

Memo

To: **Energy Efficiency Advisory Council**
From: **Eric Belliveau and the Consultant Team**
Date: **January 14, 2022**
Subject: **EEAC Consultant Team Proposed 2022 Work Plan and Budget Request**

SUMMARY

Strategy for this Work Plan

At a high level, the Consultant Team expects much of its focus in 2022 to be on supporting and guiding implementation of the numerous new elements and areas of focus included in the PAs' 2022-2024 Plan. These elements include electrification and GHG reductions, equity, and workforce development, among others. Although the first year of implementation during each Three-Year Plan has traditionally required the lowest level of effort over the three-year cycle, it is not yet clear whether this will be the case in 2022. The reorientation of the Plan to focus on GHG emissions reductions coupled with quickly ramping up new elements of the Plan may require more upfront effort to ensure these new elements get launched successfully and that sufficient data is provided to track progress. The Consultant Team looks forward to working collaboratively with the PAs to resolve any issues that come up and ensure successful program outcomes.

As in the past, our work is divided into several advisory groups, representing the major areas of effort across the entire range of Consultant Team responsibilities and portfolio of Program Administrator (PA) programs. Within each advisory group, several work areas further clarify the tasks and topics that we plan to address over the coming year. The advisory group leaders worked with representatives from DOER and others to define and present the information included in this work plan. At the point we developed this plan in December 2021, the EEAC had not yet developed its priorities for 2022. The Consultant Team will be developing quarterly work plans during 2022 that will accommodate EEAC priorities not covered in this plan on a quarterly basis as necessary. We have included a separate deliverables section as well as a timeline of when these deliverables are expected to be completed but note that we retain flexibility to respond to the Council and as other topics/issues arise. Specific deliverables will also be included in each Consultant Team quarterly work plan. The Consultant Team's contract begins January 2022 and the budget described in this work plan reflects a 12-month period through December 2022.

PLANNING & ANALYSIS

Context

Our work in the area of planning and analysis will focus on several important Council support activities. These include:

- Supporting the Council in its efforts to ensure effective program and portfolio performance and to achieve the 2022-2024 Three-Year Plan goals. This includes providing guidance related to new elements in the Plan.
- Reviewing and assessing the results of the 2019-2021 Three-Year Plan, including analyzing successes

and missed opportunities.

- Ensuring that the Council is effective in the performing its responsibilities, and that Council processes are informative, effective, and efficient
- Providing technical analysis to support the development and implementation of a strategic vision for the future, in order to identify opportunities and implement crucial adjustments to the energy efficiency picture in Massachusetts

To work towards and facilitate these outcomes, we will work in the three major planning and analysis areas described below. To the extent a task comes up that is not explicitly or fully listed in this plan, the Consultant Team will establish a scope and budget for its execution.

Work Areas

PARTICIPATE IN EEAC MEETINGS, BRIEF AND SUPPORT THE COUNCIL

- Prepare for and attend all EEAC meetings and Executive Committee meetings as directed.
- Provide independent technical support in advance of and during Council and Executive Committee meetings for all areas of energy efficiency and demand reduction planning, policy development, technical and economic analysis (cost-effectiveness), program design and implementation, and tracking and monitoring of progress towards achieving the 2022 goals. This includes a variety of deliverables including emails, spreadsheets, memos and presentations.
- Provide individual briefings to Councilors on a rotating basis with a goal of talking to each Councilor at their desired frequency.
- Assist with providing orientation for new(er) Councilors. This includes individual meetings, review and edit of the councilor handbook and any other historical information the new councilor may need.
- Support new processes and subgroups of the Council as directed including the Data Request Process, Third Party Program Administration working group, C&I working group, and Equity working group.

TECHNICAL ANALYSIS

- Review and analyze results of 2019-2021 program implementation.
 - Review and analyze the 2019-2021 Performance Term Report in August 2022. This will be a significant review of the results and performance of the 2019-2021 Plan, based on the final data and Evaluation, Measurement and Verification (EM&V) results that are available in 2022. A key task will be to identify lessons learned from past performance review.
- Support planning and analysis for implementation of 2022-2024 Plan; review and analyze results.
 - Review and analyze available information to guide implementation, evaluation, and reporting of new elements in the Plan such as electrification, GHG targets, work force development efforts, and equity metrics, among others.
 - Review, analyze, and assess the PAs' reports and reporting, including the monthly dashboards and quarterly reports. Review trends and multi-year comparisons, review reporting on new elements of the Plan, and provide Consultant findings and recommendations to the Council. This task includes presentations to the Council throughout the year.
 - Use the PA reporting to assess and report to the Council on the status of program achievement towards the 2022 and 2022-2024 Three-Year Plan goals and related topics. Identify and assess any data or programmatic trends which portend successes or challenges in program delivery and savings. This may take the form of presentations and/or memos.
- Identify reporting improvement opportunities.
 - Work with the PAs and the Council to design and implement further improvements to the PA reports, quarterly and otherwise, in response to Councilor feedback, including forward-looking projections and enhanced trend comparisons in the reports. This includes refining and defining Key Performance Indicators (KPI), as well as the incorporation of new requirements for reporting on the equity of Mass Save programs

- Review Mass Save Data and recent revisions and provide feedback to the PAs. Provide input on future revisions and additions. Task includes ongoing discussions and written suggestions on potential changes.
- Support cost-effectiveness screening, benefits analysis, and EM&V activities.
 - Analyze cost-effectiveness screening, assessment of benefits and costs, and application of EM&V results and field experience; propose appropriate improvements for cost-effectiveness analysis and common screening tools. Task includes a memo reviewing current tools and suggestions for synthesis among MA PA tools.
 - Review, comment on, and contribute to the electronic Technical Reference Manual (eTRM). This is still an evolving process and the Consultant Team will assess what is needed as more information becomes available. Early review indicates a significant level of work is needed to properly understand the data input changes to the BCR models and their relationship to the eTRM.
- Coordinate strategic planning
 - Coordinate strategic planning efforts with the PAs through the more regular meeting of the Planning and Analysis Group (PAG). This group provides a forum to discuss long term strategic planning issues that may not be part of the current plan. Examples of this for 2022-2024 are and electrification and GHG reductions, equity, and workforce development, among others. This is separate from the implementation teams' approach to the issues.
- Contribute to other state and regional planning and analysis efforts
 - Contribute to and review ISO-NE efficiency forecasting efforts, ensure the consistent and appropriate treatment of efficiency in the ISO forecast, and review and provide comments on the work of the ISO-NE Energy Efficiency Forecast Working Group. Task includes participation in the working group and close coordination with DOER and reporting to the Council on outcomes and for decisions that determine key project direction.
 - Provide technical assistance for reporting and tracking the Three-Year Goals and energy efficiency impacts for the Clean Energy and Climate Plan (CECP), including impacts of efficiency programs and other efficiency strategies on the 2020 and 2030 CECP goals. Task includes memos and/or presentations to the Council as needed.

SUPPORT THE COUNCIL ON REGULATORY ISSUES AND DPU PROCEEDINGS

- Track, monitor, review, summarize, and present to the Council information on all relevant DPU proceedings affecting energy efficiency and demand reduction programs, as assigned.
- Review and analyze any DPU-proposed or potential revisions to the DPU EE Guidelines coming out of Plan review and DPU approval or Performance Term Report review.
- Help interpret DPU order on 2022-2024 Plan for the Council and support implementation implications as necessary.
- Support additional proceedings that the Council wishes the Consultants to cover as they relate to the continued delivery of the Three-Year Plan.

ACTIVE DEMAND MANAGEMENT

Context

The PAs' 2022-2024 Plan includes an expansion of active demand offerings first made available statewide in the 2019-2021 Plan. Program enrolled active demand capacity from things like residential direct load control for Wi-Fi thermostats, and energy storage is expected to increase dramatically over the next three years. Commercial interruptible load curtailment programs will be going through a transition period as fossil fuel generators are phased out, and controls/operations-based curtailment strategies will become the core mechanism for larger customers to participate. The PAs made new commitments to deliver more Wi-Fi thermostats through IES programs, creating additional opportunities for these customers to participate in ADM offerings. The 2022-2024 Plan also provides new guidance for storage

developers on daily dispatch's 5-year incentive lock, providing clarity to the market. In 2022, the Active Demand Group will focus on monitoring PA commitments in the 2022-2024 plan cycle pertaining to expanding active demand capacity in Mass Save.

Work Areas

PLANNING, TECHNICAL, ANALYTICAL, AND STRATEGIC SUPPORT FOR IMPLEMENTATION OF THE 2019-2021 PLAN

- Review and analyze available information to guide implementation, evaluation, and reporting of ADM elements of the Plan including daily dispatch.
- ADM supporting tasks will include:
 - Coordinate with the Active Demand PA staff on the 2021 ADM results and planned efforts for the summer of 2022 through continued regular meetings.
 - Coordinate with sector-specific consultant team members, PA staff, councilors, and external stakeholders on further integration of EE and ADM measure offerings through Mass Save
 - Support the PAs with identifying lessons learned from the ADM and daily dispatch field experience, results, and market feedback. Ensure new guidance on 5-year incentive lock is effectively communicated to the market.
 - Track residential discount-rate enrollment through updated ADM reporting and ensuring PAs and LEAN market the Connected Solutions program to IES customers.
 - Monitor the phase-out of generator participation in C&I Curtailment and Daily Dispatch programs

IDENTIFY AND REVIEW NEW OPPORTUNITIES AND EM&V IMPACTS

- Complete review of the Active Demand EM&V results of 2021 study efforts
- Review work plans and evaluations proposed in the 2022-2024 Strategic Evaluation Plan; Planned studies include a combined impact/process evaluation of the C&I Curtailment Program as well as a Literature review of EE/DR integration in other jurisdictions
- Coordinate with the PAs on gas demand management opportunities and potential benefits and monitor PA gas demand response pilots initiated through other non-energy efficiency rate cases (primarily EGMA; potentially National Grid)

RESIDENTIAL AND INCOME ELIGIBLE

Context

2022 is a pivotal year for the Mass Save Residential and Income Eligible Sectors as the PAs strive to implement ambitious electrification and equity commitments for the 2022–2024 Plan while boosting already robust weatherization production, all in a new context of no claimable lighting savings for the Residential Sector. At the same time, there is uncertainty surrounding the lingering impacts of the COVID-19 pandemic, which adversely affected the results of the Income Eligible Sector during the 2019-2021 Term.

At the highest level, the residential priority for the Consultants this year will be working with the PAs and LEAN to support the successful achievement of their commitments and goals for the 2022-2024 Plan and tracking, assessing, and reporting to the EEAC on progress in doing so. This will include an intensive focus on achievement of the heat pump installation goals in the Term Sheet for both Sectors with an emphasis on market transformation through work with manufacturers, distributors, contractors, and customers. Implementing increased services to historically underserved customers. In addition, the Consultants will continue to work to advance equitable delivery of Mass Save programs and services to all Residential and Income Eligible customers, with a specific focus on achievement of the Equity Targets negotiated with the PAs for the 2022-2024 Term. Additional details and work efforts are provided below.

Work Areas

RESIDENTIAL PROGRAM SUPPORT

Despite the disruption and uncertainty of the pandemic during the last Term, the Residential Sector continues to post

strong results. These results are in part due to tools including the addition of virtual assessments and enhanced incentives paired with strong demand for services from customers spending more time at home. All of this and more will need to be brought to bear for 2022 given a strong shift to emphasis on electrification in the 2022-2024 Plan. The Consultants' work for the Residential Sector in 2022 will include the following:

- Track, provide input on, and report on PA progress towards meeting 2022-2024 Plan goals and commitments, including:
 - Meeting heat pump installation goals from the 2022-2024 Term Sheet
 - Development and implementation of a market transformation strategy for heat pumps
 - Weatherizing as many homes as possible to reduce greenhouse gas emissions and prepare for electrification. This includes pairing weatherization with electrification.
 - Implementing strategic enhancements for the Retail Initiative, including guided customer support for HVAC, launching a preferred heat pump installer network, leveraging midstream channels, especially for water heating, and new incentives for whole housing displacement and bundling of weatherization and heat pumps
 - Easing participation in residential programs through streamlining, reducing eligibility criteria, virtual tools, and other efforts
 - Providing an all-electric new construction offer
 - Enhancing services to multifamily customers, both property owners and tenants
- Review status of PA efforts to claim behavioral savings
- Monitor rollout of home energy scorecards
- Review and analyze residential information and data in the PAs' monthly data dashboards, quarterly reports, Term Report and periodic reporting on relevant indicators and other term sheet commitments as well as any ad hoc reports. Use data to identify trends, successes and challenges, and PA differences
- Participate in RMC meetings twice per month to discuss progress and provide support to PA efforts to achieve their commitments for the 2022-2024 Plan Term. The schedule of focused topics for discussion will be developed with the RMC in January and is expected to track Council priorities for 2022.
- Participate in Council meetings with a residential focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors.

INCOME ELIGIBLE PROGRAM SUPPORT

With the underachievement of goals for the sector in the 2019-2021 Term, the Consultants will be bringing increased attention to commitments and performance of the Income Eligible Sector in 2022. Electrification efforts for this sector will be particularly challenging and will be closely scrutinized. The Consultants' work for the Income Eligible Sector in 2022 will include the following:

- Work collaboratively with PAs and LEAN to provide support for 2022 IES efforts to:
 - Increase production to make up for 2020 and 2021 COVID-19 production losses, including a sustained focus on workforce capacity development
 - Increase installation of heat pumps with strategies that may include:
 - Developing heat pump assessment capability within each CAP
 - Developing standardized protocols for heat pump installation in different IES building types
 - Increase installations of WiFi thermostats and other technology to support ADM, including by developing standardized protocols for installation of WiFi thermostats for different IES customers and building types
 - Gather data and analyze differences in CAPs to inform potential strategies for IES to be delivered

- more uniformly throughout the Commonwealth
 - Provide analytic support to determine appropriate strategic direction for IES support of fossil fuel heating
 - Develop an affordable multi-family decarbonization/deep energy retrofit offering with a customized approach for income-eligible/affordable multi-family buildings going beyond a typical retrofit
 - Implement strategies, including a mixed income protocol for multi-unit buildings, to ensure that customers living in small multifamily buildings are equally and comprehensively served
 - Finalize development of a new key performance indicator for the Income Eligible Sector
- Review and analyze income eligible information and data in the PAs' monthly data dashboards, quarterly reports, and periodic reporting on relevant indicators and other term sheet commitments as well as any ad hoc reports. Use data to identify trends, successes and challenges, and PA differences
- Participate in Council meetings with an income eligible focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors.
 - Participate in monthly Low Income Best Practice meetings and provide support for new and continuing initiatives of group
 - Participate in regular Income Eligible meetings with DOER to discuss progress and provide support

EQUITY

This is a new category for the work plan to reflect the focus on Equity in the 2022-2024 Plan and for the Consultants. Equity issues apply to all sectors (Residential, Income Eligible, and C&I), though this section of the Work Plan applies specifically to Residential and Income Eligible Sectors. The Consultants' work in 2022 for the Equity work area regarding Residential and Income Eligible Sectors will include the following:

- Participate in Equity Working Group meetings and support group with best practices research, compilation of relevant information, and other preparations as requested by the Group and its co-chairs
- Provide input on development of and review PA implementation plans for moderate income customers, renters, and limited English proficiency customers
- Monitor and assess Community First partnership program as well as efforts to foster alternative partnership models
- Review, analyze/assess, and report on PAs' reporting of progress toward achieving the Equity Targets
- Review, analyze/assess, and report on other regular PA reporting on equity matters (monthly, quarterly, biannual, annual, Term and ad hoc)
- Participate in Council meetings with an equity focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors

WORKFORCE DEVELOPMENT

Workforce development is properly receiving an increased emphasis in the 2022-2024 Plan. The addition of this work plan category shows that the Consultants will be increasing our work in this area as well, including these efforts:

- Track, provide input, and report on PA progress towards 2022-2024 Plan goals and commitments, including:
 - Workforce development programs and budget updates for new and existing workers including
 - Heat pump dedicated training and market transformation
 - PA workforce development collaboration status with MassCEC
 - Clean Energy Pathways internship program, including
 - Recruitment, training retention, mentoring, job placement and retention

- Workforce development pathways to two-year and four-year degrees related to energy efficiency for disadvantaged students seeking clean energy related higher education
 - K-12 educational programming
 - Provide input on quarterly reports, monthly data dashboards, and specific updates
- Coordinate with EM&V Advisory Group and Equity Working Group regarding M/WBE contractor study from Equity Targets
 - Participate in workforce development meetings (with DOER, the PAs, and Mass CEC) and support the effort with best practices research, compilation of relevant information, and other preparations as needed
 - Review, analyze/assess, and report on other regular PA reporting related to workforce development matters (monthly, quarterly, biannual, annual, Term and ad hoc)
 - Participate in Council meetings with a WFD focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors

COORDINATE WITH EM&V EFFORTS

- Regularly coordinate with EM&V Advisory Group to exchange updates on relevant work efforts
- Review draft study reports and provide input to ensure they will yield useful and actionable information to assess and enhance implementation efforts
- Identify outcomes and recommendations in final studies and reports that should prompt responsive actions by PAs and determine whether they are being implemented effectively.

COMMERCIAL AND INDUSTRIAL

Context

The Commercial and Industrial sector is going through a transformational moment where traditional usage patterns and occupancy trends are changing due to COVID-19. Despite the impact of the pandemic on business activity and global supply chains, the decline in opportunities for attributable Commercial and Industrial lighting savings are still likely to occur rapidly in the 2022-2024 Plan. The Program Administrators will need to accelerate the transformation of the HVAC market with an emphasis on tighter building envelopes, electric heat pumps and improved indoor air quality. In addition to new incentives, the PAs will need to provide greater support in the form of technical assistance to help customers comprehensively evaluate efficiency opportunities and make the business case for upper management to prioritize energy and carbon reduction strategies as prudent and climate-forward investments. This will require leaning into climate-focused marketing, a departure from the old *Energy Optimization* philosophy outlined in the 2019-2021 plan. The new Deep Energy Retrofits offering, while in its early stages, will serve as a long-term engagement strategy for helping customers along their way to decarbonization. The formation of the C&I Working Group will provide a bi-directional forum for the PAs to learn directly from the market and to provide guidance to market participants about directional changes in the Mass Save program.

Work Areas

The C&I Consultant Team anticipates a continuation of work in a few key areas of activity:

C&I PROGRAM SUPPORT

- Track, provide input, and report on PA progress towards 2022-2024 Plan goals and commitments, including but not limited to:
 - Electrification: monitoring PA progress in developing new heat pump incentive offerings for customers of all sizes and baseline fuels
 - Meeting heat pump unit goals from the 2022-2024 Term Sheet including displaced fossil fuel usage and square footage electrified

- Developing and launching a Deep Energy Retrofits offering for C&I customers
- Expanding C&I demand management offers to increase demand savings and shift peak loads
- Increasing participation in ESPO/Retro-commissioning and other controls-focused efficiency measures
- Analyze historic and current program performance to identify trends, opportunities, and deficiencies, including:
 - Electrification and fuel switching, including air and ground-source heat pumps and variable refrigerant flow (VRF) systems in both new construction and existing buildings
 - Custom HVAC projects including early replacement and replace-on-fail measures, retro-commissioning, energy management system and system optimization
 - Delivery of lighting projects with controls and finishing the conversion of the Commonwealth's streetlighting to LEDs
 - Equipment System Performance Optimization (ESPO) low/no cost prescriptive measures, as well as custom and monitoring-based commissioning (MBx) participation and savings
 - New construction program improvements, including performance-based design (utilizing Energy Use Intensity or "EUI"), zero net energy, and Passive House
 - New or underperforming technologies/measures such as Energy Management Systems (EMS)
 - Program impacts resulting from the circumstances of COVID-19
- Work with DOER, PAs, the EEAC and external C&I stakeholders to ensure the C&I Working Group is successfully launched and provides the necessary forum to develop collaborative program enhancements in the key areas of electrification and deep energy retrofits noted in the council's July Resolution regarding alternative implementation models
- Participate in Council meetings with a C&I focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors.

EQUITY

This is a new category for the work plan to reflect the increased significance and volume of this work area in the 2022-2024 Plan and for the Consultants. Equity issues apply to all sectors (Residential, Income Eligible, and C&I), though this section of the Work Plan applies specifically to the C&I Sector. The Consultants' work in 2022 for the Equity work area for C&I will include the following:

- Participate in Equity Working Group proceedings relevant to C&I customer segments such as small business, municipalities, and non-profits, as well as relevant workforce development issues
- Driving adoption of cost-effective building envelope measures in all size commercial customers, with an initial emphasis on small business per Equity Targets
- Increasing participation and savings by small and micro businesses, particularly from building envelope and weatherization measures committed to in the Equity Targets
- Advancing new partnership models as a method for better serving commercial renters, small and micro businesses and limited English proficiency customers, particularly in EJ communities
- Increasing effectiveness of efforts to enroll rental property owners in Mass Save
- Determine the effectiveness of temporary enhanced incentives offered to C&I customers during 2020 and parts of 2021; see how these results compare to the recently completed CLC enhanced incentives study
- Participate in Council meetings with an equity focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors

WORKFORCE DEVELOPMENT

Workforce development is properly receiving an increased emphasis in the 2022-2024 Plan. The addition of this work plan category shows that the Consultants will be increasing our work in this area as well, including these efforts:

- Workforce development issues relevant to C&I buildings with a particular focus on ensuring new, dynamically controlled energy efficient equipment is properly installed, operated and maintained in order to deliver on estimated savings
- Technical assistance and training for contractors and distributors, especially with respect to HVAC, building envelope and electrification projects
- Workforce development efforts including HVAC system installation, retro-commissioning and customer training through continued Building Operator Certification offerings
- Participate in Council meetings with a WFD focus, including preparing meeting materials as appropriate, reviewing PA draft presentations, and briefing Councilors

COORDINATE WITH EM&V EFFORTS

- Regularly coordinate with EM&V Advisory Group to exchange updates on relevant work efforts
 - Revisit the emergency EM&V protocols, baselines and measure development for school HVAC measures that provide energy efficient provision of improved indoor air quality
- Review draft study reports and provide input to ensure they will yield useful and actionable information to assess and enhance implementation efforts
- Identify outcomes and recommendations in final studies and reports that should prompt responsive actions by PAs and determine whether they are being implemented effectively.

EVALUATION, MEASUREMENT, AND VERIFICATION

Our work in the area of Evaluation, Measurement, and Verification (EM&V) continues to be shaped by the requirements of the 2009 Council resolution that established the Commonwealth's current EM&V framework, which assigns substantial responsibilities to the Council Consultants. Working on the Council's behalf, we are charged with overseeing every phase of the EM&V process, including evaluation planning, contractor procurement, study implementation, reporting and outreach, and application of study results. While we must work closely and collaboratively with the PAs, the resolution specifies that if consensus cannot be reached between the PAs and the Council Consultant, decision-making authority (subject to a system of appeals) rests with the Council Consultant as the Council's agent.

Highlighted EM&V team objectives in 2022 include:

- Carrying out EM&V-related term sheet agreements
- Developing and implementing EM&V research in support of the Council's priorities, including strategic electrification, customer equity, and moderate income customers.
- Completing the transition to a prospective-only EM&V application framework.
- Continuing to build a mature framework for savings claims from market effects
- Planning and implementing studies laid out in the 2022-2024 Strategic Evaluation Plan (SEP)
- Developing additional studies as needed to support the evolution of programs, policies, and markets.

We will work with DOER and the Council to determine the specific functions or studies to be covered as necessary.

Work Areas

OVERSEE EM&V PLANNING

- Complete the transition to a prospective-only EM&V application framework, as ordered by the DPU. Under the DPU's May 2021 order, beginning in 2022 all EM&V results are to be applied prospectively

only, and the three-year lock-in to net-to-gross assumptions that previously applied is dropped. The EM&V program began adapting to this new application framework immediately, but further adaptations are needed, including the staging of studies and the details of the prospective application process.

- Plan and implement research needed to support the Council's priorities and EM&V-related term sheet agreements. Anticipated areas of focus include: prospective research into potential heat pump-related market effects; a study of the representation of minority and women-owned businesses in the PAs' energy efficiency procurement efforts; evaluation of new initiatives targeting moderate income customers; and the development of new approaches for handling the effects of local energy initiatives such as the Boston Building Energy Reporting and Disclosure Ordinance (BERDO) on net program impacts.
- As needed, drive the EM&V program's response to any EM&V-related provisions in the DPU's final decision regarding the three-year plan.
- Continue to evolve the EM&V program to meet the quickly changing research needs and constraints imposed by the COVID-19 pandemic. The pandemic has had a significant effect both on EM&V research objectives (for example, by leading to changes in the handling of business operational characteristics and ventilation measures for impact accounting purposes) and on research methods (for example, by limiting on-site visits). It is highly likely that the need for such changes will continue in 2022, although the specific course the changes will take remains hard to predict.
- Plan new EM&V studies as needed to support impact reporting, program planning and implementation, and policymaking. The high-level EM&V research agenda for the 2022-2024 current program cycle was established through the SEP, which was developed in 2021. However, the SEP is primarily a strategic document and includes detailed plans for only a limited subset of studies, so planning of additional new studies will be an ongoing activity in 2022 and beyond. Planning for individual EM&V projects focuses on refining research objectives, determining data collection and analysis activities, setting budgets, assigning contractor staff, and laying out project schedules. In order to ensure consensus and maximize opportunities for stakeholder input, the planning process for individual studies includes three separate planning stages from the time a study is conceived to the time it is implemented.

OVERSEE EM&V STUDY IMPLEMENTATION

- Oversee the implementation of individual EM&V studies once they have completed the detailed planning stage. EM&V study implementation can include a wide range of data collection and analysis activities, the specific nature of which varies by type of study. Each study can have as many as eight stages from draft scope to survey instruments to draft and final reports.

OVERSEE EM&V REPORTING

- Oversee the development and dissemination of interim and final reports on EM&V studies. Final EM&V reports in Massachusetts generally need to go through multiple drafts, as various stakeholders provide comments that must be processed collaboratively. This work area also encompasses overseeing the incorporation of impact evaluation results into the eTRM.

COUNCIL AND STAKEHOLDER ENGAGEMENT

- Work with the Council, individual Councilors, and stakeholders, both to incorporate their input into EM&V plans and reports and to brief them on study results through presentations and other forms of outreach.

TECHNICAL SERVICES

Context

The Technical Services team is responsible for a variety of administrative tasks that support the Council's information sharing through the website including production of the Annual Report to the Legislature. These tasks are described in more detail below.

Work Areas

PRODUCE MINUTES FROM ALL EEAC MEETINGS

- Ensure meeting minutes are collected from all EEAC and EEAC Executive Committee meetings subject

to the open meeting law and that these minutes are circulated for comment, corrected, and issued in final form for posting to the EEAC website. We note that for budgeting purposes, the minute taking will be included in the “Council Meetings” budget category.

WEBSITE UPDATES, REVISIONS, AND MAINTENANCE

- Regular and timely updates of the website content.
- Make changes or expansions in structure or organization of the website that were previously suggested by the Council. These will include updates such as improving the search functionality, refreshing website images, and allowing for more streamlined public comment.

CONSULTANT TEAM QUARTERLY REPORTS AND WORK PLANS

- Provided timely and meaningful report of Consultant Team activities. The Consultant Team will produce activity reports on a quarterly basis.
- In 2022, the Consultant Team will also continue developing quarterly work plans. These plans will act as an update to this annual work plan as well as provide more granularity around anticipated tasks and deliverables as the year progresses.

SUPPORT DEVELOPMENT OF THE ANNUAL REPORT TO THE DPU AND LEGISLATURE

- In coordination and cooperation with DOER, we will support development of the most recent Annual Report to the DPU and Legislature.

KNOWN DELIVERABLES

As previously noted, it has been helpful in previous years to we retain flexibility to respond to the Council and as other topics/issues arise. However, there are also many known deliverables we intend to complete in 2022. The sections below provide details on those known work products. We expect that schedules may change over time and will provided an updated list of known deliverables in each of the Consultant Team’s quarterly work plans.

| Month | Category | Topic | Description | Advisory Group(s) |
|----------|--------------|-------------------------------------|-----------------------------------------------------------------------------------------|---------------------|
| January | Memo | 2022 Work Plan | Describes Consultant Team tasks, deliverables, and budget for 2022 | All |
| | Presentation | 2021 Work Plan | Summarizes Consultant Team tasks and deliverables for 2021 | All |
| February | TBD | TBD | TBD | TBD |
| March | Presentation | PA Q4 Report | Observations on KPIs, PA differences, areas PAs do not meet goals or council priorities | P&A Residential C&I |
| | Memo | Consultant Team Quarterly Work Plan | Plan for Consultant Team activities and deliverables in Q2 of 2022. | All |
| April | Memo | Consultant Team Quarterly Report | Report on Consultant Team activities for Q1 of 2022. | All |

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|------------------|----------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| May | TBD | TBD | TBD | TBD |
| June | Presentation | 2021 Q1 Report | Observations on KPIs, PA differences, areas PAs not on track to meet goals or council priorities | P&A Residential C&I |
| | Memo | Consultant Team Quarterly Work Plan | Plan for Consultant Team activities and deliverables in Q3 of 2022. | All |
| July | Memo | Consultant Team Quarterly Report | Report on Consultant Team activities for Q2 of 2022. | All |
| August | Presentation | 2019-2021 Term Report | Assess results of the PA 2019-2022 Term included lessons learned for 2022-2024 and differences between residential and IES achievement. | All |
| September | Presentation | 2021 Q2 Report | Observations on KPIs, PA differences, areas PAs are not on track to meet goals or council priorities | P&A Residential C&I |
| | Memo | Consultant Team Quarterly Work Plan | Plan for Consultant Team activities and deliverables in Q4 of 2022. | All |
| October | Memo | Consultant Team Quarterly Report | Report on Consultant Team activities for Q3 of 2022. | All |
| November | TBD | TBD | TBD | TBD |
| December | Presentation | 2021 Q3 Report | Observations on KPIs, PA differences, areas PAs are not on track to meet goals or council priorities | P&A Residential C&I |
| On-Going | Tracking Spreadsheet | EM&V Status Update | A spreadsheet summarizing the status of current and planning EM&V studies | EM&V |

PROPOSED BUDGET

| YEAR 3 | | | | | | | | | |
|--------------------------|-------------------------|----------------------------------------------------------------------|------------------------|--------------------|---------------------------|-------------------|-------------------------------|-------------|-------------|
| | Staff | Role | Hourly Rate | Strategic Planning | Planning & Implementation | Oversight of EM&V | Coordinate Technical Services | Total Hours | |
| Optimal Energy, Inc. | Eric Belliveau | Principal in Charge | \$220 | 250 | 290 | 40 | 40 | 620 | |
| | Gretchen Calcagni | Project Manager and Technical Services Lead | \$194 | 200 | 300 | 15 | 100 | 615 | |
| | Phil Mosenthal | SME: Codes and Standards, Policy | \$220 | 6 | 6 | | | 12 | |
| | Matt Socks | SME: AESC Study, Potential Studies, TRM | \$194 | 100 | 60 | | | 160 | |
| | Crystal Johnson | SME: Low Income/Equity | \$194 | 180 | 180 | | | 360 | |
| | Michelle Keller | SME: C&I | \$194 | 150 | 150 | | | 300 | |
| | Adam Jacobs | C&I Lead | \$189 | 250 | 600 | | | 850 | |
| | Analyst | Analyst Support | \$142 | 150 | 255 | | 200 | 605 | |
| | Senior Analyst | Senior Analytic Support | \$173 | 50 | 60 | | | 110 | |
| | Cindy Kimball | Contract Administrator & Technical Services Core Member | \$100 | | | | 100 | 100 | |
| Individuals | Jeff Schlegel | SME: Active Demand, Avoided Cost study, ISO issues, Policy | \$202 | 100 | 100 | | | 200 | |
| | Caroline Hazard | Residential and Low Income Core Member | \$176 | 100 | 100 | | | 200 | |
| | Ralph Prah | EM&V Lead | \$202 | | | 900 | | 900 | |
| | Bob Wirtshafter | EM&V Core Member | \$204 | | | 200 | | 200 | |
| | Michael Rufo | SME: GHG strategies, Distributed Energy Resources, CA best practices | \$235 | 10 | 10 | 10 | | 30 | |
| | Other Consultants (TBD) | SME TBD if necessary (average projected rates) | \$210 | 70 | 75 | | | 145 | |
| CX CE Caltech AE | Lori Lewis | EM&V Core Member | \$220 | | | 160 | | 160 | |
| | Carol Lasky | SME: Website and Graphic Design | \$120 | | | | 75 | 75 | |
| | Design Support | SME: Website and Graphic Design | \$105 | | | | 75 | 75 | |
| EFG | Margaret Lynch | Residential and Low Income Lead | \$184 | 150 | 370 | | | 520 | |
| | Jennifer Chiodo | C&I Core Member and EM&V Core Member | \$210 | 50 | 90 | 180 | | 320 | |
| Ca Co-SP | Glenn Reed | Residential and Low Income Core Member | \$220 | 150 | 150 | | | 300 | |
| | Anna Sommer | SME: Planning and Analysis | \$220 | 25 | 25 | | | 50 | |
| | Dan Mellinger | SME: Lighting | \$205 | 25 | 30 | | | 55 | |
| Ca Co-SP | Sean Becker | SME: Energy Storage and ADR | \$240 | 25 | 50 | | | 75 | |
| | Elizabeth Chant | SME: Low Income/Equity | \$204 | 40 | 40 | | | 80 | |
| | George Lawrence | C&I Core Member | \$194 | 25 | 50 | | | 75 | |
| TOTALS | | | Hours | Hours | 2,106 | 2,991 | 1,505 | 590 | 7,192 |
| | | | Budget Amount (Labor) | Amount | \$411,325 | \$576,360 | \$309,660 | \$83,475 | \$1,380,820 |
| | | | Budget Amount (Travel) | Amount | \$3,000 | \$3,000 | \$0 | \$0 | \$6,000 |
| Total 2022 Budget Amount | | | TOTALS | | \$414,325 | \$579,360 | \$309,660 | \$83,475 | \$1,386,820 |