

IN THE MATTER OF THE POTOMAC EDISON  
COMPANY D/B/A ALLEGHENY POWER'S  
ENERGY EFFICIENCY, CONSERVATION AND  
DEMAND RESPONSE PROGRAMS PURSUANT  
TO THE EMPOWER MARYLAND ENERGY  
EFFICIENCY ACT OF 2008

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BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF MARYLAND

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CASE NO. 9153

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IN THE MATTER OF BALTIMORE GAS AND  
ELECTRIC COMPANY'S ENERGY EFFICIENCY,  
CONSERVATION AND DEMAND RESPONSE  
PROGRAMS PURSUANT TO THE EMPOWER  
MARYLAND ENERGY EFFICIENCY ACT OF  
2008

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CASE NO. 9154

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IN THE MATTER OF POTOMAC ELECTRIC  
POWER COMPANY'S ENERGY EFFICIENCY,  
CONSERVATION AND DEMAND RESPONSE  
PROGRAMS PURSUANT TO THE EMPOWER  
MARYLAND ENERGY EFFICIENCY ACT OF  
2008

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CASE NO. 9155

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IN THE MATTER OF DELMARVA POWER &  
LIGHT COMPANY'S ENERGY EFFICIENCY,  
CONSERVATION AND DEMAND RESPONSE  
PROGRAMS PURSUANT TO THE EMPOWER  
MARYLAND ENERGY EFFICIENCY ACT OF  
2008

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CASE NO. 9156

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IN THE MATTER OF SOUTHERN MARYLAND  
ELECTRIC COOPERATIVE'S ENERGY  
EFFICIENCY, CONSERVATION AND DEMAND  
RESPONSE PROGRAMS PURSUANT TO THE  
EMPOWER MARYLAND ENERGY EFFICIENCY  
ACT OF 2008

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CASE NO. 9157

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**Consensus Report on the EmPower Maryland EM&V Process**

**June 24, 2009**

**Crissy Godfrey, Director, Demand Side Management Division**

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# Consensus Report on the EmPower Maryland EM&V Process

## Introduction

On April 21, 2009, the Commission heard Case No. 9154<sup>1</sup>, in which Staff first presented its preferred approach, an EM&V Commission-led Evaluator Model (“Evaluator Model”), for the Evaluation, Measurement and Verification (“EM&V”) process of the EmPower Maryland programs. Without consensus on this proposal, the Commission instructed Staff and relevant stakeholders<sup>2</sup> to meet and agree upon this or an alternative EM&V model, and report back to the Commission during one of the remaining two EmPower Maryland hearings<sup>3</sup>. After conferring with its technical consultant (Lawrence Berkeley National Laboratory, henceforth “LBNL”) and drafting a matrix of roles and responsibilities for utilities (see Attachment A), Staff scheduled a conference call with stakeholders on May 18, 2009. During this call, LBNL laid out alternative approaches used in other states to the planning and oversight of EM&V. LBNL also identified six general principles that could be used to guide and assess the relative merits of alternative approaches to oversight and management of EM&V activities and discussed “best practices” nationwide<sup>4</sup>. At the end of this meeting, Staff instructed stakeholders to provide feedback on the Evaluator Model: 1) whether they supported the Model, 2) any comments or concerns on the roles and responsibilities of all parties within the matrix, and 3) if against the Model, to provide an alternative approach by May 22, 2009. Staff did not receive responses from all parties by this deadline. However, Staff did confirm the support of the remaining parties verbally in a separate June 3<sup>rd</sup> meeting on the Baseline Study RFP implementation. As of the date of this report, Staff has received a favorable consensus from all stakeholders on Staff’s preferred model

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<sup>1</sup> In the Matter of Baltimore Gas & Electric Company’s Energy Efficiency, Conservation and Demand Response Programs Pursuant to the EmPower Maryland Energy Efficiency Act of 2008.

<sup>2</sup> Stakeholders include the utilities involved in the process (Potomac Electric Power Company (“Pepco”), the Delmarva Power & Light Company (“DPL”), Baltimore Gas & Electric Company (“BGE”), The Potomac Edison Company dba Allegheny Power (“Allegheny Power”), and the Southern Maryland Electric Cooperative (“SMECO”), the Maryland Energy Administration (“MEA”) and the Office of Peoples’ Counsel (“OPC”).

<sup>3</sup> Before rescheduling occurred of the Pepco and DPL hearings, the last two EmPower Maryland hearings (SMECO and Allegheny Power) were scheduled for May 21 and May 26, 2009 respectively.

<sup>4</sup> Staff identified in its testimony during the April 15, 2009 Draft Baseline RFP Hearing several EM&V best practice contracting approaches which included the California Public Utility Commission, Wisconsin’s Focus on Energy, and the Pennsylvania Public Utility Commission.

of the EM&V process. Although there was some brief discussion of a collaborative model similar to that used for the energy efficiency programs of the 1990s, no additional models were presented.

## **Purpose of EM&V**

The EmPower Maryland Efficiency Act of 2008 (“Act”) establishes energy and demand reduction goals of 15% by 2015, with targeted energy savings reductions of 5% by 2011. Measurement and validation of savings and impacts is a critical component of demand side programs, particularly when evaluating how effective program delivery has been, what factors are driving or impeding customer participation in programs, characteristics of participants and non-participating customers, determinants of equipment decisions, and customer satisfaction with program delivery. Moreover, the design and depth of program data collection, monitoring, and analyses can set the tone in terms of the significance in accuracy and prudence of compliance results. In Staff’s April 15<sup>th</sup> hearing testimony, Staff outlined the key components of a successful EM&V process and several examples of “best practice” EM&V programs in other states. Costs for such “best practice” programs generally range from 5% to 7% of total energy efficiency program budgets. However, the average cost allocated for EM&V activities amongst the EmPower Maryland utilities is only about 2.6%, or half the budget of other leading states.

Given the enormity in scale of the EmPower Maryland initiative and the likelihood of higher rate impacts, Staff is sensitive to the issue of program credibility and transparency being under considerable scrutiny, both legislatively and through ratepayers. A collaborative model<sup>5</sup>, suggested briefly in the stakeholder meeting and similar to that used in the 1990s, would not likely provide the immediate underlying authority or ability to direct the EM&V process in a manner amenable to the Commission’s goals. As such, the Commission will likely want to play a more significant role in the oversight and management of the EM&V process. Ultimately, this may be a more cost-effective route

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<sup>5</sup> The collaborative model would consist of all relevant stakeholders, in a non-binding capacity, meeting regularly to discuss the progress of the EM&V process. The utilities would serve as Contract Officers to the EM&V Contractor, with no other party having authority over the utilities’ directives. If the Commission or another stakeholder was not able to resolve a particular issue within the collaborative stakeholder process,

for the Commission in that increased transparency will also increase public and policy maker confidence.

A statewide EM&V process will enhance our knowledge in areas that are not necessarily the purview of or relevant to the PJM, such as free ridership, energy efficiency savings, and cost-effectiveness. That said, the EM&V process also will need to dovetail with other PJM requirements for bidding into capacity markets (e.g., PJM Energy Efficiency Measurement & Verification Manual). For instance, the EM&V Contractor(s) will need to have a clear understanding of the Commission's definition of issues such as peak demand versus the PJM's in terms of collecting data and ultimately reporting results.

## **Commission-Led Evaluator Model**

In meeting the aforementioned needs, Commission Staff was essentially left with two model options for the EM&V process – either a Commission-led statewide EM&V Contractor or Commission-led EM&V Evaluator (with a Utility-led EM&V Contractor) for the EmPower Maryland programs. All of the utilities had stressed the importance of being able to closely and directly manage their EM&V Contractor to provide immediate direction, deliverable timeliness, smooth coordination of PJM and Commission needs, as well as customer confidentiality. Therefore, a Commission-led EM&V Contractor, similar to the Baseline Study RFP, was out of the question for the utilities, leaving us with Staff's preferred model of the Commission-led Evaluator. Essentially, this approach delineates roles and responsibilities between two separate Contractors – one as the prime EM&V Contractor for the utilities and the other in an independent Evaluator capacity for the Commission overseeing and coordinating with the utilities and the selected EM&V Contractor.<sup>6</sup> The advantage to the Evaluator Model is that both the utilities and the Commission benefit. The utilities maintain direct control over their statewide EM&V Contractor and the close link between EM&V and program design. The Commission has an independent, third party to evaluate and verify the results of EmPower Maryland,

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more formal action would have to be taken at the risk of either missing key deadlines or delaying pertinent actions.

<sup>6</sup> MEA is expected to hire its own EM&V Contractor to evaluate its EmPower Maryland programs, and would not be included as part of the scope of work for the Commission-led Evaluator.

proposed studies, methodologies, budgets and schedules and other technical merits with an eye on broader public policy and stakeholder concerns.

This Evaluator Model has the added benefit of also carving out other deliverables that may be highly valuable to the Commission and General Assembly, but not necessarily a priority to the utility's direct EM&V responsibilities. For example, aside from reporting per capita energy consumption and peak demand, the Act stipulates that the Commission, when examining programs for approval, also consider cost-effectiveness, as well as impacts to ratepayer classes (especially low-income), jobs and the environment. Although these factors are very important in program design, the utilities will likely focus efforts on programmatic energy and demand savings and cost-effectiveness and not necessarily areas like jobs or environment. The Commission's Evaluation Contractor would serve as an intermediary for this information, collecting information from the primary data sources of the utilities and its EM&V Contractor to conduct broader statewide evaluation pertinent to the Commission's reporting and assessment needs. For example, the Evaluator could conduct impact analyses as necessary on such issues as emissions avoidance, price mitigation, jobs, effects on ratepayers (especially low-income), system reliability and coordination of federal stimulus funding. This information could be used for the purposes of reporting the Commission's efforts as part of the Maryland Commission on Climate Change, factored into integrated resource planning efforts, or simply be monetized or valued in some form to help the Commission understand indirect but real impacts to Marylanders. These broader, abstract issues are all just as necessary as the bottom line of energy and demand savings but not necessarily prudent for the utilities to be focusing on in terms of direct supervision of their EM&V Contractor. This approach would leave the utilities to focus on program-specific EM&V, and the Commission to lead a broader statewide evaluation effort.

Additionally, this approach proposes the evaluation of peak demand impacts as well as energy savings. Typically, EM&V efforts have been dedicated to energy savings, as most programs are evaluated on the number of kilo-watt hours saved and not peak load reductions. However, Maryland is in a unique situation in that EmPower Maryland has

also set peak energy demand goals, and the State also has several prominent demand response programs (e.g., Peak Rewards, CoolSentry or other Direct Load Control programs, and at least three potential Smart Grid projects) either underway or about to be. Currently, these programs are evaluated for the most part based on what PJM requires of them to bid in successfully to its capacity markets (e.g., periodic load impacts, indoor temperature or equipment operability studies, customer satisfaction surveys), with cost-benefit analyses likely only performed and filed with the Commission upon approval. Other pertinent issues to evaluate for the Commission could include deemed energy savings, a sensitivity analysis of cost-effectiveness based on energy market conditions, or customer satisfaction. Staff is of the opinion that demand reduction programs need to be assessed with the same keen, discerning eye as the energy efficiency programs to ensure that ratepayers are receiving the best value in the most cost-effective manner. However, Staff believes that demand reduction evaluation efforts to a large extent could mirror those explicit PJM requirements for bidding capacity into the PJM Reliability Pricing Model (RPM) market, such as the PJM EM&V Manual, Manual 19 and Attachment B (Direct Load Control Load Research Guidelines). However, there will be some subtle changes that will need to occur for Maryland's impact analyses, such as the definition of "peak demand" which is defined by PJM much more broadly than the limited number of hours that PJM defines it. Staff recommends that the Commission include the utilities' demand response programs in EM&V efforts, as they are a significant part of the EmPower Maryland initiative.

Finally, Staff believes it may be advantageous for the energy efficiency ("EE") and demand response ("DR") EM&V be performed by the same utility EM&V contractor (or potentially a team of contractors whereby one takes the primary coordination lead but EM&V roles may be split between EE and DR activities) in order to better integrate the synergies of energy savings and peak demand reductions amongst programs. For example, two homeowners – one with a 10-SEER heat pump versus one with a 14-SEER heat pump – both participating in a direct load control ("DLC") program will have varying levels of associated energy savings. Staff contends that using one EM&V Contractor (or Contractor team) to evaluate EE and DR may also reduce time-consuming and duplicative efforts, such as gathering data, or coordination amongst two EM&V

Contractors (as well as possibly the Commission Evaluator) to evaluate these program synergies.

Attachment A is a draft outline, delineating roles and responsibilities of each party in greater detail. There are three main players – the utilities’ EM&V Contractor (in unison with utilities), the Commission’s Evaluator and Staff. However, it should be noted that this model assumes initial statewide market assessments (i.e., Baseline Study) will be conducted through a separate Contractor and that the Northeast Energy Efficiency Partnership (“NEEP”) is fully funded to conduct its Maryland-based projects, such as the highly coveted Technical Reference Manual (“TRM”). However, if necessary, the Commission Evaluator could take over these responsibilities. For example, in all likelihood, the TRM will need to be updated and maintained for the State, and this may not necessarily be the purview of NEEP per se.

Responsibilities are organized into several categories such as statewide studies; planning and management; process evaluation; databases; primary data collection and impact analyses; independent data collection and impact analyses; other outcome analyses; reporting; best practices and other (miscellaneous). The utilities and their EM&V Contractor will be responsible for initial evaluation plans and schedule; primary data collection and databases; impact and process evaluation; and semi- annual and multi-year reporting (the latter which will help divulge trends and influence future program design and management). The Commission Evaluator will provide technical expertise to Staff in helping assess evaluation plans, proposed budgets, and schedules, review utility contractor evaluation studies (which may include lessons learned and recommendations for future program design or evaluation), as well as generally oversee the EM&V process. The Evaluator will also be responsible for an evaluation verification plan (e.g., quality control such as sampling and inspections) and schedule; coordination of evaluation verification efforts; interface between the utilities and their primary data collection and tracking databases; maintenance of a reporting database of statewide program impacts (potentially publicly accessible); preparation of broader outcome analyses and reports (e.g., system reliability, emissions, etc.); impact verification;

periodic recommendations on EM&V best practices and improvements; and organization of periodic statewide public workshops on evaluation results of EE and DR programs.

As stated above, Staff emphasizes that this is a *draft* matrix (Attachment A). It will be important for the utilities, Staff, other parties and contractors to work effectively and collaboratively together from the beginning of the process, including setting forth plans for the EM&V work and determining responsibilities for various functions, so as to avoid duplication of effort and costs.

## **Cost Recovery**

The utilities have drafted a joint utility Request for Proposals “(RFP)” for the “Evaluation, Measurement and Verification of EmPower Maryland Residential and Commercial Conservation Programs”, with input from LBNL and Staff. The EM&V Contractor has been budgeted into the EM&V portion of the utilities’ EmPower Maryland portfolio. The EM&V budget for all utilities is estimated at approximately \$6.96 million for the 2009-2011 period. Staff proposes to have the Commission Evaluator funded through this mechanism as well. LBNL has estimated this additional cost at about 25% of the EM&V consulting budget, or approximately \$1.74 million, for the 2009-2011 period. This estimation (in both dollars and scale) may fluctuate up or down depending upon several factors, including but not limited to size of the overall EmPower Maryland Initiative (e.g., additional EE or DR programs), delineation of roles and responsibilities (e.g., if the TRM is updated or maintained by NEEP, the Evaluator, etc.), the necessity of additional baseline studies or market assessments. Staff proposes that costs be allocated as a percentage of the total Maryland electricity usage, as also recommended for the Baseline Study. This allocation methodology would make sure that each utility is paying a reasonable portion of the costs.

Staff emphasizes that not all utilities provided budget costs for current EM&V activities of approved DLC programs in the utilities’ EmPower Maryland budgets. In some cases, select EM&V activities may currently be performed by a utility’s Direct Load Control (“DLC”) contractor (e.g., SMECO’s DLC Contractor, Comverge, for CoolSentry), such as verification of capacity reductions, or are still being negotiated with

the contractors, as is the case with PHI. In other cases, a utility may not currently have any demand response programs running, such as AP. Therefore, as a next step, Staff and utilities will need to determine what DR EM&V activities still need to be conducted by the utility EM&V Contractor. The addition of these activities will likely increase the utilities' total EM&V budget; and, thus, the Commission Evaluator budget proportionally per LBNL's estimation above. The Evaluator's budget should remain somewhat flexible in that some DR EM&V may be highly contingent upon having a hot summer and peak events actually called. Thereby, DR EM&V funds would not be wasted on studies unlikely to bear additional key information for the Commission in terms of, included but not limited to, energy savings, load impacts or program design. Other non-contingent EM&V studies as identified by the Evaluator or Staff and deemed necessary by the Commission could be performed on an ad-hoc basis – for example a sensitivity analysis of cost-benefit ratios.

Staff views the Commission Evaluator and its role and responsibilities as a vital budgetary component to an integrated, objective EM&V program, and the shared responsibility of the utilities and the Commission for ensuring effective, transparent oversight of the EmPower Maryland initiative. In the future, Staff recommends joint planning between the Evaluator, the utilities and their EM&V Contractor (or Contractor team) to develop an overall holistic EM&V budget.

## **Timeline**

In order to maintain a highly organized and collaborative process among all the Contractors, Staff stresses the importance of an expeditious approval from the Commission. Moreover, there are several deliverables and processes that should run parallel to one another. Principally, the Baseline Study, tentatively scheduled for delivery in March 2010, and the TRM, to be completed by the end of 2009 (according to the NEEP EM&V Forum schedule), would both benefit immensely from having the EM&V Contractor and Evaluator on hand to inform their direction. These processes will also reciprocate into the design of the EM&V plans and schedules. Ultimately, these deliverables (i.e., EM&V plans, TRM, baseline studies) will form the basis of future

program design and evaluation, in addition to the preparation of bids into the PJM capacity markets.

The utilities have drafted and will be issuing a joint RFP to solicit an EM&V vendor for the EmPOWER Maryland energy efficiency programs. They await Commission approval of the EM&V process before making final revisions and posting this RFP. Upon issuance, the utilities expect responses to be due about 4 weeks afterward – putting an EM&V Contractor in place may take roughly 2 to 3 months. If the Commission approves this model, Staff, with stakeholder input and technical expertise from LBNL, will need to draft an RFP for a Commission-led Evaluator. Staff expects the same timeframe to procure an Evaluator. The RFP will be issued through the Utilities, but managed by the Commission, similar to the SOS Contract model.

## **Conclusion**

The development of this Commission-led Evaluator model is the preferred approach of Commission Staff in order to maintain the necessary oversight and transparency to ensure policy-maker and public confidence in the EmPower Maryland programs. Similar to the SOS Contract model, the Evaluator would be paid through the EmPower Maryland EM&V budget and is estimated to attribute an additional cost of roughly 25% of the utilities' current EM&V budget (about \$1.74 million for the 2009-2011 period for EE activities only). With consensus from all parties, Staff recommends the expedited approval of this model in order to maintain an amenable timeline for the baseline study, TRM and evaluation plans to be completed in parallel to one another.

Staff also recommends that the Commission include demand response programs in the EM&V process. Although to a large extent these programs' demand reductions are closely scrutinized by PJM in bidding programs into the RPM capacity markets, it would be beneficial to evaluate other issues pertinent to the Commission such as but not limited to cost-effectiveness, energy savings, program penetration rates, program design (e.g., best medium for consumer education such as orbs, displays). As a significant part of the EmPower Maryland initiative, Staff emphasizes that these programs need to be evaluated similarly to the energy efficiency programs to ensure that ratepayers are receiving the best value in the most cost-effective manner. The utilities' EM&V plans currently only

budget for energy efficiency programs, not their demand response programs. If the Commission concurs with the development of EM&V for DR programs, Staff and utilities will work jointly to augment the utilities' current draft EM&V RFP(s) to also include necessary DR EM&V activities (complementing those already being done with DLC Contractors) to be included in the utilities' EM&V Contractor scope(s) of work. Depending upon the budget for these DR activities, the estimated budget for the Commission Evaluator would also increase proportionally based on the 25% general rule of thumb). Staff reiterates that in comparison to other "best practice" EM&V programs nationwide the EmPower Maryland EM&V budgets were very low, averaging around 2.6% where leading EM&V programs range more around 5% to 7%. Even if DR evaluation is added to the Contractors' responsibilities, the Maryland EM&V program budget will still remain relatively lower than these programs. The proposed approach to EM&V is not only consistent with other "best practice" approaches but also would ensure the validity, objectiveness and transparency required to garner and maintain stakeholder, policymaker and public support for the bold initiative that is EmPower Maryland.

## Attachment A

### EmPower Maryland – Energy Efficiency and Demand Response Programs

#### Evaluation, Measurement and Verification (EM&V), Data Tracking and Reporting Activities: Roles and Responsibilities for Maryland PSC, Utilities, and PSC statewide Evaluation Consultant

<b>Task and/or Deliverable</b>	<b>Utilities (or their Consultant)</b>	<b>PSC Statewide Evaluation Consultant(s)</b>	<b>MD PSC</b>
<b>Statewide Studies</b>			
Prepare Statewide Baseline Study		XX <sup>7</sup>	
Prepare additional Statewide Market Assessments (e.g. market impact studies) and updates (bi- or tri-annual)		XX	
Prepare statewide Technical Reference Manual (TRM) (and annual or bi-annual updates)	XX <sup>8</sup>		
Review TRM and updates of TRM		XX	
Approve TRM (and review Statewide Market Assessments)			XX
<b>Planning and Management</b>			
Prepare Master Evaluation Schedule for utility and statewide evaluation contractor activities; include overview of reporting schedule with annual and tri-annual portfolio reporting, as well as semi-annual interim reports and/or presentations	XX	XX	XX
Develop utility (statewide and individual utility) impact and process evaluation plans; including gross and net energy and demand (including peak demand from DR) savings, cost-effectiveness analyses, database and reporting protocols, survey templates, and schedules	XX		
Review utility evaluation plans		XX	
Develop plan for due diligence (QA/QC) of utility impact results (energy and demand savings, cost-effectiveness), including verification approach (with sampling plan), and schedules for review of utility submittals and reporting to PSC.		XX	
Develop plan for determining and reporting additional outcomes (e.g., system reliability, T&D and generation needs impacts; emissions avoidance; price mitigation; jobs impacts, effects on ratepayers especially low-income, coordination with federal stimulus funding)		XX	
Review and approve utility and PSC evaluation consultant plans			XX
Coordinate all utility evaluation efforts	XX		
Coordinate statewide due-diligence (QA/QC) impact evaluation/verification efforts		XX	
<b>Process Evaluation</b>			

<sup>7</sup> As of now the baseline study contractor is separate from statewide contractors hired by PSC for other activities listed in this table.

<sup>8</sup> May be done in conjunction with NEEP effort.

Prepare program process evaluations	XX		
Conduct (independent) customer and trade-ally satisfaction surveys and reports	XX		
Review customer and trade-ally satisfaction survey results		XX	XX
<b>Databases</b>			
Prepare data reporting, interface, and database plan that includes coordination between the utilities' and PSC's statewide evaluation contractor database(s) and utility databases	XX	XX	
Design, implement and maintain utility primary program management and tracking database(s) with project and program data (includes individual utility databases and a statewide database operated by utilities)	XX		
Design, implement and maintain statewide data management and quality control database of information 'uploaded' from utility database(s) and used for (a) obtaining and managing data for due-diligence activities and (b) establishing public web accessible database and reporting system with aggregated, higher-level information on program impacts (e.g., statewide energy and demand savings)		XX	
Review and approve statewide database and reporting plan			XX
<b>Primary Data Collection and Impact Analyses (EE and DR Programs)</b>			
Prepare ex-ante savings estimates	XX		
Conduct primary data collection and site baseline and ex-post verifications for EE and DR projects	XX		
Prepare persistence of savings analysis: conduct primary data collection	XX		
Prepare analyses and documentation of project, program and portfolio gross and net energy and demand savings, cost-effectiveness	XX		
<b>Independent Data Collection and Impact Analyses</b>			
Conduct quality control and due diligence of utility analyses and documentation of project, program and portfolio gross and net energy and demand savings and cost-effectiveness; inspect sample of project sites and review primary data and analyses, prepare verified achieved versus claimed savings and cost-effectiveness report per reporting schedule		XX	
<b>Other Outcome Analyses</b>			
Prepare additional efficiency and DR program/portfolio outcome reports: System reliability, T&D and generation needs impacts; emissions avoidance; price mitigation; and jobs creation, impacts on low-income ratepayers and leveraging of federal stimulus funding (e.g., ARRA).		XX	
<b>Reporting</b>			

Prepare utility interim semi-annual and final annual (and tri-annual) reports of EE program and portfolio net and gross impacts and cost-effectiveness evaluation results	XX		
Prepare semi-annual (interim) and annual (final) reports of verified achieved utility program and portfolio results – energy and demand savings and cost-effectiveness.		XX	
Prepare annual report on additional Empower MD outcome results (e.g., avoided emissions, reliability and job impacts)		XX	
Review utility and PSC consultant semi-annual reports; review and approve utility and PSC consultant annual (and tri-annual) reports			XX
<b>Best Practices</b>			
Participate in quarterly (or semi-annual) impact evaluation process review and improvement meetings	XX	XX	XX
Prepare best practices recommendations for improvements to evaluation processes	XX	XX	
Review & approve best practices recommendations for program modifications and improvements			XX
<b>Other</b>			
Prepare materials and reports in support of Commission analysis of efficiency programs		XX	XX
Organize and conduct periodic statewide public workshops on evaluation results of EE programs		XX	XX

## Master Evaluation Schedule – Key Milestones Per EmPower Maryland Energy Efficiency Act

These dates are stipulated in the EmPower Maryland Energy Efficiency Act of 2008, and are recurring either on an annual or tri-annual basis.

<b>Milestone</b>	<b>Date</b>
PSC Report due to General Assembly on EmPower Maryland	March 1, 2010 (Annually)
Begin consultation with MEA/PSC on next 3-year program design	July 1, 2011 (Tri-annually, continuous)
2012-2015 Three-year Program Design- finalized and filed with PSC	September 1, 2011 (Tri-annually, continuous)
Commission approves/disapproves of 2012-2015 Three-year Program Design	December 1, 2011 (Tri-annually, continuous)