

# Memo

To: **Energy Efficiency Advisory Council**  
From: **Eric Belliveau and the Consultant Team**  
Date: **August 2, 2017**  
Subject: **EEAC Consultant Team Proposed September 2017 – December 2018 Work Plan and Budget**

---

## SUMMARY

### Strategy for this Work Plan

As in the past, our work is divided into several advisory groups, representing the major areas of effort across the entire range of Consultant responsibilities and portfolio of PA programs. Within each, several work areas further clarify the tasks and topics that we plan to address over the coming year. Each advisory leader worked with representatives from DOER and others to define and present the information included in this work plan. In each section below, the Consultants worked to make sure EEAC priorities are embedded in our plan. In addition to being driven by EEAC priorities, the Team solicited Councilor input and incorporated experience from previous work plans. Where the topic did not change and the coverage remains the same, language from the previous plans was maintained. One task that will cut across all advisory group areas will be supporting the development of the 2019-2021 Plan. Rather than describe the Three Year planning process in each advisory group individually, we have described the work of the whole Team related to this task in the section below.

---

## 2019-2021 PLANNING

During 2017-2018, the PAs must develop the fourth statewide electric and gas Three-Year Plans, covering 2019 through 2021. The Council will participate in developing and reviewing the Plans. The PAs must submit draft Plans for Council review in April and final Plans to both the EEAC and the DPU in October for formal review and approval. On behalf of the Council, we expect to review and analyze up to three iterations of the Plan prepared by the PAs during 2018.

We also understand that the Council desires a collaborative process for developing the Three-Year Plans, including goal-setting and the relationship between the Plans and longer-term goals including the Commonwealth's energy and environmental policies. Therefore, we will work with the Council, individual voting Councilors, workshop participants, other stakeholders, and the PAs to get input and feedback and to seek outcomes that are developed collaboratively and have support of the majority of voting Councilors. We will take our direction from the Executive Committee and the Council at large in terms of how best to address any deliverables for the planning process.

The table below identifies the major activities and milestones anticipated during the planning process as well as the deliverables associated with those activities and the timeframe in which they take place. All Advisory Groups on the Consultant Team will be involved in each of these tasks to some extent. For additional information about how involved each Group will be in these tasks, please refer to the proposed budget section of the work plan. We'll note that developing the EM&V 2019-2021 Strategic Evaluation Plan (SEP) will only involve the EM&V Advisory Group's. As a result, that work is described in more detail in the EM&V section of the work plan.

<b>Activity/Milestone</b>	<b>Description</b>	<b>Deliverables</b>	<b>Timeframe</b>
Planning Workshop Briefing Documents (not including current budget spending)	Research and analysis of several topics relevant to 2019-2021 planning	Memos on each individual topic, as well as summary documents covering key topics for discussion and issues that may impact planning	Jul-February 2017-2018
Stakeholder Workshops	Workshops on planning topics will be held including: 2 on residential topics, 2 on C&I topics, and 1-2 on cross-cutting topics	Assist the facilitator by adding to the workshop summary content two weeks after the last workshop	Jul-February 2017-2018
Review of PA Potential Studies	Consultant Team review and assessment of results of PA potential studies	Memo on analysis of potential studies results and methodologies and recommendations for use in plan development	Oct-Jan 2017-2018
Assessment of Potential/Goals Suggestion	Consultant Team lit review, trend analysis, etc. to estimate 2019-2021 Achievable Potential	Memo describing assessment of potential methodology and findings as well as initial goals recommendations. Updated through June	Jan-June 2018 (First draft in March)
Draft Plan Initial Review	PAs submit draft 2019-2021 Plan	Initial review of the plan between April filing and May EEAC meeting	Apr-May18
Review of Draft Plan	Consultant Team will assess aspects of draft plan including goals, budgets, cost-effectiveness, etc.	Memo summarizing review of draft Plan (may be combined with Key Drivers memo rather than distinct document)	May-Jun 2018
Draft Plan EEAC Stakeholder Process	Discussions at EEAC meetings, additional workshops, public comment meeting	Summary documents and recommendations provided after clarification of work products with the EEAC and workshop facilitator	May-Jun 2018
Key Drivers Process	Identifying main assumptions that account for any difference in the proposed goals and budgets put forward by the PAs and those by the Consultants	Memo describing key drivers and contribution to goals with updates over the summer	May- July 2018
EEAC Comments	EEAC develops comment on the draft Plan	Formal comments from EEAC	Jul 2018
Term Sheet Negotiations	May include spot analysis on specific topics and various discussions	Process results in final Term Sheet, which is included in the Plan and referenced in the Council Resolution on the Plan	Sep-Oct 2018 Council Meeting
Review Final Draft Plan and Council Resolution	PAs submit final draft of 2019-2021 Plan for Council review and Resolution	Memo and analysis. Ultimately results in the Council Resolution on the Plan	Oct 2018

Strategic Planning	Direct work with PAs on major issues and components of the plan not covered in formal processes	Various	Ongoing
--------------------	---	---------	---------

## Briefing Documents

To support the next Three-Year Plan, the Consultant Team will research and analyze of several topics relevant to 2019-2021 planning. Many of these topics will be covered in the workshops. This research will help to inform and guide discussion of these planning topics. As of the time the work plan was submitted, work on some of these topics is already underway.

### DELIVERABLES

The Team will summarize results of its research and analysis in memos including high level executive summaries.

## Stakeholder Workshops

### DESCRIPTION

During September 2017 through February 2018, a series of public workshops will be held between the PAs and Councilors on topics related to the 2019-2021 Plan. The purpose of the workshops is to provide input and feedback to the PAs about what should be included in the draft Plan. The workshops will be led by a facilitator procured by DOER and will include two workshops covering residential topics, two covering C&I topics, and 1-2 covering cross-cutting issues. The Consultant Team will participate in workshop preparation, deliver presentations at the workshops, participate in workshop discussions, and assist the facilitator by adding to the workshop summary content.

### DELIVERABLES

The Team will develop workshop background documents and slides to present at workshops to introduce topics and foster discussion.

## Review of PA Potential Studies

### DESCRIPTION

The PAs have each selected three different contractors to complete energy efficiency potential studies for their service territories. The Consultant Team will review draft and completed studies to determine how to best incorporate the results into goal setting. This will include reviewing study scope, methodology, inputs, and results.

### DELIVERABLES

The Consultant Team will provide feedback and recommendations in a memo to the PAs and the Council.

## Assessment of Potential/Goals Suggestions

### DESCRIPTION

The first step in any energy savings goal-setting process is to estimate the level of savings that is achievable in the given timeframe. The Consultant Team will review data from several sources to arrive at a starting place for potential savings in Massachusetts for 2016-2018. These sources include:

- Historical PA performance data
- Recently completed evaluation, measurement, and verification (EM&V) studies for Massachusetts programs and markets
- Potential studies and program data for other nearby jurisdictions
- Potential studies for the individual Massachusetts PAs

In the past, the Consultant Team used trend analysis and regression of the statewide annual and lifetime savings from 2010 through the most recent year of program data to extrapolate potential statewide savings in future years.

This served as a preliminary estimate of continued potential if Massachusetts were to expect a steady state in current program offerings and savings in the future. However, recognizing the reduction in claimable residential and C&I lighting savings will have on savings potential, combined with other new or emerging opportunities, the Consultant team will make adjustments to reflect these changing conditions. The Team will likely need to rely more heavily on information other than past performance to accurately assess the potential for lighting in Massachusetts going forward.

Once the Consultant Team has identified an estimate of achievable potential for the next three years in Massachusetts, the Team will complete an analysis to identify available pools of savings that would enable the PAs to meet savings targets. In many cases, the PAs may already be realizing some savings from these pools, but the Consultant Team's goals framework will quantify how much additional potential there would be from 2019 to 2021. The Team will also provide an assessment of the costs to achieve these savings.

The 2016 program year, as the most recent year for which we will have reported actual savings achieved, will be used as the baseline for comparison purposes. In the analysis, the Team will consider factors beyond residential and C&I lighting such as changes in codes and standards, the availability and maturity of new and innovative technologies, performance and costs of the current programs and measures, and how performance and costs will change over the next three years. This analysis will help to identify where the savings could come from both in terms of sectors and programs to reach achievable potential levels.

#### **DELIVERABLES**

The Team will develop a report describing the assessment of potential methodology and findings. The Team will use this analysis to inform our initial recommended goals, which will be presented in the same report. It is expected that this document will be revisited throughout the planning process, incorporating new information as it becomes available.

### **Draft Plan First Review**

#### **DESCRIPTION**

The Consultant Team will complete an initial review of the PA's draft 2019-2021 Plan following its release on April 30, 2018. This time-limited assessment will take place prior to the May Council meeting and will include a high level review of the contents of the Plan and the PA-proposed savings targets and goals.

#### **DELIVERABLES**

The Team will prepare a PowerPoint presentation for the May Council meeting based on its initial review of the draft Plan.

### **Draft Plan Continuing Review**

#### **DESCRIPTION**

Following the May Council meeting, the Team will undertake a more detailed review and analysis of the April draft of the 2019-2021 Plan. The Team will compare assumptions made by the PAs to assumptions and estimates made by the Consultant Team in its assessment of potential and goal estimates. The Team will also determine whether input and feedback received during the workshops were appropriately considered and included in the draft Plan.

#### **DELIVERABLES**

The Team will present key takeaways, issues, and considerations identified in our review of the draft Plan in a memo and supporting analysis to the Council. This memo may be combined with a memo on the key drivers analysis to provide a more complete picture of any issues that will need to be discussed and resolved for the next draft of the Plan. The key drivers process is described in more detail below.

### **Draft Plan EEAC Stakeholder Process**

#### **DESCRIPTION**

Following the release of the first draft of the Plan, the Council will hold two to three meetings to discuss plan elements and program ideas. These will include EEAC meetings, additional public workshops, and a dedicated

public comment meeting. The Consultant Team will support these meetings by participating in discussions, providing supplemental information and analysis as necessary and summarizing the outcomes of meeting discussions.

**DELIVERABLES**

The Consultant Team will develop deliverables for the stakeholder process as necessary. It is unclear at this time what those work products will be, but may include brief memos, summary documents, and documenting recommendations for the Plan that come out of the stakeholder input process. The Consultants will clarify the end work product with the EEAC as the process approaches and before moving forward.

**Key Drivers Process**

**DESCRIPTION**

After reviewing the PAs' April 30 Three-Year Plan draft, the Consultant Team will work with the PAs to identify the main assumptions (or key drivers) that account for the difference in the proposed goals and budgets put forward by the PAs and those by the Consultants. Rather than try to resolve every assumption that may differ, the Team will focus on those assumptions that account for the largest portion of savings and the majority of the difference in proposed goals. This process will be called the "key drivers analysis" and will be a collaborative process between the EEAC Consultant Team and the PAs with input from the EEAC and other stakeholders. The first step in the process will be to select among the assumptions concerning measures, end uses, programs, and customer classes that accounted for the largest differences and had a significant impact on the portfolio. The process will provide an opportunity for finer review of savings goals and, importantly, the cost to achieve the goals. It will include review of historical performance on a series of important inputs such as sector performance, projected portfolio mix, savings attribution, net-to-gross ratios and results from EM&V studies. In addition to these considerations, market penetration and other market assumptions for specific measures or end uses will be reviewed in detail. The Consultant Team and the PAs will exchange data and hold meetings to discuss any differences in assumptions in an attempt to arrive at consensus.

**DELIVERABLES**

The Team will develop a memo describing the key drivers identified, ranking their relative contribution to savings targets, and describing any overlap between drivers. Over the summer, the Team may provide supplemental documents or updated memos to describe progress made as well as outstanding questions and issues.

**EEAC Comments**

**DESCRIPTION**

Following the stakeholder review process and informed by the key drivers analysis, the EEAC will make formal comments on the draft Plan to the Department of Public Utilities and PAs in late July. The Consultant Team will support this effort by collecting and summarizing recommendations to develop draft and final EEAC comments.

**DELIVERABLES**

The Team will work with EEAC Executive Committee to prepare, revise and finalize comments on the Plan for approval by the full EEAC.

**Term Sheet Negotiations**

**DESCRIPTION**

Once the bulk of the analytical work has been done and stakeholder input has been received, the final targets may still need some refinement. At this time, the final target setting process will largely move to an EEAC negotiating team and the PAs. The Consultant Team will continue to be involved in support of discussions as necessary and may provide additional spot analysis as directed by the negotiating team or the Council.

**DELIVERABLES**

The Consultant Team will help develop the Term Sheet, and will review and comment on versions of the Term Sheet throughout the negotiation process.

## Review of Final Draft of Plan and Council Resolution

### DESCRIPTION

After the PAs file the final version of the 2019-2021 Plan with the DPU at the end of October, the Consultant Team will review the contents of the final version in comparison to the initial and final draft versions. The Team will also identify whether Council comments and recommendations were addressed and whether stakeholder feedback was incorporated into the Plan as well as what issues may need to be tracked and monitored during implementation.

### DELIVERABLES

The Team will develop a memo to the Council on the final version of the plan and identify any issues that may need to be tracked and monitored during the implementation of the Plan.

## Strategic Planning

### DESCRIPTION

Outside of the tasks described below, the Team will continue to work on a range of strategic planning topics with the PAs. Many of these topics have been part of on-going discussions and are important considerations for the 2019-2021 Plan. For the residential programs, work may include:

- Developing and presenting a vision for state of the art residential energy efficiency programs for 2019-2021 and beyond
  - Determining how the whole house program should evolve as claimable lighting savings become negligible
  - Identifying priority program enhancements for all residential and Mass Save initiatives
- Identifying enhanced methods to serve renters, moderate income customers and other hard-to-reach populations

C&I work may include:

- Continuing to deliver nation leading programs that provide value to all C&I customers
- Increasing savings from lighting by focusing on fixtures and controls while transitioning from screw-in to linear lighting projects
- Increasing savings from HVAC measures by focusing on controls, retro-commissioning, and operational savings in addition to increasing market penetration and diversity of offerings to obtain more equipment savings
- Providing support for technologies that provide insight into energy use for the purpose of managing energy
- Providing support for customer energy management and claim savings from resulting operation changes through programs like Strategic Energy Management (SEM) or ISO 50001

Other cross-cutting strategic planning work may include:

- Determining how fuel switching/beneficial electrification and demand reduction resources should be integrated into energy efficiency programs
- Developing alternative metrics for measuring and assessing portfolio and program performance
- Articulating an advanced technology, information, and data platform for use by program stakeholders

## Other Potential Work Areas

### DESCRIPTION

In addition to the tasks outlined above, there may be other work areas the Consultant Team will need to be involved with to the extent that these areas could impact planning. At this, time, however, it is unclear what form that work might take and what the outcomes might be. These work areas include reviewing and analyzing the DPU ruling on the Eversource rate case and ruling on Grid Modernization for any relative impacts on EE or demand reduction programs, supporting DPU hearings on the 2019-2021 Plan, and reviewing implementation models. The Team will work with DOER to determine what tasks may be required to support consideration of these topics in the planning process.

#### **DELIVERABLES**

To be determined

---

## **PLANNING & ANALYSIS**

In addition to planning for the 2019-2021 Three-Year Plan as described above, our work in the area of planning and analysis will focus on several important Council support activities. These include:

- 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
- Reviewing reports/data and providing recommendations on program and portfolio performance to help ensure the achievement of high goals in the 2016-2018 Three-Year Plans

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 Area: Participate in EEAC Meetings; Brief and Support the Council**

The Consultant Team will provide the Council with up-to-date information, analysis, and recommendations that help Councilors understand issues and facilitate decision making. The monthly Council meeting is the one place where all Councilors meet and consider new ideas, review Plan progress, and plan for the future. It is an effective and efficient way of communicating and generating input and feedback that conveys the Consultants' activities and provides Councilors the opportunity to provide direction, responses to questions, and comments on findings. Communicating during the monthly Council meeting is also a practical reality considering the size of the Council and the requirements of open meeting law. In order for the Council and its meetings to be effective, the meetings are planned and supported by the Executive Committee, and both DOER and the Consultant Team provide informal briefings in advance.

The Consultants will continue to engage in an effort to solicit and integrate Councilor input between meetings and throughout the year. We will continue to engage Councilors in forums or sessions aimed at soliciting their priorities and finding the right way to synthesize those ideas into strategic topics, including through the planning workshops described above.

#### **SUPPORTING TASKS**

- Prepare for and attend at least sixteen regularly scheduled Council meetings, sixteen Executive Committee meetings, and a number of other subcommittee meetings to be determined to report to the Council on key activities and progress towards achieving the Council's priorities and to receive direction and feedback on Consultant Team tasks and work products.
- Provide input on the areas of focus and topics for upcoming meetings in advance, by reviewing and commenting on the advance topic schedules maintained by DOER.
- Provide independent technical support in advance of and during Council and Executive Committee meetings for all areas of energy efficiency and demand reduction planning, technical and economic analysis (cost-effectiveness), program design and implementation, and tracking

and monitoring of progress towards achieving goals.

- Propose, support, prepare, and provide (when assigned) briefing documents, informal pre-meeting informational sessions, or webinars on priority topics identified by the Council in its meeting/topics schedule.
- Provide individual briefings to Councilors on a rotating basis with a goal of talking to each Councilor at their desired frequency.
- Coordinate and support efforts to make progress on technical issues with the PAs on an as-needed basis through meetings of the Planning and Analysis Group (PAG).
- Provide quarterly reports to the Council on all activities in which the Consultants engage.
- Assist with providing orientation for new (or newer) Councilors.

#### **DELIVERABLES**

This task's deliverables include Council and Executive Committee meeting attendance and presentations, briefing documents, informal pre-meeting information sessions and webinars, individual Councilor briefings, and quarterly reports.

#### **Work Area: Provide Technical Analysis**

Several areas of technical effort contribute to the planning, analysis, design, implementation, and reporting of energy efficiency and demand reduction programs in Massachusetts. In addition, there are some relevant external factors and contexts that require interpretation for the Council, such as the broader energy policy landscape in the Commonwealth, energy planning and forecasting within the ISO-NE region, and related trends across the U.S. As a result, the Council requires concise, meaningful, targeted technical analysis and information on these topics and reports to support their deliberations and decision-making.

#### **SUPPORTING TASKS**

- Provide technical input to and review and comment on draft work products for the 2018 Regional Avoided Energy Supply Component (AESC) avoided costs study, and participate in the study group meetings with representatives from the six states. The AESC avoided cost study results will be used to conduct the cost-effectiveness analysis for all programs included in the 2019-2021 Plan, and therefore is a major study. The 2018 AESC study will increase the emphasis on demand or capacity impacts, plus will consider looking at the avoided costs for other demand side management resources such as demand management and storage. The 2018 AESC study will be completed by March 31, 2018.
- Consider issues in applying the 2018 AESC results for 2019-2021 program years, including analysis of the implications of the new avoided costs on benefits and net benefits for 2019-2021.
- Analyze the cost-effectiveness framework and 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.
- Continue to focus on peak demand reduction and demand management as an area of increased importance in the Commonwealth, in addition to the planning tasks covered in the Plan section above.
  - Participate in and provide technical support for the Demand Savings Group as well as the Council's Peak Demand Reduction (PDR) Subcommittee.
  - Coordinate with the PAs on technical aspects of demand issues to feed into the Demand Savings Group and/or the PDR Subcommittee.
  - Provide analysis, review, assessment of potential, and assessment of outcomes.
  - Monitor and review the results of demand demonstrations and evaluation results.
  - Analyze and recommend potential solutions or advances to identified challenges of design and implementation.

- Assist in planning future demand demonstrations including for the winter of 2017-2018 and the summer of 2018.
- Contribute to and review ISO-NE energy efficiency forecasting efforts for both energy and demand, ensure the consistent and appropriate treatment of efficiency in the 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 meetings via conference call.
- Provide technical assistance for reporting and tracking of the Three-Year Plan goals and energy efficiency impacts for state climate policy purposes.
- Analyze utility bill impacts at a high level and the relationship between program costs and efficiency savings experienced by customers through utility bills. Task includes a presentation to the Council on bill impacts versus sector savings achieved in Massachusetts.
- Review, comment on, and contribute to the Technical Reference Library (TRL) as needed. Task includes review and comment on a host of assumptions that make up the measure characterizations in the resource.
- Review, analyze, and assess the PAs' reports and reporting, including the monthly dashboards, quarterly reports, and annual (Plan-Year) reports; review trends and multi-year comparisons; and provide Consultant findings and recommendations to the Council
- Use the PA reporting to assess and report to the Council on the status of program achievement towards the 2016-2018 Three-Year Plan goals and related topics; identify any data or programmatic trends which portend successes or challenges in program delivery and savings achievement in the 2016-2018 Three-Year Plan
- Work with the PAs to design and implement further improvements to the PA reports in response to Councilor feedback, including forward-looking projections and enhanced trend comparisons in the reports

#### **DELIVERABLES**

This will include analyses, memos, and presentations to the Council, as well as briefing documents or other reports. The Consultants will work with the Council to outline work areas and determine the schedule and level of detail of work products.

### **Work Area: Support the Council on Regulatory Issues and DPU Proceedings**

The Consultant Team will provide Councilors with information on DPU proceedings and regulatory issues relevant to ratepayer-funded energy efficiency and demand reduction programs in the Commonwealth. DPU proceedings can have significant impacts on how the goals of the enabling legislation and the Three-Year Plans are pursued, and on the reporting of Plan results and achievement of those goals.

#### **SUPPORTING TASKS**

- Track, monitor, review, summarize, and present to the Council information on all relevant DPU proceedings affecting energy efficiency and demand reduction programs, as assigned.
- Monitor and assess any implications of DPU Orders on the 2019-2021 EE Plans, and the associated support of the Council in the Plan approval process.
- Monitor and assess any implications of DPU review of the 2016-2018 EE Plans and reports.
- Review and analyze any potential revisions to the DPU EE Guidelines coming out of Plan review or Performance Term Report review.

#### **DELIVERABLES**

Specific deliverables will vary depending on the level of involvement and Council needs, but may include analysis, participation and/or support for a technical session or hearing, memos or technical papers, and presentations to the Council.

---

## RESIDENTIAL AND LOW-INCOME

### Context

As described in detail above, the primary focus of the Residential and Low-income Advisory Group during the period covered by this work plan will be supporting the planning process for the 2019-2021 Statewide Energy Efficiency Plan. This is a particularly significant plan period for the residential and low-income sectors, as the ability to claim lighting savings—for many years an inexpensive and plentiful source of electric savings for the PAs—decreases to close to zero. This has implications not only for savings going forward, but also for how the programs are designed and delivered. This development proceeds alongside other drivers for innovation, including reducing greenhouse gas emissions, managing peak impacts, and maintaining the Commonwealth's position as the nation's leading provider of energy efficiency programs.

At the same time that the Residential and Low-income Advisory Group is working to support development of a plan for 2019-2021, it will be reviewing PAs' progress towards achieving the goals of the 2016-2018 Plan and providing support and recommendations as appropriate. The Residential Consultants plan to do this work collaboratively with the PAs and LEAN to continue the national prominence of the Mass Save Residential and Low-income Programs. The basic framework includes focusing on Council priorities from the October 26, 2015 resolution and the 2016-2018 Plan Term Sheet, helping to refine existing program strategies through identification of improvement opportunities, identifying additional cost efficiencies, shaping EM&V research and findings, and assessing new technologies and program approaches.

### Overall Discussion of Deliverables

As previously stated, a significant portion of the Consultant Team's effort in 2017-2018 will be spent supporting the development of the next Three-Year Plan. The Residential Advisory Group will contribute to a number of Plan-related deliverables as described in the 2019-2021 Plan section of the work plan. Many of the tasks described below will ultimately inform the Team's plan development deliverables. To the extent that additional residential-specific deliverables may be desired, the Group will work with DOER and develop scopes and budgets for these work products.

### Work Area: Technical Support for Programs and Effective Practices

The challenges of achieving the 2016-2018 goals and identifying new sources of electric savings are substantial. The Residential Consultants' work priorities for 2017-2018 will be two-fold: 1) tracking goal achievement and implementation of commitments in the 2016-2018 Plan and term sheet, and 2) identifying and incorporating new and innovative technologies and approaches into the Massachusetts programs.

#### SUPPORTING TASKS

- Contribute scenario analysis, as well as quantitative analytical support, to the development of alternative approaches to obtaining residential and low-income sector energy and demand savings through a revised PA-implemented program framework
- Review, analyze, and report on 2016-18 Plan results, including monthly data dashboards, quarterly reports, and plan year reports. Particular focus will be on achieving goals highlighted in the Council's final resolution for lighting and new initiatives and on PA innovations and demonstrations
- Support development of continuous improvements, improved cost efficiencies, and other effective practices for the Residential and Low-income Sectors in consultation with the PAs, including identifying effective practices from other jurisdictions
  - Use key performance indicator data and discussions with the RMC and interested stakeholders to continue the assessment of new initiatives for renters and moderate income customers; work with PAs to report an update on results from these initiatives, and recommended improvements, to EEAC every six months, including at September 2017 meeting
  - Continue to assess the trajectory of lighting savings decline in the Residential and Low-

income Sectors and potential impact on goals for 2016-2018 and 2019-2021; update Council at September 2017 meeting

- Continue work in support of a cost effective, fully integrated and comprehensive multi-family retrofit offering in 2019-2021
- Assess opportunities to expand program services presented by revisions to the Residential Conservation Services regulations and guidelines, including fuel switching and fuel displacement activities using thermal renewable technologies (e.g., heat pumps)
- Provide technical support to term sheet commitments regarding peak demand reduction efforts, innovation and technology, and contractor engagement, including monitoring and assessing results of demonstration projects
- Advise on new technologies and approaches and the potential for savings and integration into the programs
- Explore developing and implementing the idea of healthy housing as a demand-side health care measure with substantial integration into energy efficiency efforts, particularly for low income customers

### **Work Area: Participate in RMC and Council Meetings**

The Residential Consultants regularly (twice per month) participate in meetings of the Residential Management Committee (RMC) in order to monitor progress of the PAs' implementation plans, share information, offer analysis and context, and be active participants in continuously improving and shaping the design and delivery of the programs. The Residential Consultants also periodically prepare and present content for EEAC meetings as the agenda dictates.

#### **SUPPORTING TASKS**

- Review agendas and associated materials and/or coordinate with PAs to determine agenda content for RMC meetings
- Prepare and deliver materials (e.g., presentations) for the RMC and Council
- Produce other applicable output as needed with the goal of providing actionable advice for the Council and the PAs
- Report on relevant content of RMC discussions to the Council

### **Work Area: Coordinate with EM&V Efforts and Incorporate Feedback from EM&V and Studies into the Programs**

The Residential Consultants actively engage in the EM&V process at all stages. The Team will review and provide input on draft evaluation plans to ensure that the highest priority issues from an implementation perspective are addressed in the scope of work. As the evaluation work is conducted, the Residential Consultants are in regular contact with our EM&V colleagues to review and comment on interim work products. Once a study is complete our team often discusses the findings with the RMC to determine how the findings will be addressed. Priority studies for the team through this work plan period include the Residential Customer Profile and Residential Baseline studies; as well as planned evaluations and market research studies for multi-family programs, Home Energy Services, renter and moderate income initiatives, and lighting (several). Incorporating key process and impact findings into the 2019-2021 will be a particular focus.

#### **SUPPORTING TASKS**

- Provide direction and guidance in study planning to ensure necessary data are collected, and useful data are reported
- Review studies and reports, perform additional analysis to interpret results, and present findings through memos, webinars, and presentations
- Produce applicable output as needed in reports, memos, and presentations with the goal of providing referenced and actionable advice for the Council and the PAs

---

## COMMERCIAL AND INDUSTRIAL

### Context

Changes in markets and technologies will have both positive and negative impacts on savings. The lighting market, long the largest source of savings, is experiencing rapid and significant changes. LED technology has matured, costs have declined, and products are readily available. These trends mean there are increasing opportunities for savings in the linear lighting market as fluorescent technology is changed out, and decreasing opportunities for savings from screw-in lamps as the market becomes saturated and codes and standards change. The Consultants are closely monitoring these market changes and are in a position to help the Council understand the market dynamics and their impacts on the programs. We will also continue to provide actionable information to the Program Administrators to support the continued evolution of efficiency programs as they adjust to changing markets while continuing to provide successful customer-facing offerings. Examples of actionable information include providing examples of program design and delivery methods from other states, researching new measures, and analyzing data to update deemed savings as technology advances.

The Consultants' work will include both a review of the past three years and planning for the next Three Year Plan to ensure lessons learned from the past are applied to the future. The goal is to ensure that the current programs are being delivered as effectively as possible, and to advise on innovative new approaches or best practices that may enhance implementation. In addition, the Consultants will continue to identify and work with the PAs to include new technologies coming to the market and existing technologies that may not be contributing at their full potential. The Consultants will continue to play a key role in providing technical support and advice to the Energy Efficiency Advisory Council on these issues as they are defined and addressed.

### Overall Discussion of Deliverables

As previously stated, a significant portion of the Consultant Team's effort in 2017-2018 will be spent supporting the development of the next Three-Year Plan. The C&I Advisory Group will contribute to a number of Plan-related deliverables as described in the 2019-2021 Plan section of the work plan. Many of the tasks described below will ultimately inform the Team's plan development deliverables. To the extent that additional C&I-specific deliverables may be desired, the Group will work with DOER and develop scopes and budgets for these work products.

### Work Area: Technical Support for Programs and Effective Practices

The programs are the delivery mechanism for incentives and technical support for utility customers. How the programs are designed and delivered has a direct impact on the amount of savings achieved and where those savings are realized. Massachusetts has a well-established portfolio of programs that are delivering results. However, there are several areas in which there is the opportunity to either go deeper to realize greater savings, or to try different approaches to delivering services that will result in savings. In the 2018-2020 planning period these areas include lighting retrofit, HVAC, manufacturing process, and demand reduction as detailed below.

#### GENERAL SUPPORTING TASKS

- Review, analyze, and report on 2016-18 Plan results, including monthly data dashboards, quarterly reports, and plan year reports.
- Support development of continuous improvements, improved cost efficiencies, and other effective practices in consultation with the PAs, including identifying effective practices from other jurisdictions.
- Provide briefing materials to prepare for, and participate in, C&I focused EEAC workshops

#### LIGHTING

The C&I lighting market is in a state of transition. LED Screw-in lamps such as A-lamps and reflectors are expected to become the new baseline in the next few years due to either the enforcement of federal standards, or they become the typical customer choice, thus indicating the market has reached saturation. Fortunately, linear

lighting comprises 74% of the C&I lighting market by lamp count, and there is substantial potential for savings in the linear market. The challenge will be to increase the adoption of linear LED technologies to maximize savings and minimize any drop off in savings as the screw based lamp savings diminish. The Consultants see three primary opportunities in the linear LED market that, if rapidly deployed could lead to the maximum adoption of LED lighting with strong savings over the next plan period. These include: work with the distributors and vendors to ensure that program supported upstream lighting products comprise the minimum standard equipment for energy upgrade projects undertaken in MA; maximize comprehensive fixture retrofit projects rather than lamp replacements to maximize savings; integrate controls in LED lighting projects to minimize over illumination, enable demand response and maximize savings. The Consultants will work with the PAs to suggest program adjustments as necessary in order to achieve these objectives.

#### **LIGHTING SUPPORTING TASKS**

- Monitor the market in Massachusetts and other states for trends and opportunities to incorporate best practices.
- Monitor the methods results of delivery of services to customers through review of MassSaveData and discussions with the Program Administrators.
- Advise on strategies to maximize savings.

#### **HVAC**

Heating, ventilation, air conditioning (HVAC) systems consume over 50% of the energy used by commercial buildings in New England.<sup>1</sup> In 2016, the Massachusetts PAs achieved only 8% of C&I electric savings from HVAC, and this result is a continuation of the declining share of HVAC savings for many years. Significant opportunities remain to reduce the gas and electric energy consumption and improve the services provided by HVAC systems in Massachusetts's C&I buildings through better equipment, controls, retro-commissioning, and operations. In order to reverse the downward HVAC savings trend, and maintain high savings in Massachusetts, it will be necessary to adopt the approaches and methods of the highest achieving PAs statewide. In addition, there appears to be a shortage of professionals qualified to do complex commissioning, retro-commissioning, and controls programming. Increased training to improve the knowledge of the workforce will be necessary to drive increased HVAC savings in the 2019-2021 Plan and beyond.

#### **HVAC SUPPORTING TASKS**

- Identify opportunities for program improvements.
- Assess the capacity of HVAC design and construction professionals and provide support for targeted workforce development activities as directed.
- Monitor delivery methods and advise the PAs on strategies to increase savings.

#### **PROCESS SAVINGS AND STRATEGIC ENERGY MANAGEMENT (SEM)**

The Manufacturing sector is critical to the Massachusetts economy and energy efficiency programs. Manufacturing accounts for more than 11%<sup>2</sup> of the state economy, savings from industry continue to increase year over year and savings from industrial process projects are typically highly cost-effective.

Strategic Energy Management (SEM) programs work at the organizational level to create a corporate culture that values energy management which drives measurable energy savings through behavior and operational changes. In addition to the behavior savings, SEM programs identify traditional capital projects through the increased focus on energy use.

#### **PROCESS SUPPORTING TASKS**

- Continued collaboration with the PAs and Leidos, the Industrial Initiative implementer for National Grid and Eversource, to share best practices from other states and to identify new opportunities
- Assistance in implementing a SEM initiative in 2018.

---

<sup>1</sup> <https://www.eia.gov/consumption/commercial/data/2012/c&e/cfm/e1.php>

<sup>2</sup> <http://www.aimnet.org/massachusetts-business-center/manufacturing-services.cfm>

## DEMAND REDUCTION

The Program Administrators are trying a number of new approaches to demand reduction through energy efficiency and demand response programs. The Consultants will continue to collaborate to provide assistance in these efforts.

### DEMAND SUPPORTING TASKS

- Identify where the programs can leverage current program designs or activities to emphasize demand reductions.
- Identify existing and emerging measures that have a significant impact on demand during the summer or winter peak.
- Provide analytic support for demand response initiatives.
- Increase awareness of the customer focused approach to demand management which improves the customer cost effectiveness of demand control and peak shaving technology by enabling customers to control their demand costs on an ongoing basis while enabling grid demand response when needed.

## Work Area: Technical Support for New Technologies and Innovation

In order to increase savings, new technologies and ways to integrate these new technologies into the programs are necessary. Codes, standards and market saturation may erode the opportunities for savings by raising baselines for equipment. When baselines are increased, the difference between standard efficiency equipment and efficient equipment narrows. However, as new technologies are constantly being developed and improved that increases the difference between standard and efficient equipment. If baselines increase faster than technology advances, then savings opportunities shrink. If technology improvements advance faster than baselines, then opportunity expands. . Once introduced into the market, new products typically decline in price as they become more common, but this process takes time. To accelerate their adoption by the market, new technologies usually need program support to overcome the normal market barriers to anything new, unknown, and more expensive. Program support can take many forms, such as the promotion of the technology, verification that there are benefits such as savings and reduced maintenance, and incentives that reduce the incremental cost. Direct discussions with the PAs through the CIMC and Council meetings are the primary avenue for advancing these.

### SUPPORTING TASKS

- Identify new or underperforming technologies/measures
- Advise on new technologies and the potential for savings and integration into the programs by working with the CIMC Emerging Tech Group.
- Track trends in measure adoption to identify opportunities for changes and improvements to the programs to encourage either a systems or multi-measure approach.
- Advise on implementation strategies to help adoption of underperforming technologies.

## Work Area: Participate in CIMC and Council Meetings

The C&I Consultants attend a portion of all CIMC and some Council meetings in order to share information, offer analysis and context, and to be active participants in the design and delivery of the programs. The time allotted for Consultant participation in CIMC meetings provide an opportunity for collaboration and a free exchange of ideas between the PAs and the Consultants to improve the design and delivery of the programs.

The Consultants recognize that there is a great body of knowledge and experience represented by the Council members. The Consultants would like to continue to collaborate with the Council to leverage this knowledge of technologies and markets, and create joint presentations or other beneficial deliverables.

### SUPPORTING TASKS

- Prepare and deliver presentations for the Council and CIMC

- Report on the impact of CIMC discussions to the Council

## **Work Area: Incorporate Feedback from EM&V and Studies into the Programs**

Massachusetts has a comprehensive evaluation, measurement and verification process in place. However, it is critical for the lessons learned from the studies to be properly understood and applied to make changes in order to improve the programs and be most beneficial for the ratepayers of Massachusetts. Sometimes additional analysis and interpretation is necessary to apply the conclusions reached in the studies. The Consultants may also provide context to better put findings into perspective, which allows for better prioritization of PA effort.

One specific area of work is to monitor the implementation of the Baseline Framework. This effort alone includes five critical areas of study and guidance which impact PA savings including: a dual baseline system of savings calculation for measures with rapidly changing baselines (such as LED lighting), establishing industry standard practice baselines, updating measure life assumptions, ensuring alignment between gross and net savings baselines, and incorporating new data and approaches into the TRM and tracking systems.

### **SUPPORTING TASKS**

- Provide direction and guidance in the planning of EMV studies to ensure necessary data is collected, useful data is reported and MA can be confident in reported savings values
- Provide comments on draft reports to improve the quality of the work product
- Review studies and reports, and follow up with the PAs to determine if recommendations from evaluations are being incorporated into the programs
- Participate in the implementation of the Baseline Framework including the establishment of the dual baselines process and protocols
- Produce memos or presentations as requested by the council

---

## **EVALUATION, MEASUREMENT, AND VERIFICATION**

### **Context**

EM&V is a critical engine both for the EEAC Consultant Team and for the Commonwealth, providing objective and fact-driven results that help to ensure the reliability of savings claims, improve existing programs and support the development of new ones, and lay a solid foundation for the development of the next Three-Year Plan.

The 2009 Council resolution that established the Commonwealth's current EM&V framework assigns substantial responsibilities to the Council Consultants. Working on the Council's behalf, the Consultant is 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 the Consultant 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 Consultant as the Council's agent. Since establishing the current EM&V framework in 2009, the Commonwealth's EM&V program has advanced by leaps and bounds in terms of scope and scale, methodological rigor, and institutional maturity.

At the time this work plan was written, there were a record 75 studies in the detailed planning, implementation, or reporting stage. This large number of studies is a function both the EM&V program's growth to meet the PAs' and the Commonwealth's information needs and a temporary surge due to the overlap of older studies laid out in the 2016-2018 Strategic Evaluation Plan (SEP) and newer studies that were laid out in the recent SEP Update and Peak Demand evaluation plan.<sup>3</sup> Due to this growth in EM&V activity, a more systematic approach to prioritizing

---

<sup>3</sup> As of PY2016, EM&V accounted for 2.1% of total program spending, consistent with, if not below, industry norms and below the annualized budget cap established for the 2015-2018 program cycle.

our involvement in individual studies will be necessary for this contract period.

The approach to prioritization that will be most consistent with the intent of the EM&V Resolution is to cover only a portion of the portfolio of individual studies, and to draw a clear line between those studies that we will and will not cover. This approach offers the advantages of continuing to meet the intent of the 2009 EM&V Resolution for a substantial portion of the EM&V portfolio, while maintaining a clear delineation between those studies that are, and are not, receiving detailed oversight on behalf of the Council.

We will work with DOER to determine the specific studies to be covered. However, we recommend that, as a driving principle, we attempt to cover all impact evaluations. A core rationale for the 2009 EM&V Resolution, and the statewide EM&V framework that has been in place ever since, was the need to ensure studies are performed objectively. Given the financial stakes involved, impact evaluations present the most significant potential conflicts of interest stemming from PA EM&V study administration. For other types of studies, such as process evaluations and market assessment studies, the PAs have greater inherent incentives to produce objective results, as their ability to continue meeting their goals is strongly influenced by the accuracy of the results.

In addition to covering individual studies, we will maintain high-level oversight of the EM&V program by attending meetings of the Evaluation Management Committee and, as our budget allows, other overarching EM&V working groups.

## **Objective**

The preceding context helps to explain why all of our Group's tasks for the current work plan period are driven by a single overarching objective: to enhance and ensure the objectivity, accuracy, timeliness, and usefulness of PA-administered EM&V activities on behalf of the Council, as specified in the 2009 EEAC EM&V Resolution.

Our specific priorities in pursuing this objective in the upcoming contract period include the following:

- Providing a solid foundation of factual results to support the development of the next Three-Year Plan.
- Developing a 2019-2021 Strategic Evaluation Plan that seeks to streamline the EM&V program to be consistent with the reality of what are likely to be lower program budgets, but nonetheless continues to provide Massachusetts with needed EM&V results.
- Moving studies currently in the pipeline through the planning, implementation and reporting stages to completion.
- Ensuring that savings claims remain reliable in the face of ever-increasing pressures on the PAs to meet savings goals.

## **Overall Discussion of Timeline**

Most EM&V functions are ongoing throughout the year. As discussed in the 2016-2018 SEP, in order to make the most effective use of resources, new studies are to be deliberately staggered to start and end throughout the three-year program cycle. This means the EM&V team's involvement in most core functions is expected to be ongoing throughout the work plan period.

## **Overall Discussion of Deliverables**

Because the 2009 EM&V Resolution specifies that EM&V in Massachusetts is to be a fully collaborative effort between the PAs and the Council's agents, many work products are developed jointly by the PAs and the EEAC Consultants. Work products can therefore be divided into two primary categories: those for which the EEAC Consultants have sole responsibility, and those that are the joint responsibility of the PAs and the EEAC Consultants. Joint work products generally include final reports, webinars, strategic evaluation plans, project-specific evaluation plans, and detailed quarterly status reports showing progress on all in-progress studies. EEAC Consultant-only deliverables generally include presentations to the Council; quarterly activity reports; and briefings of individual Councilors by phone, in person or by e-mail.

We note that all EM&V activities related directly to the development of the 2019-2021 Three-Year Plan are budgeted under the overall 2019-2021 Planning task, and are discussed primarily in that section of the work plan. Such activities include development of the 2019-2021 SEP (EM&V's contribution to the review of draft and final plans); review of potential studies and coordination of that review with the EM&V program; EM&V-related support for briefing documents and workshops; and EM&V support for EEAC consulting team analyses of savings potential, key drivers, and term sheet negotiations. However, we include some discussion of these activities in this section to facilitate cross-referencing.

### **Work Area: Oversee EM&V Planning**

This task encompasses the development of both the overall strategic EM&V plans and detailed plans for individual EM&V projects. With the research agenda for the remainder of the 2016-2018 program cycle already in place, planning efforts in the current work plan period are expected to focus largely on developing the 2019-2021 SEP (budgeted for under the overall 2019-2021 Planning task) and completing the process of moving the individual EM&V projects laid out in the SEP Update and Peak Demand evaluation plan into the implementation stage. Planning for individual EM&V projects focuses on establishing 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 and the time it is implemented.

Due to the strategic staggering of studies, oversight of project-specific planning is expected to occur throughout the work plan period. Consistent with past processes, an in-progress draft of the SEP is expected to be included with each successive draft of the overall Three-Year Plan, with the final draft being the most detailed. Development of the 2019-2021 SEP is thus expected to span the winter of 2017-2018 through October 2018.

The development of the SEP is intended to serve as the primary mechanism through which the future strategic direction, scope, focus, and resource allocation for the Commonwealth's EM&V program are determined. We therefore recommend that it follow an inclusive process, in which DOER, Councilors, and other interested parties are invited and encouraged to participate.

#### **DELIVERABLES**

EEAC Consultant-only deliverables include quarterly activity reports and briefings, and may include Council presentations. Joint EEAC Consultant/PA work products include project-specific evaluation plans, overall strategic evaluation plans, and monthly status reports.

### **Work Area: Oversee EM&V Study Implementation**

This task involves overseeing the implementation of individual EM&V studies once they have completed the 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.

#### **DELIVERABLES**

EEAC Consultant-only deliverables will include activity reports and briefings and may include Council presentations. Joint EEAC Consultant/PA work products include interim reports, maintaining a schedule of studies, possible webinars, and monthly status reports.

### **Work Area: Oversee EM&V Reporting**

This task involves overseeing 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 task also encompasses overseeing the incorporation of impact evaluation results into the TRM/TRL.

#### **DELIVERABLES**

EEAC Consultant-only deliverables include quarterly activity reports and briefings, and may include Council presentations. Joint EEAC Consultant/PA work products include final reports, webinars, monthly status reports, and posting summaries and studies to the EEAC website.

## **Work Area: Council and Stakeholder Engagement**

This task includes working 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.

### **DELIVERABLES**

In-person presentations, webinars, and one-on-one briefings by phone or e-mail, as needed. We have budgeted for one in-person presentation at a Council meeting.

---

## **TECHNICAL SERVICES**

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 Area: Produce Minutes from all EEAC Meetings**

The Team will ensure that minutes are collected from all 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. In 2017-18, the Consultant Team will also take minutes at EEAC Executive Committee meetings. We note that for budgeting purposes, the minute taking will be included in the "Council Meetings" budget category. The Team will also purchase a new projector for use at the EEAC meetings.

### **Work Area: Website Updates, Revisions, and Maintenance**

Much of the work on the EEAC website will be focused on regular and timely updates of the website content. The Team will also work to make changes or expansion in structure or organization of the website that are identified by the Council. In a planning year, a greater volume of materials tend to be uploaded to the website to keep stakeholders informed about the process. These materials include draft Three Year Plans and supporting documents, public comments, and briefing memos, among others.

### **Work Area: Consultant Team Quarterly Report**

The Team will continue to provide DOER and Councilors with a timely and meaningful report of Consultant Team activities. The Consultant Team will produce activity reports on a quarterly basis.

---

## **PROPOSED BUDGET**

The table below presents our high-level proposed budget by work area. This budget was developed based on our current understanding of likely Council priorities and projected activities, issues, and work products for 2017-2018. As previously stated, the 2019-2021 planning process will account for a significant portion of the Team's collective time over the next sixteen months. Therefore, we have developed a budget with time allotted to specific tasks within the planning process.

Budget Category	Allocation of Total Budget (\$)	P and A allocation	C&I Allocation	Residential Allocation	EM&V Allocation	Tech Services Allocation
<b>2019-2021 Planning</b>						
Briefing Documents	\$56,442	\$18,626	\$18,626	\$19,190		
Stakeholder Workshops	\$84,663	\$27,939	\$27,939	\$28,785		
Review of PA Potential Studies	\$56,442	\$36,687	\$8,466	\$8,466	\$2,822	
Assessment of Potential/Goals Suggestion	\$141,104	\$91,718	\$21,166	\$21,166	\$7,055	
Draft Plan Initial Review	\$28,221	\$11,288	\$5,644	\$5,644	\$5,644	
Review of Draft Plan	\$98,773	\$49,387	\$19,755	\$24,693	\$4,939	
Draft Plan EEAC Stakeholder Process	\$56,442	\$31,043	\$11,288	\$11,288	\$2,822	
Key Drivers Process	\$141,104	\$91,718	\$21,166	\$21,166	\$7,055	
EEAC Comments	\$35,276	\$17,638	\$7,055	\$7,055	\$3,528	
Term Sheet Negotiations	\$141,104	\$91,718	\$21,166	\$21,166	\$7,055	
Review Final Draft Plan	\$63,497	\$28,574	\$13,969	\$17,779	\$3,175	
Strategic Planning	\$98,773	\$69,141	\$9,877	\$14,816	\$4,939	
<b>Other Work Areas</b>						
Council Meetings - Plan	\$169,325	\$118,528	\$25,399	\$25,399		
Council Meetings - Thematic	\$141,104	\$77,607	\$28,221	\$28,221	\$7,055	
Committee Meetings	\$98,773	\$88,896	\$4,939	\$4,939		
AESC Support	\$70,552	\$70,552				
Evaluation Team Specific	\$423,313				\$423,313	
Residential Team Specific	\$111,994			\$111,994		
CI Team Specific	\$111,994		\$111,994			
Technical Team Specific	\$56,442					\$56,442
<b>Travel and Direct Expense</b>						
Travel and Direct Expense	\$84,663	\$46,564	\$21,166	\$12,699	\$4,233	
<b>Budget Total</b>						
<b>Total</b>	<b>\$2,270,000</b>	<b>\$967,623</b>	<b>\$377,834</b>	<b>\$384,466</b>	<b>\$483,635</b>	<b>\$56,442</b>