Mid-Atlantic Technical Reference Manual (TRM)Updating Process Guidelines

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Prepared for the NEEP Regional EM&V subcommittee
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With special thanks to the participating members of the
NEEP Regional EM&V subcommittee

Recommendations and proposed update process for the Mid Atlantic TRM

Overview[1]

The Technical Reference Manual is the outcome of a project conducted for the Regional Evaluation, Measurement and Verification Forum ('the EMV Forum') sponsored by Maryland, Delaware and the District of Columbia. The intent of the project was to develop and document in detail common assumptions used to estimate savings and cost effectiveness for approximately thirty prescriptive residential and commercial/industrial electric energy efficiency measures. For each measure, the TRM includes either specific deemed values or algorithms[2] for calculating:

Gross annual electric energy savings;

Gross electric summer coincident peak demand savings;

Gross annual fossil fuel energy savings (for electric efficiency measures that also save fossil fuels, and for certain measures that can save electricity or fossil fuels);

Other resource savings if appropriate (e.g. water savings, O&M impacts);

Incremental costs; and

Measure lives. (the useful life of the measure, or remaining useful life of existing, functioning equipment

The TRM is intended to be easy to use and to serve a wide range of important users and functions for different stakeholder groups, including:

Utilities and Efficiency Program Administrators and Program Implementers– for cost-effectiveness screening and program planning, tracking, and reporting and default savings values to use in the absence of primary data.

Regulatory entities, independent program evaluators, and other parties – for evaluating the performance and cost effectiveness of efficiency programs relative to statutory goals and facilitating planning and portfolio review; and

[1] Much of the TRM description in this overview is copied directly from the preface to the Mid-Atlantic TRM v2.0

[2] Typically, the algorithms provided contain a number of deemed underlying assumptions which when combined with some measure specific information (e.g. equipment capacity) produce deemed calculated savings values.

Market Monitors, such as PJM's Reliability Pricing Model (its wholesale capacity market) and future carbon markets – for valuing efficiency resources.

The TRM is intended to be a flexible and living document. To that end, NEEP, the project sponsors, and the TRM authors all expect it to be periodically updated with additional measures, modifications to characterizations of existing measures and even removal of some measures when they are no longer relevant to regional efficiency programs.

Now that it has been developed and is in use, the Mid-Atlantic TRM will benefit from an objective and thoughtful update process. Defining a process that coordinates with the needs of users, evaluators, and regulators is critical. Below we outline our proposal for a process for the update of information in the TRM and we provide recommendations on the coordination of the timing of this process with other critical activities[3].

This proposal for an update process and accompanying recommendations was prepared for the regional EM&V Forum by Shelter Analytics. Bret Hamilton of Shelter Analytics was project manager, he was assisted by Sam Dent of VEIC, as well as by Matt Socks of Optimal Energy, Inc, with oversight and assistance by Elizabeth Titus of NEEP.

We wish to extend our gratitude to all of the Mid-Atlantic TRM forum members and their consultants who participated and informed this process, with special thanks to: Mike Messenger, Itron; Bryan Ward, Cadmus Group; Dave Pirtle, Pepco Holdings, Luba Abrams, Karl Esser, and Kristy Fleischmann, Baltimore Gas & Electric; Drew Durkee, ICF; Dennis Hartline, Maryland Energy Administration; Bahareh VanBoekhold and Cara Lampton, DNREC; Nikola Janjic, VEIC/DC SEU; and Cheryl Jenkins, VEIC. We could not have completed this project without your contributions.

The process of developing recommendations for update included these steps:

1. Review and summarize TRM update processes in place in other jurisdictions for comparison and guidance.
2. Recommend an overarching strategy to update the TRM in a timely and appropriate manner, to best meet the needs of the organizations using it.
3. Interview regional stakeholders to identify needs and schedules relevant to the update process, commonalities that are mutually supportive of a single process and schedule, as well as any unique needs or situations that necessitate extra attention.
4. Identify cyclical activities that may benefit or detract from the TRM update process, and propose a schedule for measure review and update.
5. Identify measures to be added or updated in the next round of TRM measure development, later in 2012. These recommendations will be presented in a separate document.

[3] Please see Appendix B of Version 2 of the Mid-Atlantic TRM for an overview of the needs and prior recommendation for the establishment of a formal process to keep the document relevant and up to date.

What follows is a summary of our findings and recommendations and a draft update process document. Our specific recommendations are included in each section (for easy reference) as well as incorporated into the draft update process.

Review of TRM update strategies in other places and lessons learned

The project team reviewed current TRM update processes in place in the states of Illinois, Maine, Massachusetts, New Jersey, Pennsylvania and Vermont for comparison. We looked for any common themes, as well as things that work particularly well within the context of that particular jurisdiction. We also looked for pitfalls that from our perspective, would detract from the ability to keep the TRM fresh and relevant in the Mid Atlantic context. The comparative tables are included in Attachment 1: TRM update process in other places.xls

Lessons learned, some examples and some recommendations

Clearly define roles and responsibilities

There should be an individual or governing group who is ultimately responsible for keeping the document up to date and determining who works on the analysis and adjustments during updates, as well as facilitating final approval of changes and updates.

The consultant team thinks NEEP currently fills this role well, working with the subcommittee and EM&V Forum Steering Committee in a consensus based process.

Limit the legal/regulatory hoops required to make changes

Some jurisdictions such as Pennsylvania require approval by the regulator and significant public consultation for any TRM adjustment - this can significantly hold up the process of updating or developing new measure characterization and can limit energy efficiency program offering

Others, as in Vermont, give the evaluator/regulator significant opportunity for input but the TRM does not need to be formally approved to be used. If significant disagreements remain they are addressed during the annual Technical Advisory Group meetings prior to the savings verification process.

The current consensus "approval" process appears to be meeting the needs of the stakeholders in the Mid-Atlantic, so no change is recommended here. It may be noted that adding complexity to the TRM approval process can limit the ability to add new measures and update existing ones at the pace necessitated by the rapid market transformation occurring in the energy efficiency industry.

Process guidance should make it clear what assumptions are used and for which purposes

Implementers need some level of consistency in measure savings assumptions to allow adequate planning and goal setting for subsequent program years. Massachusetts handles this by always having two active versions - "Planning" and "Report" TRMs. For the Mid-Atlantic, we think deciding when and whether assumptions should be used for planning purposes, ex post evaluations or goal setting is subject to preferences of the implementers and evaluators..As such we propose not to insert any language on this topic in the TRM but assume that either

utilities or PSC staff will add this information either to the TRM or in some other forum or publications.

Set expectations about update cycle so jurisdictions can decide whether adjustments apply to current year or only future years

- Vermont allows flexibility (case by case) as to how and when adjustments should apply. Characterizing measures to reflect existing implementation methodology, or to correct clerical errors identified during the annual review process can be performed retroactively. New measure developments and additions are performed proactively. Measure characterizations are submitted for DPS and 3rd party evaluator review through a portfolio update process.
- Massachusetts applies changes and files a "Report TRM" ex-post (after evaluations are complete and results are included in annual performance reports).
- The Pennsylvania process takes too long for retrospective corrections and is used only ex-ante, i.e. for planning.

We recommend recognizing the difference between correcting errors[4] and updating parameter values based on new evaluations or research. Error corrections may be applied ex-post, updates stemming from new evaluations or codes and standards applied ex-ante. If ex-post adjustments occur, each jurisdiction may want to consider a process for adjusting or pro-rating implementation goals if impact is significant enough.

Need for regular contact among implementers, evaluators, TRM administrators

A TRM requires regular review and revision to remain useful and relevant. The EM&V subcommittee appears to be a good forum to discuss TRM changes and reach consensus.

The consensus process is valuable but can be time consuming. We recommend the stakeholders form subcommittees to address the major markets (residential, commercial, institutional, etc.) to address any concerns on an ongoing basis and keep track of the need for updates based on new programs, evaluations, research, etc. The members will be responsible for informing the regional coordinator about update requests, keeping track of program needs, and relevant new studies for future use in the TRM. The subcommittees should meet at least once per year to discuss update needs, with regular email communication in between. The central coordinator may play a role in organizing information, tracking requests, hosting and facilitating the subcommittee meetings.

[4] A significant error is one that causes substantial change to reported savings. For example, if there is a minor calculation error that results in a 0.5% difference in savings, it is probably not worth the hassle of changing values ex-post. There are two factors that dictate that significance – level of savings impact and penetration. A 0.5% change to a measure that is 80% of program savings would be worth ex post update, while a 25% error to a measure that is only 0.01% of savings may not be. We think the thresholds at which action is required can be subjectively determined ad hoc. If the stakeholders find it necessary, a threshold dictating action can be agreed upon.

Utilize savings verification and evaluation results to inform TRM updates
Stakeholders should plan to highlight good sources of specific data, recent studies and other relevant research during annual TRM update meetings and make sure that the update schedule and budget allow for proper review and incorporation of those results.

Develop process where old measures are systematically reviewed through annual update process
Vermont has made the commitment that no measure characterization in the TRM should be more than 3 years old. Existing measures older than 3 years are reviewed annually and updated with newest evaluation results and savings assumptions. We think this is a good practice and recommend it for the Mid Atlantic TRM. The Mid Atlantic TRM currently has "Effective Date" and "End Date" fields at the measure level, reflecting the last review date, and expected end date for the assumptions. We suggest adding a "Last Periodic Review" field in the TRM at the measure level. If either the elapsed time since the "Effective Date" or "Last Periodic Review" exceeds 3 years, a thorough review of all measure assumptions is triggered.

Maintain a reference library to track changes and legacy measures that allows transparency and consistency through time.
Measure histories could be archived into a single read-only document, multiple documents, or stored in a searchable database for easy reference in the future. We recommend using the completion date to identify each version, rather than version numbers (v1, v1.2, v2 etc) to make the archive easier and more intuitive to use and reference.

Develop a protocol and database to catalog pertinent feedback, error corrections, updates, new information, new measure suggestions and references
The Stakeholders will need a place and process to file, store, and retrieve all of the various types of communication regarding TRM content that develops between updates, and the action steps taken in addressing each item. We suggest use of an online resource that is accessible to the coordinators (read/write) and users (read only) to house the TRM update database. The NEEP EM&V portal web site would be an excellent location. An example can be seen at: http://www.ma-eeac.org/DPU.htm

This database will need gatekeepers[5] to help reduce redundancy and keep the content concise, relevant and timely. We suggest regional coordinators in each jurisdiction act as gatekeepers to compile and submit new requests through the database.

Summary of surveys and interviews with regional partners

Because the regulators and the utilities in each of the three jurisdictions have independent concerns and internal schedules that must be accommodated by the TRM update process, the next phase of our research included surveys and interviews with key individuals representing the major stakeholders in the region. Specifically, our goal was "To solicit feedback from regulators, utilities, and program administrators regarding the coordination of the regional TRM

[5] See definition of regional coordinator in "Roles" section of Draft Update Process on page 8

with state-specific TRMs using a survey developed for the process to capture common elements and departures," and to "Gather input from utilities who work in multiple states."

There were a few common themes that came up in the interviews:

Substituting primary data:

Several individuals stated there is some confusion as to when it is appropriate or acceptable to substitute "better" site specific data in place of the assumptions in the TRM. It should be clearly stated in each measure in the TRM where substitutions are likely desirable, how and when site or program specific measure information may and should be substituted for the deemed values or algorithms in the TRM. Most commercial measures in the current TRM already include some language (either in a footnote or parameter definitions) to this effect. Our team thinks this is best considered measure by measure, with careful guidance included in the measure characterization and caveats to avoid using alternative data only when it is convenient to report higher savings. Ultimately, for users of the TRM, the decision to stray from deemed or established values must be weighed against the risk of having gross savings adjusted downward during the verification process unless there is sufficient supporting documentation.

Support for the reliability pricing model (RPM)[6]

There is a need for more measures in the TRM that support planning activities to allow programs to qualify for participation in the RPM, the mid-Atlantic capacity market. Specifically mentioned were more TRM entries for appliances and weather-dependent measures. Future updates and new measure characterizations should include information that supports the planning and reporting stages of market auctions and reporting. We suggest planning for and prioritizing the development of new measures around the relative importance of the measures within the context of implementation and overall program savings. We note that the PJM reporting period (beginning on June 1) and the EmPower Maryland reporting schedules are not synchronized see Schedules, below).

State/District specific TRM versions

Delaware and the DC SEU each have their own TRMs. These TRMs were built mostly to fill gaps in measure characterizations for specific programs where those measures are not already in the Mid-Atlantic TRM, but also to accommodate region-specific data. Both jurisdictions turned to the Mid-Atlantic TRM first as a primary source, and filled in as needed to support program planning and reporting. Maryland relies on the Mid-Atlantic TRM solely, and has also been very active at the TRM Subcommittee in directing development of measures. Interviewees expressed universal support for more coordinated effort in research and development of the regional TRM. Our interpretation of the interview responses is that if the existing Mid-Atlantic

[6] In the Mid Atlantic, the RPM (reliability pricing model) administered by the PJM is similar in purpose to the FCM administered by ISO New England.

TRM had met all the program needs for each jurisdiction, the local TRMs would not have been necessary.

Schedules

Regulatory schedules are still under development in all three jurisdictions, and interaction with any TRM update schedule appears to be somewhat flexible.

Availability

Generally speaking, people in Maryland are more available to consider TRM measure updates during May to late June, and September through October. The PJM RPM reporting year begins on June 1[7].

Program planning

EmPower Maryland operates on the calendar year with quarterly progress reporting periods. Washington DC SEU is funded over the calendar year but reports October 1st through September 30th. Delaware has not yet established a regular reporting cycle, but evaluation reports are due in July of 2012. Maryland evaluation and savings verification reports generally are published in March – April timeframe. EM&V reporting cycles have not been established in DE or DC.

Summary table of schedules

	Maryland	Delaware	Washington DC	PJM-FCM
Cycle	Jan 1- Dec 31	Jan 1- Dec 31	Oct 1-Sept 30	June 1- May 31
January	Annual, externality reports, draft evaluation		Savings Verification Results Finalized	
February				
March	Final impact evaluation report			Third Incremental Auction- June 1
April	Eval. Plan; Verification	Annual reports due ? (TBD)		
May			Program Planning	Base Residual auction +3Y
June	Update ex ante values		Program planning	Delivery Year Begins
July	Cost effectiveness, Q2 report	Evaluation reports due (2012) Begin DETRM updates	Program planning	Second incremental auction +1Y
August	Annual report		Program planning	
September	Draft program design changes	Complete DE TRM updates		First Incremental Auction +2Y

[7] The research phase of this project did not reveal any sort of synchronization of TRM updates with ISO New England forward capacity market schedules in the that region.

October	Q3 progress report		Savings Verification input to local TRM	
November	Final program design changes		Savings verification database	
December	Update ex ante values; final program designs approved		Savings verification database	

Proposed update process

Roles

Central coordinator
NEEP will continue to play a central coordinating role in managing TRM content and updates. The Central coordinator will set up and maintain a limited-access, online database that will catalog update and error correction requests, as well as record follow-up action steps. The central coordinator will work at the direction of the regional partners to establish budgets, work plans and engage any contractors necessary to develop and manage TRM content.

Regional coordinators
Each state and Washington DC will designate personnel to serve as coordinators and gatekeepers to help manage the flow of information from TRM users to the central coordinator. Requests for updates, error corrections, etc. will go to the regional coordinators to be cataloged on the NEEP Mid Atlantic TRM update request tracking database. This may be facilitated with development of a standard update or error correction request form that can be easily logged in the central database.

Stakeholders
The regional partners to the NEEP EM&V Forum Mid-Atlantic TRM effort, regulators and evaluators are referred to here as stakeholders.

Users
Anyone who uses information in the Mid-Atlantic TRM, but is not designated as a regional coordinator or central coordinator is referred to here as a user.

Contractors
Contractors are mostly treated interchangeably with the other roles in the process. Coordinators, stakeholders and users are of course, always free to use a designated, empowered contractor for representation or proxy in this process.

Use of the TRM

Each jurisdiction will decide for itself whether to apply assumptions in the TRM in an ex ante or ex post manner, or both. We recommend taking a pragmatic approach, applying changes and corrections as appropriate in ex post applications, and new measures or major updates ex ante.

It is expected that the TRM will be used in program planning, reporting, verification, evaluation, and demand reduction activities, as well as for preparing plans and reports for the PJM forward capacity and RGGI markets.

The TRM measures will include, to the extent possible, information that supports these uses.

In most cases, users minimize risk of ex-post adjustments to savings claims where savings values are derived from the TRM.

The TRM will be revised to include language that explains the reasons for and risks of using customer specific or primary data, instead of using the values in the TRM. Each new measure will include recommendations as to when and how customer specific or primary data could appropriately supersede the values and algorithms in the TRM, with a default provided in instances when this is not available. Recommendations will be added to existing measures as determined necessary by the stakeholders during the next update. The language and recommendations will bear warnings about "cherry picking" primary measure data only when it is convenient to boost program results.

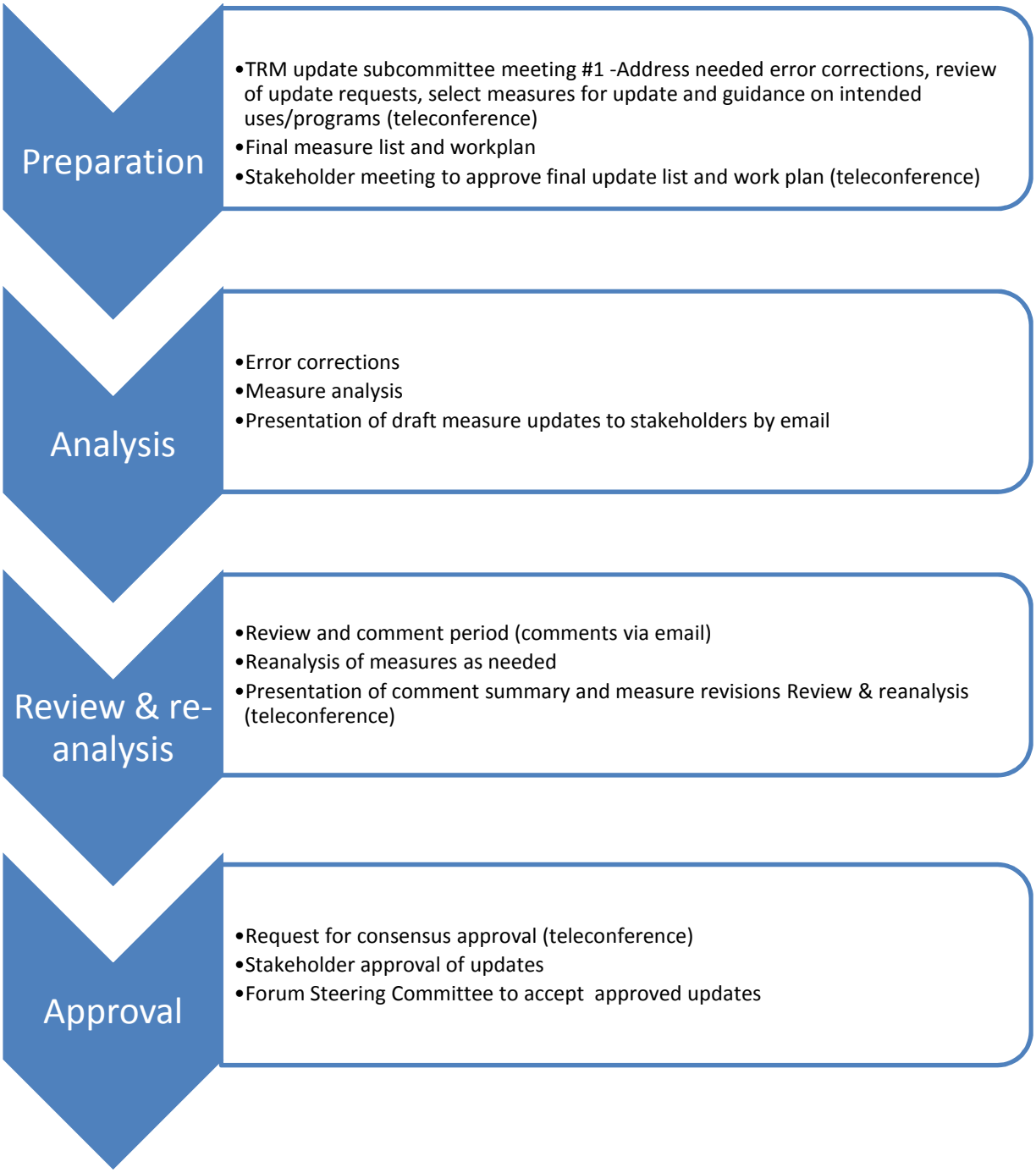
Coordinating the regional and local TRMs

Based on interviews with the stakeholders in Delaware and Washington DC, the main purpose of the local TRMs is to fill gaps in the regional TRM, ensure program needs are met and to accommodate local conditions in the measure assumptions. Both documents used the Mid-Atlantic TRM as a starting point and source for appropriate data and references. At the same time, stakeholders in all three jurisdictions have expressed interest in sharing data and resources while collaborating on research projects and subsequent TRM development work.

We think the Mid-Atlantic TRM could be expanded to meet the needs of all three jurisdictions with more relevance and less cost than will be required to develop and maintain the three separate TRMs. By maintaining focus on the single document, we think that coordinated research and development efforts will naturally follow. The project as a whole bears the potential to have value much greater than the sum of its parts.

We recommend starting conversations now to plan a path that develops the Mid-Atlantic TRM to meet the needs of all three jurisdictions by January, 2014.

Overview of the TRM update process.



Update cycle

A calendar outline of this schedule is in the table Proposed TRM update Schedules on page 16 below

Errors, corrections, suggestions
The update process will begin by tracking any errors, necessary corrections or additions that are found in the existing document by cataloging them in a dedicated database on the NEEP EM&V website portal. Regulators and evaluators will need to be especially alert to needed changes that may result in reduced savings for program administrators, such as changes in codes and standards. The central coordinator will also play a role in identifying and addressing this type of change. The database shall facilitate recording what actions were taken and when they were applied so that a historical record of changes is kept. Update requests will be submitted to the regional coordinator who will then log them into the update database.

TRM update meetings
We think holding regular update meetings will help prioritize efforts for error correction and measure updates. The Stakeholders will form subcommittees by major market area. The subcommittees will meet once per year to discuss program and technology changes as they pertain to the TRM, as well as any errors, concerns, new measures, or new programs that come up. Update meetings will be organized and hosted by the central coordinator or its contractor. The measure update meeting is intended to deal with necessary error corrections , a summary review of update requests submitted and selection of a final list of measures for update, based on relative importance and available budget. Prior to this meeting, the coordinator will circulate agenda items and measures identified in need of updates logged into the measure update tracking database since the previous meeting.

Draft prioritized list of measures for updates, additions and review of "old" measures
The central coordinator is responsible for compiling and maintaining a list of new measures, measures that require updates, and error corrections for the next round of revisions throughout the year that were identified through the TRM update database and discussed at the update meetings. Individual states/participants can nominate measures and weigh-in on their relative priority.

The process for identifying specific criteria for any proposed amendments should include:

- Identification of errors in the language, including typos and errors in references.
- Updated studies relevant to parameters used that cause a material (e.g., more than 2% of total program savings) change in impacts.
- Changes in codes or standards that impact savings estimates.
- New measures or technology.

The final list will be subject to approval by the stakeholders in a consensus process. The final list of planned updates and additions must be supported by a corresponding budget. It may make sense to collaborate with the consultant making the updates to help with scope and budget. Stakeholders will be given between one and two weeks to review and approve final

update lists. A conference call will be held to review questions or concerns, and a roll call or vote will be held to approve the final measure list. This step should be completed 5 months prior to scheduled adoption of a revised TRM to allow enough time for research, documentation feedback and final approval of the updates.

Research and documentation
The central coordinator will conduct the necessary research and analysis to characterize each measure assumption as appropriate for the region at the direction of the stakeholders. The research and documentation phase will take place over about two months and based on experience, should be completed at least 3 months prior to scheduled adoption of a revised TRM to allow for review, feedback and reanalysis (if needed) of measure updates.

Results and feedback
Draft final measure assumptions will be presented to the stakeholders for review and approval via email. Stakeholders will be given two weeks to review draft measure updates and respond with questions and feedback in writing and email to the central coordinator (see Measure updates, below). Given busy schedules, if may take as long as one month to gather feedback from the stakeholders. Feedback should be complete and compiled 2 months prior to scheduled adoption of a revised TRM. It has historically taken as long as a month to re-analyze measures and garner consensus support for any changes, leaving one month for final draft review and consensus approval.

Reanalysis
The Central coordinator will then address all questions and concerns raised during the feedback period. If needed, some measures will be re-analyzed at this time. Comments will be summarized and presented with the revised/reanalyzed measures in a stakeholder conference call (or calls as required).This will give the opportunity for in depth discussion with the goal of reaching consensus on all contentious issues. The exact number of conference calls required will depend on the number of measures and complexity of issues in question. This has been quite variable in the past and we expect it to continue to be so. Reanalysis should be completed 1 months prior to scheduled adoption of a revised TRM to allow time for final review and consensus approval.

Final draft approval
Once all stakeholders' questions are addressed, and at least one week after the final measure review meeting, the central coordinator will call for consensus approval of the new measures and updates (see Approval process below). In the past, one month has been sufficient for review of the final draft and consensus approval of the updates.

Selection of measures for update and addition

Identifying new measures
New programs, technologies and implementation models all provide a potential need for new measure assumptions. All users, stakeholders, and coordinators will keep track of their own

needs for new measure assumptions and submit quarterly to their regional coordinator(s) who will log the requests in the NEEP Mid Atlantic TRM update database.

Applying updates
When new data, studies, or research make it apparent that there is a need to update existing measure assumptions, this information will be submitted to the regional coordinator(s) for inclusion in the TRM update database.

Review of "old" measures
The central coordinator will flag any measures not updated within the previous three years. These measures will automatically be included for careful review and update or replacement.

Drafting measure assumptions

The central coordinator will manage all measure updates at the direction of the stakeholders. Measures added or updated in the TRM will be researched to learn how they are treated in other jurisdictions and what new developments may have occurred.

Input of new data and relevant results
New developments could be changes in technology, new research, implementation methods, program evaluations, verification results, or any other information that affects the results expected from any given measure.

The central coordinator will conduct a survey of recent relevant reports and studies to inform the new measures. The central coordinator will call upon the Stakeholders to provide input regarding knowledge of new research and relevant data that could improve measure assumptions.

Due diligence
The central coordinator will take special care to make sure Stakeholder needs and interests are represented in the draft measure assumptions, and that the values are as fair and reasonable as possible.

Weather-dependent measures will be analyzed using TMY weather data for each jurisdiction. The regional coordinators will designate which weather stations are to be used for their jurisdictions.

Draft measure assumptions and algorithms will undergo rigorous internal review. Once released for external review, stakeholders will conduct their own reviews and should apply appropriate expertise from their own staff and consultants

Approval process

Stakeholders will have at least two weeks to review newly drafted measure assumptions and to submit comments. The central coordinator will review and if necessary reanalyze the measures in question. A summary of comments and revisions will be presented and discussed with the group in a conference call (or calls if required), during which the central coordinator will provide an overview of methodology and address any additional questions for each measure

with the goal of reaching consensus. After all questions and concerns are addressed, the central coordinator will call for consensus approval of the final measure assumptions.

Silence will be considered tacit approval.

Following approval by the stakeholders in the involved in the update process, an updated TRM will be drafted and released. Per the operational guidelines of the Regional Evaluation, Measurement and Verification Forum, it will be distributed to Forum members for review and subsequently to the Forum Steering Committee for their acceptance.

Schedule(s)

The following table is a reprise of the table from the schedule discussion above, with the addition of two proposed TRM update schedules. There is an interesting conflict represented here. The schedule that best fits planning and reporting needs is quite different from the schedule that lines up with times of the year when people have said they are available to work on updates to the TRM.

Option 1 shows updates to the TRM which result in a revised TRM every year in May. This schedule meets the most needs in terms of applying most recent evaluation and reporting data, while having finished assumptions ready for the PJM forward capacity delivery year that begins on June 1. It also anticipates the start of the Washington DC SEU year in October. Advantages: benefits more quickly from Maryland program evaluations and Delaware reporting, anticipates PJM and DC program years. Disadvantages: This is a busy time of year for all; Delaware and DC evaluations won't be ready yet.

Option 2 correlates better with the times the stakeholders stated they are available to participate in the process on the survey and during telephone interviews. It produces a finished document in time for the start of program years in Maryland and possibly Delaware. Advantages: more people say they are available to contribute in late summer/fall. TRM updates will benefit from Delaware evaluations. Anticipates Maryland and Delaware program years. In time to inform Delaware and Maryland local TRM updates Disadvantages: Very little time available from the time final TRM is available in November to the time in December that updates to the tracking system must be made to track saving in the next program year starting in Juje. Also updates would come after the start of the PJM and DC planning years

Overall, we see (Option 2) with a complete revised TRM in November of each year as a better match. We think either could work, but all parties should agree which will serve the greater good.

Proposed TRM update Schedules

	Maryland	Delaware	Washington DC	PJM-FCM	Mid A TRM update option 1	Mid A TRM update option 2
Cycle	Jan 1- Dec 31	Jan 1- Dec 31	Oct 1-Sept 30	June 1- May 31	June 1-May 31	Dec 1- Nov 30
January	Annual, externality reports, draft eval.		Savings Verification		Final update list	
February					Analysis	
March	Final impact evaluation report			Third Incremental Auction- June 1	Analysis	
April	Eval. Plan; Verification	Annual reports due ? (TBD)			Draft TRM and Comment period	
May			Program Planning	Base Residual auction +3Y	Reanalysis (if needed); **Final TRM**	
June	Update ex ante values		Program planning	Delivery Year Begins		TRM update committee meeting
July	Cost effectiveness, Q2 report	Evaluation reports due (2012) Begin DETRM updates	Program planning	Second incremental auction +1Y		Final update list
August	Annual report		Program planning			Analysis
September	Draft program design changes	Complete DE TRM updates (2012)		First Incremental Auction +2Y		Analysis
October	Q3 progress report		Savings Verification to TRM			Draft TRM and Comment period
November	Final program design changes		Savings verification Database			Reanalysis (if needed); **Final TRM**
December	Update ex ante values; final program designs approved		Savings verification Database		TRM update committee meeting	