Minutes from
Energy Transformation Advisory Board Meeting
April 3, 2025

Welcomes and Opening Remarks

At 1:08 pm, Office of Energy Transformation (OET) Executive Director, **Melissa Lavinson** called the meeting to order.

Executive Director (ED) Lavinson welcomed the Energy Transformation Advisory Board (Advisory Board) to the third quarterly meeting. **ED Lavinson** acknowledged the newest Advisory Board Member, Representative Mark Cusack, who joins the ETAB as the House Chair for the Joint Committee on Telecommunications, Utilities and Energy. (Chair Cusack was represented by David Hart in the meeting.)

ED Lavinson noted that OET is approaching its 1-year anniversary. She thanked all members of the Advisory Board and the Focus Area Work Groups (FAWGs) for their commitment and hard work, contributing to the significant progress to date. All the FAWGs are currently transitioning from Phase 1 to Phase 2 work (i.e., from framing and understanding the issues and alternatives, to assessing alternatives). **ED Lavinson** reviewed the agenda and the meeting goals: 1) update the Advisory Board on the status of the FAWGs and 2) gain alignment from the Advisory Board for the DTP and FTT FAWGs to move forward with Phase 2 work, using the proposed alternatives and assessment framework and criteria as a starting point. She noted that this meeting approach, which incorporates small group discussions, was developed based on feedback requesting more engagement and direct conversations between Advisory Board Members.

ED Lavinson welcomed and turned the meeting over to facilitators **Toby Berkman** and **Catherine Morris**, from the Consensus Building Institute.

Toby Berkman reviewed the ground rules and the format of the meeting, emphasizing the interactive agenda and the need for comments to be kept concise and on topic. After updates from OET and the Executive Office of Energy and Environmental Affairs (EEA), **Berkman** indicated the meeting would focus on the work to date from the Financing the Transition (FTT) FAWG, followed by the Decarbonizing the Peak (DTP) FAWG. The process for each section would be for the consultants working with FTT and DTP to give a high-level update on the outcomes of Phase 1, followed by a brief time for clarifying questions. The Advisory Board members will then divide into small groups to offer recommendations for adding or further clarifying the list of alternatives and/or the assessment framework and criteria. Small groups will report back to the large group and the recommendations will be gathered and brought back to the FAWGs. Following the small group discussion, the Advisory Board will be asked to vote to "affirm that the proposed list of alternatives and assessment framework and criteria [as amended by the Advisory Board] is an appropriate starting point for the FAWG to proceed with its deliberations in Phase 2."

Updates on Outreach and Engagement

ED Lavinson provided an update on outreach and engagement, which included a community meeting on March 31st in Lowell that provided an overview of the state's climate and energy goals and efforts. The meeting was attended by 25-30 people, with high enthusiasm and constructive feedback about the direction of this effort. This was the first in a series of community engagement meetings, which will occur quarterly around the state.

At the last Advisory Board meeting, the Advisory Board authorized the creation of a new FAWG: Enabling Sustainable Economic Development (ESED). This FAWG has been launched with an informational webinar. The FAWG is open to new members. **ED Lavinson** indicated that information on the ESED FAWG can be found on the OET website.

Update on Administration's Energy Affordability Agenda

ED Lavinson welcomed **EEA Secretary Rebecca Tepper.**

Secretary Tepper thanked the Advisory Board for their time and contributions. She acknowledged customers' struggles with high energy bills, particularly during this cold winter. **Secretary Tepper** indicated that, in response to both this season and larger trends, the Governor launched her energy affordability agenda, which is focused on lowering bills, avoiding unnecessary spending, and stabilizing prices. For example, electric and gas ratepayers will receive $220 million in direct bill relief over March and April. In addition, the administration is working to expand discount and money saving programs, providing more than $2.5 billion in benefits over five years. The agenda also aims to reduce unnecessary charges and reduce price volatility, providing close to another $3.5 billion in savings. She indicated that some benefits have already begun, while other efforts will launch within months and deliver savings over the next five years. **Secretary Tepper** also noted that EEA is working concertedly to develop a broader energy affordability bill for this legislative session that builds off of the Governor's energy affordability agenda, and that may include elements such as authorizations for innovative financing options to lower costs, rate reforms, measures to reduce peak demand while diversifying and increasing energy supplies, provisions to improve utility and government accountability and efficiency, and increased opportunities for customers to control costs. **Secretary Tepper** noted the potential alignment of the bill with the work of OET, and emphasized the importance of continued collaboration as these initiatives are developed and debated in the coming months.

Presentation and Discussion on FTT FAWG Assessment Framework

Toby Berkman gave the floor to **Sue Tierney**, from Analysis Group, to share specifics about what has come out of the Phase 1 work of the FTT FAWG.

Sue Tierney provided a high-level presentation on FTT's goals, progress, and assessment framework. **Tierney** highlighted that future costs of the distribution system may rise faster than in the past, owing to growing electricity demand. While efficiency improvements will help mitigate growth and ratepayer costs, new investments will still be needed. The FTT FAWG's primary goal is to identify financing and cost recovery mechanisms that can, for example, reduce borrowing costs, more directly assign costs to beneficiaries, and help smooth rate adjustments over time. The FTT FAWG is focused on tools for financing, rather than what gets financed, and is limiting its scope to the local grid (i.e., excluding behind-the-meter options, transmission, power plants, etc.).

Phase 1 Goals: The FTT FAWG worked 1) to establish a collective understanding of the current ratemaking and cost recovery process for local grid investments, 2) develop a comprehensive list of alternative financing and cost recovery mechanisms, and 3) create a framework and criteria to assess alternatives. **Tierney** affirmed that the FTT FAWG largely accomplished its Phase 1 goals and was sharing the list of alternatives and assessment framework with the Advisory Board for input.

Efforts to Date: The FTT FAWG identified seven different financing tools for consideration, documented their mechanics and applications, and tested them with FAWG members to ensure understanding. FAWG members also identified three additional options (public ownership of utility infrastructure, greenhouse gas fees, and carbon taxes) which are noted but not currently fully developed. In Phase 2, the FTT FAWG will assess the various options and work to narrow the list to make recommendations to the Advisory Board on which ones to take forward for more focused modeling and evaluation in Phase 3.

Assessment Framework: The FAWG created an assessment framework with three main categories: 1) Investment and cost recovery, 2) Implementation pathway, and 3) Other intangibles. The assessment framework evaluates each mechanism against the *status quo*, considering factors such as, for example, capital cost reduction, cost levelization over time, rate certainty, near-term rate impacts, equity, governance considerations, and overall feasibility.

The financing alternatives discussed include:

- **Clean Energy Tariffs**: Customer-funded grid upgrades through targeted surcharges, with utilities maintaining ownership of equipment.
- **Securitization**: Using secured, low-cost debt financing (which is achieved through irrevocable regulatory financing orders) to spread costs over time. DPU sets asset eligibility criteria and recovery timeframes, with customers paying back funds through a fixed, non-bypassable charge.
- **Distribution Entitlement Lease**: Third parties (typically nonprofits) lease portions of utility projects and provide upfront funding. The utility and leaseholder recover costs through the utility bill. The utility provides the leaseholder with a percentage of the revenues collected form customers to pay back the upfront funding costs. The

leaseholder recycles a portion of these revenues back to customers to, for example, support discount rate programs, provide customer bill credits, etc.

- **Public-Private Partnerships**: Collaboration between public entities and utilities to fund infrastructure, exemplified by the DC Power Line Undergrounding initiative that combines ratepayer funding, low-cost public bonds, and direct municipal/government contributions (e.g., repaving).
- **Environmental/Energy Transition Bonds**: Public authority-issued bonds providing low-cost financing for infrastructure projects, repaid by project users typically at a lower cost of capital than they otherwise could secure.
- **State Revolving Fund**: Provision of low-cost infrastructure loans, with repayments recycled to fund additional projects.
- **Climate Superfund:** Recently adopted in Vermont and New York (2024), it establishes fees to be collected from entities responsible for historical GHG emissions to fund climate/clean energy related infrastructure.

Discussion:

Toby Berkman asked for clarifying questions on the FTT Assessment Framework.

Dan Goldman (Clean Energy Ventures) asked for clarification on the scope of the projects that might be financed. He indicted that the solution and what is applicable depends on the scope of the grid upgrades. For example, do grid upgrades include substations, new distribution lines, etc.?

- **ED Lavinson** responded that the financing mechanisms are being assessed vis-a-vis distribution infrastructure, which could include power lines, substations, transformers, information technology systems, and other distribution-owned infrastructure in which companies would need to invest to meet growing electric demand and achieve clean energy goals. She also clarified that FTT's efforts are to assess alternatives to current financing and recovery methods, i.e., compare alternatives to the *status quo*.

Caroline Hon (National Grid) asked for clarification on what it means to use this assessment framework as a starting point. Should we expect the frameworks to evolve as the analysis is conducted?

- **ED Lavinson** responded that, yes, the process would be iterative, and frameworks may evolve. She indicated that the FTT FAWG has spent time looking at potential alternatives and assessment criteria, and the question for the Advisory today is to determine if what is being proposed is a reasonable starting point and if it addressing the right questions. **ED Lavinson** reinforced that, as the FTT FAWG continues assessing how options function and their implications, the assessment will help determine if additional criteria/questions need to be addressed and which options warrant a deeper, *pro forma* analysis. Conducting detailed analysis for all options would be very time and

resource intensive, so this step is an attempt to narrow the options using an apples-to-apples assessment framework.

FTT Small Group Discussion

Toby Berkman transitioned Advisory Board members into facilitated small groups, with the prompt: *Are there recommendations for adding or further clarifying the list of alternatives, and/or the assessment framework and criteria?*

The following notes capture the themes from small group report outs:

General Comments

- Need to further clarify implementation and timing of financing alternatives.
- Need to contextualize distribution system investments within the full electrical system.
- Need to be very careful regarding how criteria will be weighted and prioritized, particularly regarding ratepayer impacts. Recommended that Advisory Board should be consulted on weighting.
- Desire for transparency in how color rankings (red/yellow/green) are determined and will be consistently applied.
- Need for clarity on how investments connect across site and grid levels.
- Consideration of overall costs, savings, and sustainable budgeting.
- Recognition that financing approaches may need to be paired to maximize/optimize effectiveness.
- Expectation that many issues will ultimately return to the legislature.

Suggestions on/for Additional Financing Options

1. **Public/Private Investment Approaches**
    - Non-public financing options (third-party financing, shared savings models).
    - Risk aggregation approaches similar to green bank models.
    - Options for drawing private capital into infrastructure with de-risking mechanisms.
2. **Regulatory and Policy Mechanisms**
    - Carbon tax/fee or other carbon reduction strategies.
    - Enhancement of existing mechanisms (e.g., RGGI).
    - Clean energy tariff.
    - Reduced utility return on equity (ROE) given expected grid expansion/performance-based solutions where utilities earn more for achieving certain goals.
3. **Public Funding**
    - General fund allocation/public funding of (not just financing) investments (similar to interstate highway system).
    - State grants.

- Tax incentives and tax increment financing
- ⊄ Using economic growth benefits for financing (e.g., new housing or business development help pays for local infrastructure).

Additional Criteria Suggestions

Investment/Cost Recovery

- Align cost recovery with technology lifespan/ duration for which benefits accrue.
- Consider magnitude of savings versus displacement of ratepayer dollars.
- Assess overall costs and savings at system level for sustainable budget.
- Evaluate financial risks (e.g., defaults) of different options.
- Need for transparency in how much of ratepayer payments go to capital vs. Interest.
- Clearly identify if there is a ratepayer/taxpayer split and avoid "double dipping."
- Capture carbon reduction benefits in financial assessments.
- Consider impacts on access for LMI (low and moderate income) customers.
- Evaluate indirect economic benefits or costs and unintended consequences.
- Determine which option provides the biggest bang for the buck under budget constraints.
- Caution that tying cost recovery to beneficiaries could challenge DER (distributed energy resources) developers.

Implementation Pathway

- Practical assessment of legislative and legal feasibility.
- Consideration of litigation risks and potential time costs of lawsuits.
- Timetable for implementation of different options.
- State bond capacity limits and competing infrastructure needs.

Other Intangibles

- Be more specific about Environmental Justice (EJ) criteria (include public health, intergenerational EJ impacts).
- Impact on utilities' operational risk and capital structure.
- Economic development and business impacts.
- Avoid socializing costs while privatizing profits.
- Consider how rapidly changing energy and transportation sectors affect options.

Toby Berkman called for a vote on:

- The Advisory Board affirms that the proposed list [as amended] of alternatives and assessment framework [as amended] is an appropriate starting point for the FTT FAWG to proceed with its deliberations in Phase 2.

VOTED: to affirm the proposed list of alternatives and to allow the FAWG to proceed with Phase 2.

In the room: none opposed, none abstained
Online: none opposed, none abstained

Presentation and Discussion on DTP FAWG Assessment Framework

Catherine Morris gave the floor to **Jonathan Blair**, from E3 to share specifics regarding the outcome of the Phase 1 work of the DTP FAWG.

Jonathan Blair presented the DTP FAWG's approach to identifying and developing alternative technologies and policies to reduce peak electric demand. He indicated that the DTP FAWG is conducting both a top-down, system-wide assessment and a bottom-up, case study approach to understand electric system and individual facility dynamics, operational drivers, compensation, community impacts, and policy implications. **Blair** indicated that in Phase 2, the DTP FAWG will apply the assessment framework to the four facilities participating in the DTP FAWG and at a system-wide level.

Phase 1 Goals: The DTP FAWG worked 1) to establish a collective understanding of the current regional electric system dynamics, current and future electric demand, current and future generation resource mix, the role peaking power plant and combined heat and power facilities play in the system today, what drives their operations and which entities govern/regulate them, how they derive compensation, and how the ISO New England (ISO-NE) manages the regional electric grid and determines resource needs/adequacy, 2) develop a comprehensive list of alternative technology and policy options to decarbonize peak electric demand – both supply and demand side options, and 3) create a framework and establish criteria to assess technology and policy alternatives. **Blair** affirmed that the FTT FAWG largely accomplished its Phase 1 goals and was sharing its alternative technology and policy lists and assessment framework with the Advisory Board for input.

Efforts to Date: The DTP FAWG, with support from E3, Georgetown Climate Center (GCC), and Harvard Energy & Environment Law Program (EELP), developed a comprehensive list of alternative technology and policy options. The FAWG recommended that technology options be specific and acknowledged that additional refinement of policy options will be needed. The framework for assessing the technologies and policies includes a comprehensive range of criteria. The group will continue to refine these criteria and thresholds as they work toward creating a portfolio of options in Phase 2.

Summary of alternatives framework for technology and policy:

The assessment framework to evaluate technology alternatives includes:

- Environmental Impacts
- Feasibility
- Community and Economic Impacts
- Suitability for Fossil Fuel-Fired Peaker Replacement
- Cost
- Availability/Stage of commercialization
- Other Considerations (e.g., consistency with existing state policy, legal risks, federal policy risk)

Abby Husselbee, with EELP, presented on the framework for evaluating policy alternatives, which examines:

- Impact on peak demand
- Impact on increasing availability of decarbonized supplies
- Equity considerations
- Customer cost impacts
- System cost impacts
- Implementation needs/risks
- Timing
- State authority

Jonathan Blair emphasized that the DTP FAWG affirmed that list of alternatives should remain comprehensive at this stage, with no premature exclusion of options despite differing opinions on efficacy. All alternatives should be consistently assessed using criteria that considers broad impacts and implications. While some criteria are quantifiable (like emissions), others are more qualitative (such as community acceptability or implementation feasibility). A subgroup of DTP FAWG members will convene to develop a proposal for defining and consistently applying criteria across alternatives before conducting assessments.

Discussion:

Catherine Morris asked for clarifying questions on the DTP Assessment Framework.

Paul Chodak (Eversource) asked for clarification on how the assessment framework is accounting for Massachusetts being only a small part of the larger regional electric system, noting that electrons don't abide by state lines.

- **ED Lavinson** responded that the FAWG is focusing on what can be influenced within state lines, first, while recognizing that some critical leverage points may require changes at a much larger scale by the ISO-NE. **ED Lavinson** also noted that Massachusetts peak demand and peaker capacity is a significant proportion of peak demand and peaker capacity regionally, so reductions within the state have a significant impact on the broader system.

Mekala Krishnan (McKinsey Global Institute) asked how the FAWG is thinking about timelines for decarbonizing the peak.

- **ED Lavinson** responded that the ultimate goal is to meet the timeline set by the State's climate laws. The DTP FAWG is thinking about timeline in terms of feasibility to implement technology and policy changes. This is currently captured in the assessment framework and will be made clearer.

Senator Michael Barrett (Co-Chair Joint Committee on Telecommunications, Utilities and Energy) commented that he would like to see more consideration of how this effort might need to respond and adapt to changing priorities under the current Federal administration.

DTP Small Group Discussion

Catherine Morris transitioned ETAB members into facilitated small groups, with the prompt: *Are there recommendations for additional technology and policy alternatives and/or criteria outlined in the assessment framework?*

Technology Alternatives Suggested:

Fuels

- Evaluate e-fuels as an alternative energy source.

Energy Generation & Management

- Consider ramping capability of generation technologies.
- Better define and unpack demand response as a technology solution.
- Be sure to appropriately consider Carbon Capture and Storage (CCS) technologies.
- Clarify what's included under steam conversion.
- Account for dynamic peak timing (shifting seasonal, daily, and hourly peaks).

Additional Criteria Suggested

- **Environmental Impacts**: Include particulate matter under air quality, social cost of carbon/methane, externalities, and lifecycle emissions.
- **Feasibility**: Address uncertainty factors (cost, availability, supply chain, innovation), commercial availability timeframes, real-world implementation impacts.
- **Community & Economic Impacts**: Consider land use displacement, distinguish between host and neighboring community impacts, quantify scale of community pushback.
- **Reliability & Resilience**: Evaluate seasonal capacity rating changes, site-specific resilience risks.

- **Implementation**: Align investments at site and grid levels, account for potential changes in federal funding and regulations.
- **Costs**: Use production cost modeling for site-specific solutions, include comprehensive costs (levelized, behind-the-meter, total installed, avoided costs).
- **Additional Considerations**: Assess co-benefits, substitutability, system integration, and adaptability to changing conditions.

Additional Policy Alternatives Suggested

Supply-Side

- Standardize regulations with potential state preemption of local restrictions to accelerate clean energy adoption.
- Enhance clean energy procurement frameworks, including optimizing and leveraging surplus interconnection.

Customer-Facing

- Develop private markets for grid services (long-term storage, frequency regulation, voltage regulation).
- Implement co-location policies to place loads near generation/storage.
- Expand demand response to include natural gas enhanced rate design.
- Streamline permitting processes (e.g., automatic approval for residential solar and storage).
- Improve rate design accessibility for both residential and commercial customers.
- Reframe carbon pricing to emphasize investment benefits.
- Enhance EV rate structures.
- Consider supplier billing models (following Texas example).
- Provide flexibility for municipal aggregation.
- Pursue performance-based incentives.

Additional Criteria Suggested:

- **Peak Impacts**: Evaluate effects on both peak demand and peak supply.
- **Equity**: Ensure equitable allocation of costs and benefits, consider distributional impacts across customer classes.
- **Cost Impacts**: Include avoided costs and comprehensive social cost analysis.
- **Implementation**: Assess risks of aggregation approaches, impacts on grid infrastructure, flexibility to address load uncertainty.
- **Policy Integration**: Evaluate interactions with federal policies, alignment with local actions, cumulative impacts on system complexity.
- **Effectiveness Metrics**: Measure impact on emissions, cost-effectiveness, spillover benefits, transparency.

- **Political Factors**: Consider support/opposition landscape, fit with existing location-specific conditions.
- **Timing**: Evaluate policy responsiveness and flexibility over different timescales.

Catherine Morris called for a vote on:

- The Advisory Board affirms that the proposed list [as amended] of alternatives and assessment framework [as amended] is an appropriate starting point for the FTT FAWG to proceed with its deliberations in Phase 2.

  VOTED: to affirm the proposed list of alternatives and to allow the FAWG to proceed with Phase 2

  In the room: None opposed, none abstained
  Online: None opposed, none abstained

Wrap up and Next Steps

ED Lavinson said that the next Advisory Board meeting will be in September 2025 and a survey link for proposed dates will be sent. The next meeting will focus on discussion of the initial alternative assessment outcomes for the DTP and FTT FAWGs and provide updates on progress of the ESED and Everett Marine Terminal (EMT) FAWGs. **ED Lavinson** told the Advisory Board that meeting minutes would be provided by April 10, 2025 (seven days after the meeting) and posted to the OET website, along with the meeting facilitation deck and recording. **ED Lavinson** also indicated that the Advisory Board would receive a summary of the feedback collected as part of the meeting minutes and that the amended assessment frameworks and criteria will be circulated prior to use by the FTT and DTP FAWGs.

Vivien Li (Advisory Board member) asked that prior to posting materials to the OET website, that language be included on the "Illustrative Securitization" example slide in the FTT FAWG section that reinforces that the table depicted was for illustrative purposes only and does not reflect input from or endorsement by the Advisory Board, the FTT FAWG or any of its members. **ED Lavinson** indicated that language to that affect would be added to that slide and reinforced that there has been no endorsement of the Advisory Board or the FAWGs of any alternatives. She reiterated that, at this juncture, the FAWGs and Advisory Board are only assessing alternatives using an established framework and set of criteria to ensure that alternatives are assessed on a comparable basis and questions of importance to Advisory Board and FAWG members are being answered.

ED Lavinson closed the meeting by thanking the Advisory Board for its work and time.

Meeting adjourned at 4:00 pm