the gap for investments in hard to decarbonize sectors.

environmental harm support building a system that adapts to those impacts. Two states have passed laws to create Climate Superfunds — VT and NY. These laws have not been implemented in full and are subject to ongoing legal challenges.

Creating a Climate Superfund in Massachusetts would require new legislation establishing who are the relevant responsible parties, the rate or fees to be paid, a fund to receive payments of fines, the uses of the funds (e.g., for electric distribution infrastructure projects meeting certain criteria, among other things), and an entity to administer the programs and/or project funding. Once established, the fund would provide any number of financing mechanisms to support electricity system infrastructure investments, including grants and loans. Since the funds or financing would be outside of utilities' rate base, this would lower the cost for ratepayers.¹³

Carbon or Fossil Fuel Fee

A carbon or fossil fuel fee would place a nominal fee on fossil fuels consumed in Massachusetts (e.g., \$15 per metric ton of carbon) that could increase over time to match iterative climate mandate timelines. Unlike the Climate Superfund, this mechanism would take a forward-looking approach, aiming to incentivize future emissions reductions by in-state actors. Fossil fuels covered by the fee could include natural gas, gasoline, diesel, heating oil, residual fuel oil, and propane, among others, with each assigned a unique emissions intensity. Covered sectors could include buildings, industry, and transportation (but may not include electric supply since it is already covered by the Regional Greenhouse Gas Initiative (RGGI)), with the goal of covering facilities as far “upstream” in the supply chain as possible (e.g. charging suppliers, not individual consumers).¹⁴ To facilitate more straightforward program administration, there would likely be an emissions threshold above which individual facilities are covered, and below which they are exempt. A fossil fuel fee would operate similarly, but as a fixed percentage fee added to the wholesale cost of fuels brought into the state. Either approach would be designed as a fee rather than a cap-and-invest program due to the limited size of the Massachusetts market, but a cap-and-invest program could be feasible if Massachusetts increased the size of the market by partnering with other states.

Like a Climate Superfund, creating a carbon or fossil fuel fee would require new legislation and an entity to administer the programs and/or project funding. The revenue collected from the fee could be used for any number of purposes, such as supporting electricity affordability, assisting low-income customers, paying for energy efficiency and public interest programs, building out grid infrastructure, or other measures. Since the funds would be outside of utilities' rate base, funding grid investments with carbon or fossil fuel fee proceeds would lower the cost of infrastructure upgrades for ratepayers. Carbon or fossil fuel fee proceeds could also be used to establish an SRF to pay for some distribution system investments. (Please see the Appendices

¹³ Note: A bill similar to the VT and MY legislation was introduced in the Massachusetts General Court this session. It did not advance out of committee.

¹⁴ See Glossary for background on RGGI.

for a detailed proposal from individual FAWG members that combine a carbon or fossil fuel fee with an SRF.)

DER Aggregation

A DER aggregation program would incentivize aggregated installations of solar and storage systems on circuits where doing so would potentially defer or avoid the need for system upgrades to increase capacity to meet peak electric demand. The basic concept is to target rapid solar and storage deployment to distribution grid circuits where upgrades are imminently planned, where DER aggregation could reduce costs to the rate base by deferring or avoiding those infrastructure upgrades. If it proves possible to substitute or defer higher cost grid upgrades with lower cost aggregated DER installations, then overall ratepayer bills be positively impacted. The building or homeowners participating in the program would also benefit, assuming the energy bill reductions associated with the solar/storage system are greater than their share of installation costs.

A DER aggregation program could be funded through an SRF, with subsidies in the form of low-interest loans to participating customers and proceeds from loan repayments rolled back into the program for additional installations and/or reimbursed to the rate base. It could be folded into existing programs and institutions such as the SMART program, Mass Save, or the Massachusetts Community Climate Bank. Please see the Appendices for a detailed proposal from FAWG members that combines a DER aggregation program with an SRF and subsidized customer loans.

While the FTT FAWG did not conduct its own detailed quantitative analysis of this proposal, an example of a [similar program](#) launched by Con Edison in New York suggests that the basic framework of providing support to DERs to reduce overall system costs may be effective. The Con Edison program included \$200 million in funding for DERs and other resources, which successfully deferred a \$1.2 billion substation upgrade in a densely populated area for four to six years, resulting in a net benefit to ratepayers during that period and savings for homeowners with DER installations.

Summary of Benefits and Risks/Challenges

The FTT FAWG has identified benefits and risks/challenges associated with each of these measures, as summarized in the table below.

Measure	Benefits	Risks/Challenges
Clean Energy Distribution Tariffs	Offers speed, optionality, and reduced uncertainty to businesses; better allocates costs to beneficiaries, thereby supporting overall equity	Administrative costs and time to establish; limited going-forward risks or challenges beyond establishing and administering the program
Securitization	Reduces asset financing costs and growth of the portion of the rate base on which utilities earn a profit; smooths cost recovery/rates	Transaction and administrative costs; potential impacts on utilities' overall cost of capital; utility concerns regarding the viability of using this tool for ongoing investments; utility concerns over changes to utility model that offset potential benefits of securitization
Non-Utility Distribution Entitlement Lease	Direct support to ratepayers/offset of ratepayer costs; community benefits and/or support to LMI customers and EJ communities, as determined by regulator, non-profit third party (lease holding) entity, and other stakeholders	Transaction and administrative costs; utility concerns about changes to utility model that offset potential customer benefits of this measure
Public-Private Partnerships	Reduces asset financing costs and growth of the portion of the rate base on which utilities earn a profit	Transaction and administrative costs; shared decision-making on project-specific issues (e.g., contractors, timing, etc.); taxpayer and/or debt cap implications depending on source of public funding; utility concerns about changes to utility model that offset potential customer benefits of this measure
Environmental/Energy Transition Bonds	Reduces asset financing costs and growth of the portion of the rate base on which utilities earn a profit; rate smoothing; smooths cost recovery/rates	Transaction and administrative costs; taxpayer/debt cap implications may limit scale/sustainability; utility concern about changes to utility model that offset potential customer benefits of this measure
State Revolving Fund	Reduces asset financing costs; longevity, flexibility	Transaction and administrative costs to establish and ongoing implementation costs; need for seed funding, program administration; likely requires legislation

Climate Superfund	Sizable revenue source that is not MA ratepayers or taxpayers; can be used as a direct grant to limit rate base and earnings growth or as seed funding for SRF	Requires legislation; high probability of litigation; likely one-time assessment only; potentially shifts costs to other segments of the economy; administrative costs to establish and ongoing implementation costs
Carbon or Fossil Fuel Fee	Stable revenue stream not paid for directly by ratepayers or taxpayers; market signal to discourage fossil fuel consumption; can be used as a direct grant to limit rate base and earnings growth or as seed funding for SRF	Transaction and administrative costs and time to establish and ongoing implementation costs; requires legislation; potential to increase costs in other segments of the economy; potential “leakage” to non-covered jurisdictions that would negate the structure’s benefits.
DER Aggregation	Reduces need for physical grid upgrades thereby avoiding/limiting rate base growth and, potentially, earnings; incentivizes more distributed energy resources like solar or storage; lowers bills for participating and non-participating customers	Transaction and administrative costs and time to establish; ongoing implementation costs; implementation questions re: achieving market penetration/scale to realize cost savings, equity, program administration, assigning and tracking cost recovery for participating DER customers

Recommended Pathways

Different financing measures serve different purposes and achieve them through different mechanisms. Some can affect the system in multiple ways depending on how they are designed, while others have a more defined impact; many combine several effects.

The table below outlines the potential impacts of different measures in terms of several mechanisms for reducing ratepayer costs that the FAWG members highlighted for any evaluation. These mechanisms include:

- **Rate smoothing:** Some measures have the net effect of “smoothing” rate increases over time, by reducing revenue requirements for specific investments in the near term in exchange for larger revenue requirements in the future. Measures accomplish this by financing investments through forms of debt with different amortization schedules compared with traditional utility ratemaking (where revenue requirements are tied to assets’ depreciation schedules).
- **Reducing asset financing costs:** Some measures reduce financing costs by substituting traditional utility cost of capital structure with a more heavily debt-financed structure, such that ratepayers will not need to pay for the utilities’ equity return on these assets and/or may receive a more favorable cost of debt.

- **Leveraging public financing:** Some measures seek to benefit ratepayers by leveraging public financing, either through direct taxpayer funding or through the use of public debt. While these measures have the potential to lower ratepayer costs, these benefits must be weighed against the potential costs to taxpayers.
- **Generating new sources of private capital/funding:** Some measures help raise new sources of dollars that can be deployed to fund infrastructure projects or other relevant measures.
- **Assigning costs to beneficiaries:** Under traditional ratemaking, the costs for specific infrastructure upgrades are spread across the entire rate base, rather than being carried by those who benefit from the upgrades. Some measures seek to more closely tie costs of investments to their direct beneficiaries.¹⁵
- **Providing for a dedicated equity-focused component:** Any measure that reduces ratepayer costs is de facto helping advance equity, and each of the measures under consideration by the FAWG has the potential to accomplish this goal. However, some measures can be leveraged to advance specific equity goals.
- **Reducing overall system costs:** Some measures distinctively seek not to finance or fund grid investments at all but, instead, save ratepayers money by avoiding the need for investments through demand reduction, or “non-wires alternatives.”

	Rate smoothing	Reduces asset financing costs	Leverages public financing	New private sources of capital	Assigns costs to beneficiaries	Dedicated equity component	Reduces overall system costs
Clean Energy Distribution Tariffs	○	○	○	◐	●	○	○
Securitization	●	●	○	○	○	○	○
Non-utility Distribution Entitlement Lease	○	○	○	●	○	●	○
Public-Private Partnerships	◐	◐	◐	○	○	○	○
Environmental/ Energy Transition Bonds	●	●	●	○	○	○	○
State Revolving Fund	●	●	●	○	○	○	○
Climate Superfund	○	○	○	●	○	○	○
Carbon or Fossil Fuel Fee	○	○	○	●	○	○	○
DER Aggregation	○	○	○	●	◐	◐	●

¹⁵ While we’ve created a separate category for these measures, this could also be understood as a sub-category of the bullet above in that these measures generate new sources of private revenue/funding — it is just that these sources are tied to specific investments and their beneficiaries.

Figure 1: Ratings of the effectiveness of each financing measure in terms of its impact on the FAWG-designated mechanisms for reducing ratepayer costs.¹⁶

Potential Synergies and Tension Points

In deciding on a portfolio of potential measures, policymakers should consider their potential synergies and tension points. For example:

- A state revolving fund could be used in combination with several of the other proposals — such as public-private partnerships, DER aggregation, or energy/environmental transition bonds — by serving as a source of capital for low-cost/subsidized loans or grants in support of the relevant program.
- Revenue from a carbon or fossil fuel fee or climate superfund could be used to provide the seed capital for a state revolving fund, solving the capitalization problem without taxpayer funding. A carbon fee could also be used to replenish or grow the state revolving fund over time.
- As noted in the proposal description above, DER aggregation could be combined with environmental/energy transition bonds to provide low-cost financing to building owners participating in the program.

Policymakers should account for the different time horizons that measures will need to come “online,” and the importance of appropriate sequencing. Among the measures under consideration, only the clean energy distribution tariff is seen as close to implementable in the near-term (i.e., within the next year). Measures like securitization, distribution entitlement lease, energy/environmental transition bonds, and an SRF, are seen as medium-term (two- to five-year) options, subject to the need for new legislation, administrative review, and/or program development. DER aggregation and a carbon or fossil fuel fee may also fall into this medium-term bucket depending on the specific program design. Climate superfund and public-private partnerships are seen as potential long-term options, with program implementation unlikely for at least the next five years due to current political or legal headwinds and/or program complexity.

In addition, each new measure introduces an additional element of administrative complexity, which creates its own costs for regulators and regulated entities alike. FAWG members note that complex programs impose administrative costs and participation barriers, resulting in lower

¹⁶ Ratings focus on the core impact of the measure in question, rather than potential use cases. Some measures can achieve different or broader impacts than what is indicated in the ratings depending on how they are designed and implemented. For example, the proposals for DER Aggregation and a Carbon Fee in the Appendix both include one or more dedicated equity components. Likewise, FAWG members have suggested that measures like a State Revolving Fund, Climate Superfund, Carbon or Fossil Fuel Fee may have potential to reduce overall system costs.

uptake. They suggest administrative simplicity should be treated as an economic value, not just a communication issue.¹⁷

Conclusion

To achieve the Commonwealth's clean energy and climate mandates and reliably meet growing electric demand, modernizing the local electric distribution grid is essential, but it must be done while maintaining affordability for all customers. Given the scale of potential investments and their impact on ratepayers, there is an urgent need to explore all measures to reduce ratepayer costs. Because no single solution is comprehensive on its own, policymakers should adopt a portfolio approach that carefully sequences multiple alternative financing, funding, and demand reduction mechanisms to balance immediate rate relief with long-term sustainability.

Together, these alternative approaches can mitigate anticipated electricity bill impacts through several distinct mechanisms. Depending on the specific tool, they work by smoothing rate adjustments over time, reducing asset financing costs by lowering the WACC, leveraging public support, generating new sources of private revenue, or reducing overall system costs by avoiding the need for traditional infrastructure investments entirely. By thoughtfully combining these strategies, the Commonwealth can engineer equity into the system from the outset and sustainably finance the grid of the future.

¹⁷ As policymakers decide on a portfolio of measures, the FAWG further suggests they consider the importance of public perception. If households and businesses believe costs are unpredictable or unfair, support will erode. Credibility and durability of financing mechanisms matter as much as nominal cost. Financing mechanisms that are hard to explain or perceived as opaque may face resistance regardless of economic merit. Likewise, some revenue mechanisms may look attractive in gross dollars but in practice they are volatile, politically fragile, and erode public trust. FAWG members therefore suggest that revenue sources should be evaluated on their stability and predictability, not just their yield. Financing approaches that are unstable or easily reversed can raise long-term system costs even if they appear attractive initially.

Appendices:

A. Glossary of Terms

1. Core Financing & Cost Concepts

- a. **Cost of Capital:** The required return on investment for financing energy infrastructure, typically expressed as a weighted average of debt and equity costs.
- b. **Financing:** Refers to the sources of capital required to invest in utility infrastructure. Under traditional models, utilities generally raise this capital through a mix of debt and equity with the objective of optimizing the overall cost of capital. Alternative financing mechanisms seek to reduce the overall cost of capital (e.g., securing lower interest rates) or, in the case of alternative fixed income structures, smooth the repayment schedule over time.
- c. **Funding:** Refers to the ultimate source of revenue used to pay for the infrastructure directly or to repay the financing over time. While traditional funding comes from electric ratepayers through their monthly bills, alternative funding approaches seek to identify new, non-ratepayer sources of revenue, such as taxpayer dollars, polluter fees, or private partnerships.
- d. **Rate Base:** The total dollar value of the physical assets, capital investments, and additional items that a public utility dedicates to providing a service. Under the Massachusetts DPU, it is calculated as the original, prudent cost of assets minus accumulated depreciation. The DPU uses the rate base to calculate the utilities allowed return on rate base. This return is the cost of debt and equity capital that the utility has the opportunity to earn.
- e. **Revenue Requirement:** The total annual revenue a utility must collect from ratepayers to cover operating costs, debt service, and allowed returns.
- f. **Weighted Average Cost of Capital (WACC):** The weighted average rate of return an entity (in this case, a utility or project developer) must pay to finance its assets, calculated by weighing the cost of equity and the after-tax cost of debt in proportion to their shares in the capital structure. WACC is a key determinant of utility rates because it sets the allowed return applied to the regulated rate base. All else remaining equal, a lower WACC reduces the cost of infrastructure investment for ratepayers, while a higher WACC increases long-term bill impacts.

2. Demand Reduction & System Optimization

- a. **Distributed Energy Resources (DER):** Small-scale (household, building, or community level), decentralized energy resources such as rooftop solar, battery storage, demand management, and energy efficiency.
- b. **Non-Wires Alternatives (NWA):** Solutions that defer or replace traditional grid infrastructure expansion through demand-side measures or distributed resources.

- c. **Peak Demand:** The highest level of electricity consumption during a given period; a key driver of infrastructure investment.
 - d. **Virtual Power Plants:** An aggregation of decentralized energy resources — such as customer-owned batteries, smart thermostats, electric vehicles, and distributed solar — that are coordinated using software to operate like a single, traditional power plant.
3. **Financing Tools & Structures**
- a. **Green Bonds:** Debt instruments issued to finance environmentally beneficial projects, often at favorable terms. Often funded by the state or a “green bank,” a public or quasi-public institution that uses public funds to mobilize private investment in clean energy (e.g. Massachusetts Clean Energy Center)
 - b. **Public-Private Partnership (P3):** A contractual arrangement where private entities finance, build, or operate infrastructure traditionally managed by the public sector.
 - c. **Regional Greenhouse Gas Initiative (RGGI):** The first fossil generation sector cap-and-trade program established in the United States. Launched on January 1, 2009, it sets an annual cap or “allowance” on carbon dioxide emissions and enables participating states to buy and sell these allowances through a market-based system. Every three years, the cap is lowered to gradually reduce overall CO₂ and CO equivalent (CO₂e) emissions over time. Revenue generated from the sale and trading of emission permits is pooled into a fund and redistributed to member states to support energy efficiency and infrastructure initiatives. RGGI has generally been considered successful. (Note: some scholars have highlight potential for emissions “leakage,” where electricity demand shifts to non-member states, potentially increasing GHG emissions elsewhere.)
4. **Ratepayer Impact & Equity**
- a. **Bill Impacts:** Changes in ratepayer electricity bills resulting from infrastructure investments or policy decisions.
 - b. **Energy Burden:** The proportion of household income spent on energy costs (typically electricity, heating, and cooling). Energy burden is used as an affordability indicator and is especially important for identifying households experiencing disproportionate cost stress.
 - c. **Environmental Justice Community:** In Massachusetts, Environmental Justice (EJ) communities are geographic areas identified using criteria established under state policy. These areas are defined based on a combination of indicators, including median household income, minority population share, English isolation, and/or foreign-born population. EJ communities are recognized as facing disproportionate environmental and public health burdens and are therefore afforded additional procedural protections and equity considerations in state permitting, planning, and energy decision-making processes.
 - d. **Financial Equity:** Monetary value of an asset, property, or company, after accounting for associated debt and other liabilities; distinct from social equity.

- e. **Progressive Rate Design:** Rate structures that reduce cost burdens on low-income customers. The opposite of regressive rate design, through which low-income customers bear a disproportionately high burden of system energy costs.
- f. **Ratepayer:** An electricity customer who pays regulated utility rates.
- g. **Social Equity:** Theory that calls for the fair and just management of public resources, institutions, policies, and services to ensure all individuals have equal opportunities, rights, and benefits.

B. Areas for Further Analysis and Information Gathering

In addition to the ideas for future analysis noted in the body of this report above (i.e., demand reduction, integrated energy planning), FAWG members have suggested the following two additional areas for analysis and information gathering.

- Defined indicators of success help validate whether our initial assumptions and projections are aligned with reality. For example: “we will know our financial strategy is on target if we: 1) secure the necessary capital, 2) attract the right partners, 3) meet key milestones within projected timelines, etc.”
- An informal and indicative survey of potential users of these financing instruments (e.g.; utilities, municipalities) to see which ones they might use. If appropriate, this could be done for grid/distribution infrastructure investment and for third party energy and other similar investments.

C. Alternatives Assessments

[PROVIDED UNDER SEPARATE COVER]

D. Quantitative Analysis

[PROVIDED UNDER SEPARATE COVER]

E. Member Proposals

[PROVIDED UNDER SEPARATE COVER]