

**FILED**

**SEP 16 2011**

**PUBLIC SERVICE COMMISSION  
OF  
MISSISSIPPI**

**MISS. PUBLIC SERVICE  
COMMISSION**

**DOCKET NO. 2010-AD-2**

**PROCEEDING TO POSSIBLY AMEND CERTAIN RULES OF PRACTICE AND  
PROCEDURE; ORDER ISSUING PROPOSED RULES**

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**COMMENTS OF HALE POWELL, MS, CEM  
REPRESENTING 25X25**

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**Q. PLEASE STATE YOUR NAME AND ADDRESS.**

**A. My name is Hale Powell, and my business address is HPowell Energy Associates, 20 Acton Rd, Westford, Massachusetts, 01886.**

**Q. PLEASE DESCRIBE PROFESSIONAL EXPERIENCE RELEVANT TO THIS ENERGY EFFICIENCY DOCKET.**

**A. I have been an active professional in the electric utility industry since 1980 with a primary focus on utility administered energy efficiency programs. During the period 1992 to 2003, I was a senior energy efficiency planner and program evaluator for National Grid, a large electric and gas utility which implements one of the largest energy efficiency efforts in the US. Since 2003, I have been an independent consultant specializing exclusively in demand side program design and associated regulatory issues. Much of my consulting practice entails providing technical and analytic support directly to utilities with comprehensive DSM programs. I also provide consulting support to a variety of non-profit organizations such as 25x'25.**

**I have provided input and expert testimony in a variety of state regulatory settings, particularly in the Southeast region. Since 2007, I have participated in a wide range of related dockets in Florida, Georgia, Arkansas, Virginia, Mississippi, Oklahoma, Louisiana and West Virginia. In addition, I have been active in various "collaborative" energy efficiency efforts in Oklahoma, Georgia, Virginia, Massachusetts, Mississippi and Arkansas. In these collaborative projects I have worked closely with utilities, regulatory staff and other parties.**

**I earned a Master of Science degree from the University of Pennsylvania in 1991 in Energy Management and Policy with a specific concentration on demand side electric resources, energy policy and utility regulation.**

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION ABOUT THE ISSUE OF ENERGY EFFICIENCY?**

A. Yes. In 2008 I provided extensive testimony on the subject of resource planning and energy efficiency to the Commission in Docket No. 08-UA-158, the Proceeding to Review Statewide Energy Generation Needs.

Q. PLEASE DESCRIBE YOUR INVOLVEMENT TO DATE IN THE DEVELOPMENT OR REFINEMENT OF ENERGY EFFICIENCY RULES IN MISSISSIPPI.

A. I played a very active role in the Mississippi Energy Efficiency Collaborative (MEEC) constituted by the MPSC in 2010. During this process I submitted extensive comments many of which focused on the 2007 Arkansas energy efficiency ("EE") Rules and subsequent EE developments and PSC orders in that state.

Q. THE ENERGY EFFICIENCY RULES IN ARKANSAS WERE THE SUBJECT OF EXTENSIVE DISCUSSION DURING THE MISSISSIPPI COLLABORATIVE PROCESS. CAN YOU DISCUSS YOUR ROLE IN THE DEVELOPMENT OF ENERGY EFFICIENCY PROGRAMS AND RULES IN ARKANSAS?

A. Since 2009 I have been intensively involved in the development of energy efficiency policy and programs in Arkansas. I have submitted substantial testimony in a number of related Commission dockets as well as playing an active role in various "collaboratives" established by APSC. Currently, I am working with APSC Staff and utilities to develop Rules language that addresses the issue of utility program EM&V (evaluation, measurement and verification).

Q. HOW ARE YOUR COMMENTS ORGANIZED?

A. My comments are organized as follows:

**Section One – Overview of Comments**

**Section Two – Suggested Enhancements to Commission Draft Rules**

**Section Three - Program Cost-Effectiveness**

**Section Four – Suggested Next Steps**

Q. ARE YOU SUBMITTING ANY EXHIBITS TO ACCOMPANY YOUR COMMENTS?

A. Yes. I am attaching "redlined" and "non-redlined" versions of the MPSC Proposed Rules in which I make a number of recommendations for possible refinements in the draft rules. See Attachment HP-1.

**Section One – Overview of Comments**

Q. WHAT IS YOUR OVERALL APPRAISAL OF THE DRAFT RULES CIRCULATED BY COMMISSION STAFF ON AUGUST 4, 2011?

A. I am very encouraged at the quality and comprehensiveness of the proposed rules. I applaud MPSC Staff and the members of the Mississippi Energy Efficiency Collaborative (MEEC) for the thorough and productive discussions which provided the basis for the draft rule. I fully and enthusiastically support many of the elements of the draft including the initial "Quick Start" program approach and the reliance on well established "best

practices” as the basis for the programs and associated regulatory mechanisms that will support them. I also support the rule’s stated objective of full cost recovery and the opportunity for utilities to earn a financial incentive for implementing programs that provide a high level of value to Mississippi ratepayers.

Q. DO YOU HAVE ANY SUGGESTIONS WITH RESPECT TO POSSIBLE REFINEMENTS OF THE MISSISSIPPI DRAFT RULES?

A. Yes. Section Two of my comments identifies proposed modifications that may be considered by the Commission. . These recommendations reflect a variety of program and regulatory “lessons learned” in other jurisdictions. In particular, I have drawn heavily on the regulatory and energy efficiency program experience in the nearby state of Arkansas since its original Energy Efficiency Rules were promulgated in 2007. In my view, the various “lessons learned” in that jurisdiction can, and should be, anticipated in the rules approved by the Mississippi Commission.

Q. DO YOU HAVE ANY SUGGESTIONS WITH RESPECT TO ADDITIONAL COMMISSION ACTIONS TO PROMOTE THE RAPID DEVELOPMENT OF EFFECTIVE ENERGY EFFICIENCY PROGRAMS IN MISSISSIPPI?

A. Yes. I have a number of specific suggestions that the Commission might consider following the approval of the Mississippi rules. These include encouraging wide stakeholder input into program and policy development, the hosting of public technical forums to explore cost effectiveness options and the commissioning of a statewide energy efficiency “potential study” to help assess the level of cost effective and achievable energy efficiency available in the state.

### **Section Two – Suggested Enhancements to Commission Draft Rules**

Q. IN YOUR ATTACHMENT HP-1 YOU IDENTIFY A NUMBER OF RECOMMENDED ENHANCEMENTS TO THE DRAFT RULES. ON WHAT BASIS DO YOU MAKE THESE SUGGESTIONS?

A. In general, these suggestions reflect 1) the “best practice” principles as identified by the National Action Plan for Energy Efficiency (“NAPEE”); 2) regulatory rules and orders promulgated in other jurisdictions; 3) practices adopted by utilities and regulatory authorities with significant energy efficiency program experience and 4) my professional experience as a utility energy efficiency staffer and energy efficiency consultant with experience in numerous states.

In particular, many of my recommendations for modifications in the draft rules are rooted in the language of regulatory orders issued by the Arkansas PSC subsequent to the adoption of the 2007 Rules in that state.

Q. CAN YOU SUMMARIZE THE RECOMMENDED CHANGES YOU HAVE IDENTIFIED IN THE VARIOUS SECTIONS OF THE PROPOSED RULES AND THE BASIS FOR THESE SUGGESTIONS?

A. Yes. A brief summary of my recommendations for draft Rule 29 is as follows:

1- Section 100 – Purpose.

My recommendations provide additional language that clarifies the sequential relationship between the initial Quick Start programs and the subsequent large scale Comprehensive programs.

2- Section 101 – Benefits and Objectives of Energy Efficiency Programs

This would be a new section to be added to the MPSC rules. I suggest the inclusion of 12 specific benefits and objectives associated with energy efficiency programs. The recommended language is taken, in its entirety, from the Section Two of the 2007 Arkansas Rules for Conservation and Energy Efficiency Programs.

Language articulating the broad objectives of Mississippi efficiency programs would be a useful element in the rules. Such language would clearly convey to the public and all parties the fundamental objectives to be pursued by means of ratepayer investments in energy efficiency. This language would also provide broad guidance with respect to the type of programs to be supported under Rule 29.

Unlike the 2007 Arkansas Rules, I do not suggest that Mississippi utility program filings should be required to demonstrate how each proposed program specifically supports the achievement of each of the 12 stated objectives. My experience in Arkansas utility filings under this requirement is that this is an unnecessary element and would provide the Commission with little genuinely useful information. In my view, utility filings should only be required to provide information that provides actual value to the PSC or other stakeholders.

3- Section 102 – Definitions

Most of my recommended modifications to the draft definitions are relatively minor and focus on providing a bit more clarity and context with respect to certain terms such as “best practices”, “energy efficiency”, “demand response”, “cost effective” and “deemed savings”. As an example, I suggest that the definition of deemed savings values conform to the deemed savings recommendations of the National Action Plan for Energy Efficiency (NAPEE). These NAPEE recommendations, for example, suggest that “historic” evaluation findings from other jurisdictions would be the preferred means of developing deemed savings values for Mississippi rather than reliance on “engineering calculations” as identified in the draft rule. NAPEE also identifies the type of measures for which deemed savings estimates are appropriate.

I also suggest that the definition of “energy efficiency” adopt the language used in the 2007 Arkansas rules with respect to the “rate at which energy is used”. The use of the term “input” has the potential of shifting Mississippi programs away from the primary focus on improving the efficiency of customer end-use equipment and energy utilization and reducing customer bills. I do agree that improvements in transmission efficiency, power plant heat rate or the reduction of gas leaks should be a very desirable objective for the Commission and individual utilities. However, increasing the level of effort in these

areas should not be within the scope of the current docket nor should associated expenses be recoverable via an energy efficiency rider. As is the case of best practice energy efficiency programs nationwide the emphasis of Mississippi's efficiency programs should be on the customer side of the meter.

4- Section 103 - Administration and Implementation of Programs

In this section I recommend that Comprehensive program portfolios be developed incorporating input from a variety of parties including experts, informed stakeholders and ratepayers who will be both funding and benefiting from the programs implemented by Mississippi utilities. The use of such "collaborative" efforts is widespread in jurisdictions nationwide as well as in the Southeast region<sup>1</sup>. The benefits of such collaborative efforts is that ratepayer funded efficiency programs are more likely to reflect best practices and actually are well tailored to address the needs of the ratepayers receiving the services and ensuing benefits. In addition, experience in other jurisdictions suggests that collaborative decision-making can reduce the likelihood of litigation associate with program costs and cost recovery.

5- Section 104 - Quick Start Filing Requirements

Quick Start Program Objectives and Associated Evaluation

As is stated in the draft rules, a primary objective of Quick Start programs is to accelerate the development of program infrastructure and program capabilities. Given this broad objective, it is critical that Quick Start programs define very specific objectives of this type and that the progress toward achieving these objectives be systematically assessed. If Quick Start programs are not evaluated with respect to their performance and administrative efficiency it is unlikely that subsequent Comprehensive programs will benefit from "lessons learned" during the initial Quick Start period.

In my view, one inadequacy of the 2007 Arkansas Rules was the failure to recognize the importance of evaluating the performance of initial Quick Start programs. Unfortunately, in 2009, when Arkansas utility comprehensive programs were finally proposed, there was a complete absence of information with respect to the performance, adequacy of staffing and infrastructure and comparative administrative efficiency of the Quick Start programs. As a result, a learning opportunity was lost which may have produced more effective and less costly comprehensive programs in that state. I encourage Mississippi to improve on this experience.

I recommend that the Mississippi rules anticipate this issue and specifically require that Quick Start program filings identify specific program objectives with respect to participation, the expansion of energy expertise and the development of program staff and program infrastructure. Such objectives should be accompanied by an evaluation plan by which progress toward achieving these objectives can be independently assessed. To this end, I further recommend that approximately 3 to 5% of Quick Start budgets be

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<sup>1</sup> I am currently involved in energy efficiency collaboratives authorized by regulators in Virginia, Arkansas and Georgia.



allocated to the evaluation of these programs and that evaluation results be completed well in advance of the submission of Comprehensive program portfolios.

Q. YOU INDICATE THE IMPORTANCE OF ESTABLISHING CLEAR PROGRAM OBJECTIVES FOR QUICK START PROGRAMS. WHAT SHOULD THESE OBJECTIVES BE?

A. Given the initial nature of likely Quick Start programs, the funding levels of these programs are not likely to be sufficient to make a large scale impact on energy consumption in Mississippi. However, achieving large scale energy savings from these programs should not be viewed as the primary objective.

In general, limited scale efforts such as Quick Start programs are appropriately viewed as an initial learning effort and foundation for more extensive and sustainable long term programs. Thus, a key objective of the programs should be to provide a fertile "learning experience" for both Mississippi utilities and the local contractors and energy professionals who will be identifying, designing and implementing the actual efficiency project installations.

An important element of this should be the development of internal utility expertise and staffing resources sufficient to effectively manage evaluate and plan high quality DSM programs suitable for Mississippi ratepayers of all classes. In my view, if state utilities are not able to develop these capabilities, the Quick Start programs will have failed in a critical mission,<sup>2</sup> and ratepayer expenditures would have been ineffectively spent.

Key non-savings objectives of the Quick Start programs should include the following:

- 1- Development of utility efficiency staff, expertise and necessary program infrastructure compatible with best practice standards. (quantified annual target objectives)
- 2- Provide the maximum possible level of technical training to contractors, technicians and the other energy professionals necessary to implement wide scale energy efficiency improvements for Mississippi's residential, commercial and industrial customers. (quantified annual target objectives)
- 3- Provide utility staff with a two or three year period in which to plan and develop more extensive and long term "comprehensive" DSM programs, programs which should reflect the early successes (and shortcomings) of the initial Quick Start effort. (progress metrics)

6- Section 105 - Quick Start Program Reporting Requirements

Currently, the draft rules do not identify detailed requirements for reporting progress (and challenges) during the proposed Quick Start period. In order for the Commission and

<sup>2</sup> Note that the recent December 2010 Arkansas DSM orders specifically address the need for internal utility staffing and adequate program infrastructure as essential ingredients of "comprehensive" energy efficiency programs. See Exhibit HP-2.

ratepayers to assess progress associated with their investments in energy efficiency some periodic reporting requirements should be established.

I would recommend that the Commission adopt two approaches to assessing the performance of the Quick Start effort and identifying the inevitable opportunities for improvement.

First, I would encourage the Commission to establish simple Quick Start reporting requirements that enable on-going tracking of progress toward key program objectives<sup>3</sup>. Quick Start progress metrics might include quarterly reporting of:

- a. Program participation levels to date, by customer class
- b. Estimates of energy and demand savings to date, by program
- c. Summary of program marketing plans, activities, deliverables and possible enhancements of such efforts
- d. Plans for, and progress toward the development of, utility DSM infrastructure, such as program staffing levels, project quality control, internal training, and project data tracking systems;
- e. Program evaluation spending, planned and completed activities and results;
- f. Summary of planned and completed training efforts for customers and trade allies;
- g. Summary of program "challenges" and proposed strategies to address them.
- h. Summary of progress toward achieving all other program objectives as stated in initial program filings.

Secondly, I would recommend that interested ratepayers and non-utility parties be provided regular and ample opportunities to review and discuss Quick Start progress and problems, and provide advisory input directed at program improvements. An "end of year" reporting model is simply inadequate at this point in the program development process. My experience, as a former utility employee, is that non-utility parties can provide very useful input and information upfront that can enhance the effectiveness of programs from the start.

#### Quick Start Individual Program Descriptions

Customer Education. In Section 104 I recommend that the suggested "customer education" Quick Start program be broadened to include technical training for contractors, auditors, technicians, facility engineers and other energy efficiency professionals. The accelerated development of such technical expertise is critical to the success of subsequent Comprehensive programs<sup>4</sup>. I suggest that the statewide "Energy

<sup>3</sup> In 2010 the Arkansas PSC established a collaborative "working group" to develop reasonable guidelines and requirements for energy efficiency program reporting. While the requirements developed in this process may be too extensive for Quick Start programs many elements are appropriate. However, I caution that Quick Start reporting requirements be focused on assessing program progress and not be needlessly burdensome.

Many of the Arkansas utilities did develop Quick Start reporting documents that could be used as templates for similar Mississippi efforts. In particular, the OG&E Quick Start report format would be a good starting point for similar reports in this Mississippi.

<sup>4</sup> In its initial Comprehensive program filings in 2009 Entergy Arkansas argued, with some justification, that the lack of technical expertise was a serious impediment to the full scale rollout of a comprehensive program. In my

Efficiency Arkansas" program would be an excellent model for a similar technical training and customer awareness program in Mississippi.

Demand Response. While I support the expansion of demand response programs, I suggest that program portfolios supported under Rule 29 be primarily focused on reducing customer bills and providing permanent reductions in peak demand.

7- Section 106 - Comprehensive Portfolio Plan Filing Requirements

My recommendation is that the rules do not, at this point, attempt to identify all requirements for filing Comprehensive programs following the Quick Start period. I believe that establishing such detailed requirements at this point would be premature. Instead, I recommend that such requirements be developed during the Quick Start period and reflect the a) filing requirements in other jurisdictions with established comprehensive programs; b) experience of the Quick Start programs, c) the recommendations of NAPEE or other national bodies and 4) the recommendations of Commission consultants and independent experts.

In addition, I do also suggest some caution about specifying highly detailed filing requirements in the rules since the character of energy efficiency programs are likely to change over time. Associated with such program changes will be the probable need to adjust filing requirements as well. If filing requirements are embedded within rules making such changes could be unduly time consuming and complex. While I am not fully familiar with Commission practices in Mississippi, the identification of filing requirements in Commission orders might allow for needed flexibility in this regard.

Comprehensive Portfolio Plan Individual Program Description Requirements

I recommend that detailed requirements not be included in the rules at this time and be developed, utilizing information about best practices, during the Quick Start period. As stated above, I do also suggest some caution about specifying highly detailed requirements in the rules since allowance for future flexibility might be needed as programs evolve.

I also recommend against requiring, in the individual program filings, that utilities "describe, in quantitative or qualitative terms", how their proposed programs will accomplish a number of specific objectives listed in this section. In my experience, such requirements provide little information of genuine value. I suggest deleting this filing requirement and relocating the 12 listed "objectives and benefits" to a new Section 101 of the rules.

I also recommend against providing specific "target" values for EM&V expenditures such as the 5% cap identified in the draft rules. Instead, I would recommend that the language require expenditures in conformance with best practices in other jurisdictions with comprehensive programs. While best practice expenditure EM&V levels are currently on the order of 5% of total program expenditures, this level may decrease or

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view, Mississippi should proactively address this potential constraint and aggressively promote technical training, in all customer sectors, during the Quick Start period.



increase over time as the nature of programs change in the future. I would, however, retain this specific guidance in the requirements for the limited duration Quick Start programs.

#### Pilot Programs

I recommend that the language in this section be modified to allow the operation of pilot programs that do not necessarily produce measurable energy savings. In some cases pilot programs are intended to investigate new delivery mechanisms, marketing strategies, new training curricula or other program features not necessarily directly related to producing energy savings. The language in the rule should allow flexibility in this regard in order to allow utility programs to experiment with possible program innovations.

#### 8- Section 107 - Cost-Benefit Tests

The draft rules language states that utilities may use a default evaluation period of ten or fifteen years or “the actual lives of each measure”. Since measure “lifetimes” of this sort are a very important arithmetic factor in the calculation of program net benefits (and utility incentives) I would caution against allowing a default evaluation period of this sort. In many cases, energy efficiency measures have been proven to have lifetimes considerably shorter or longer than ten or fifteen years. Using default values in these cases would inflate (or deflate) the calculation of cost effectiveness, net benefits and utility financial incentives.

Instead of authorizing “default” values of this sort I recommend that utilities be required to use evaluation periods that have been validated, and are in wide use, in jurisdictions with comprehensive efficiency programs. There are many sources of such validated data that are available to utilities and regulators.

#### 9- Section 108 - Cost Recovery

I recommend that utility performance incentives for Comprehensive programs be structured in such a way as to incentivize Mississippi utilities to develop and implement high performing programs. If the receipt of incentives is perceived to be “automatic”, programs are less likely to be effective. Utility incentives should also be based on program achievements as verified by independent EM&V.

#### 10- Section 109 - Annual Reporting Requirements for Comprehensive Programs

I recommend that detailed reporting requirements not be included in the rules at this time and be developed, instead, by utilizing information about best reporting practices in other jurisdictions. As stated above, I do also suggest some caution about providing highly detailed requirements in the rules since allowance for future flexibility might be needed as programs evolve.

I would direct the Commission to the efforts undertaken by the Arkansas Commission, in 2010, to develop detailed requirements for annual Comprehensive program reporting. The results of this collaborative effort provide utilities clear guidance for reporting as

well as ensure that regulators and the public have sufficient data upon which to assess the effectiveness and performance of ratepayer funded programs.

### **Section Three – Program Cost Effectiveness**

As further discussed below, I recommend that this section of the rules focus primarily on clarifying any minimal cost effectiveness requirements for the Quick Start programs. Instead of incorporating potentially ambiguous cost effectiveness language for the Comprehensive programs in the rules at this point, I suggest that the Commission Staff, Commission consultants, utilities and stakeholders participate in further detailed discussions on this issue during the first six months of the Quick Start period. I would recommend that such discussions might include a public forum in which national experts, such as the Regulatory Assistance Project (RAP) could lead a workshop and facilitate an informed discussion of cost effectiveness options for Mississippi.

Q. SHOULD INITIAL QUICK START FILINGS BE REQUIRED TO DEMONSTRATE THE COST EFFECTIVENESS OF THESE PROGRAMS?

A. No. While such a requirement is essential for large Comprehensive programs it should not be required for Quick Start. However, it may be useful for Quick Start program filings to cite other jurisdictions in which similar programs have been implemented and have been determined to be cost effective.

Q. IN YOUR VIEW, IS SOME OF THE DRAFT RULE LANGUAGE POTENTIALLY AMBIGUOUS WITH RESPECT TO COST EFFECTIVENESS REQUIREMENTS?

A. Unfortunately, yes. It is important for all parties to understand that any final Commission criteria for program “cost effectiveness” will have a huge impact on whether Mississippi ratepayers, in all service territories, will ultimately be able to benefit from energy efficiency programs and obtain the long term system benefits achievable via these programs.

It is imperative that such language be as clear and unambiguous as possible in order to avoid the possibility of divergent interpretations by different utilities as they design future Comprehensive programs. In this sense, clear guidelines will contribute to the overall efficiency of the process and assure a greater level of regulatory economy as proposed utility programs are assessed by the Commission in the future.

With this objective of clear and unambiguous guidance in mind, I recommend that the Commission delete draft cost effectiveness language that refers to a requirement that programs provide “aggregate ratepayer benefits for a majority of utility customers”. In my view, this language is insufficiently precise and has the potential for being problematic in the future. I am particularly concerned that such language could be interpreted to imply Commission acceptance of the “RIM” test as the primary determinant of program cost effectiveness.

Q. WHAT WOULD THE IMPLICATIONS BE OF USING THE RIM TEST AS THE PRIMARY DETERMINANT OF PROGRAM COST EFFECTIVENESS?

- A. There are volumes of literature that address the advantages and disadvantages of the various cost effectiveness tests as outlined in the California Standard Practice Manual identified in the draft rules. Suffice to say that the RIM test, although useful in some respects, has been abandoned as the primary test by virtually every jurisdiction in the US.

One, of many, concerns about the primacy of RIM is that it disproportionately focuses on the small near term rate impacts of energy efficiency programs while entirely ignoring the much larger rate impacts associated with future large capital investments in new generation assets. It is clear that that effective Comprehensive energy efficiency programs can minimize or defer the necessity for such large capital investments. As such, any near term 1% or 2% rate impacts associated with energy efficiency programs can be an effective tool for minimizing ratepayer (and overall macroeconomic) exposure to much larger double-digit rate increases associated with multi billion dollar capital construction projects.

- Q. HOW DO YOU RECOMMEND THAT THE COMMISSION FINALIZE CRITERIA FOR THE PROGRAM COST EFFECTIVENESS OF THE LONG TERM COMPREHENSIVE PROGRAM PROPOSALS TO BE SUBMITTED AFTER THE QUICK START PERIOD?

- A. In my view, there is no need for an immediate Commission determination of this issue. While 25x25 and most other parties to the MEEC process advocated the primacy of the Total Resource Cost ("TRC") other parties differed on this issue.

As a means of resolving this issue I recommend that the Commission authorize a public forum, conducted by national utility industry experts, that would enable a more thorough and informed discussion, among all parties, of the various cost effective options. I would propose that such a discussion occur during the first six months of the Quick Start period and that the Commission subsequently issue clear guidance on cost effectiveness tests and criteria in sufficient time to allow the careful planning and assessment of Comprehensive programs.

#### **Section Four – Suggested Next Steps**

- Q. FOLLOWING THE APPROVAL OF ENERGY EFFICIENCY RULES WHAT SHOULD THE MISSISSIPPI PSC DO TO EFFECTIVELY PROMOTE THE EXPANDED DEVELOPMENT OF ENERGY EFFICIENCY PROGRAMS IN MISSISSIPPI AS ENVISIONED IN THE RULES?

- A. My experience is that the regulatory approval of energy efficiency rules, by itself, will be insufficient and that a continuing and systematic effort will be required on the part of all parties. In general, I suggest that the Commission emulate the regulatory process undertaken in nearby Arkansas. Following the implementation of Quick Start programs in 2008 this process entailed a close regulatory review of the full range of energy efficiency policy issues and developed a range of reasonable and centrist policies which reflect considerable input on the part of utilities, experts and a variety of other stakeholder parties. These policies, in turn, were reflected in the developments and implementation of long term Comprehensive energy efficiency programs subsequent to the Quick Start period.

Q. BASED ON PROGRAM EXPERIENCE IN OTHER JURISDICTIONS, WHAT ARE THE CHALLENGES THAT MAY IMPEDE THE SUCCESS OF ENERGY EFFICIENCY PROGRAMS IN MISSISSIPPI?

A. Although not fully inclusive, I will list some of the likely major challenges to energy efficiency success.

- 1- Uncertain availability of an adequate number of the trained contractors and other energy professionals essential for designing and implementing energy efficiency projects on any scale. Until the an unambiguous long term commitment is made to promote energy efficiency programs private industry may be reluctant to invest in the training, tools and staffing required to implement energy efficiency on a large scale.
- 2- Uncertainty about whether Mississippi utilities will allocate sufficient qualified staff and resources to effectively plan and manage the energy efficiency programs, carefully evaluate their effectiveness and make program modifications in order to enhance program performance.
- 3- Reluctance of parties to embrace reasonable best practices widely applied in other jurisdictions. Such best practices include clear criteria for program cost effectiveness, program staffing levels, opportunities for inclusive input into program and policy decisions, reasonable levels of program incentives and lost revenue recovery and the application of robust evaluation to assess the actual performance and effectiveness of the ratepayer funded programs.

Q. GIVEN THESE CHALLENGES WHAT SPECIFIC STEPS DO YOU RECOMMEND THAT THE COMMISSION ADOPT FOLLOWING THE APPROVAL OF ENERGY EFFICIENCY RULES?

A. I recommend the following near term next steps for Commission consideration:

1. Similar to past efforts in Arkansas, the MPSC should host a series of public technical forums with the objective of increasing the familiarity of parties with best practices in energy efficiency programs and associated regulatory mechanisms as applied in other jurisdictions. Discussion at such forums could inform related Commission policy decisions and utility program development in anticipation of the submission of Comprehensive programs. I recommend that an initial forum be dedicated to the issue of criteria for determining program cost effectiveness.
2. The establishment of an on-going process by which the problems, progress and performance of the initial Quick Start programs could be monitored and suggestions for improvements identified. Ideally, such a process would be independent of program administrators and would entail participation from a variety of stakeholders, including utilities. If such a group proves effective it could subsequently provide input into a variety of energy efficiency issues which extend beyond Quick Start programs.

3. Encourage Mississippi utilities to place a high emphasis on the development of expertise and infrastructure, both within their own organizations and in the broader energy marketplace. The development of a statewide, multi-utility approach to this challenge may be most effective.
4. Consider commissioning an “energy efficiency potential study” which would estimate the magnitude of cost effective and achievable energy efficiency resources in the state. The draft rules envision the setting of energy savings “targets” for Mississippi programs; a potential study could represent the analytical under-pinnings of such a target as well as be the source of specific program ideas that are uniquely appropriate for the Mississippi marketplace.
5. Commission and Staff should ensure that they have on-going access to expert consultants who can provide independent input into the various energy efficiency policy options that will need to be resolved before full scale comprehensive programs can be feasibly implemented.

**Q.** DOES THIS CONCLUDE YOUR TESTIMONY?

**A.** Yes.



**Chapter 29    CONSERVATION AND ENERGY EFFICIENCY  
PROGRAMS**

**25x25 Suggested Rule Modifications**

**September 16, 2011**

**Rule 29**

**100 Purpose**

The Commission has developed these rules to implement effective energy efficiency programs and standards in Mississippi that are compatible with similar best practice efforts in other jurisdictions. The rules apply both to electric and natural gas service providers subject to the jurisdiction of the Mississippi Public Service Commission. The rules define “Quick Start Programs” as an initial 30 month effort whose objective is to encourage the rapid implementation of energy efficiency programs and to provide experience on which Mississippi’s electric and natural gas service providers and the Commission can build Comprehensive Portfolios – long-term energy efficiency programs. The rules also define the elements of the Comprehensive Portfolios which will be submitted for Commission consideration prior to the end of the Quick Start period.

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**101 Benefits and Objectives of Energy Efficiency Programs**

## Attachment HP-1

The overall objectives of conservation and energy efficiency programs are to encourage and enable utility customers to make the most efficient use of utility energy capacity and energy and to discourage the inefficient and wasteful use of energy. The key objectives and benefits of Mississippi energy efficiency programs are the following:

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- 1- Produce energy savings directly attributable to program activities
- 2- Long term and permanent changes in behavior, attitudes, awareness and knowledge about energy savings and the use of energy efficiency technologies in order to achieve energy savings.
- 3- Permanent peak electric demand reductions
- 4- Energy cost savings and cost-effectiveness
- 5- Reliability enhancements
- 6- Energy security benefits
- 7- Environmental benefits
- 8- Economic development/competitiveness benefits
- 9- Increases in system-wide capacity
- 10- Accelerating the commercialization of advanced or emerging technologies
- 11- Improving affordability of energy for all customers;
- 12- Implementing programs in an efficient manner.

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### 102 Definitions

1. Administrator – The entity, which may be the service provider, responsible for

Attachment HP-1

creating and managing an energy efficiency program or portfolio.

2. Best Practice – An approach that extensive experience indicates is more effective at delivering a particular outcome (*e.g.*, program design, implementation efficiency, cost effectiveness, EM&V) than other approaches. For the purpose of this rule, Best Practices are energy efficiency programs, measures and EM&V activities, and deemed savings successfully implemented in other jurisdictions and adapted for any economic, social, or demographic characteristics unique to Mississippi. Best Practices are identified by the National Action Plan for Energy Efficiency (NAPEE), by similar national organizations, and by utilities with significant long-term energy efficiency experience.
3. Comprehensive Portfolio – A collection of energy efficiency programs that, when taken together, provides financial, technical, outreach, marketing, training, and education support sufficient to achieve widespread implementation of all types of significant cost-effective energy-efficiency improvements in all categories of retail customers. Comprehensive Portfolios also reflect national best practices in all elements of program design, implementation and evaluation as well as the sufficiency of program staff and supporting program infrastructure.
4. Cost-effective – A standard used to describe a net-beneficial result for programs to be implemented, determined through a process that includes a review of relevant cost-benefit tests. A cost-effective program would be one that generally provides more net benefits than costs according to the specific cost effectiveness test or tests as specified by the Commission.
5. Deemed Savings – Pre-determined, validated estimates of energy and/or demand

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savings attributable to particular energy efficiency measures. The development of such deemed savings shall conform to deemed savings best practices as identified by NAPEE and/or other similar national EM&V guidance. ~~Deemed savings values~~ must be revised periodically to reflect new technologies; new federal, state or local policies and codes; and additional experience.

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6. Demand Response – (MPSC needs to include a definition)

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7. Energy Efficiency – Reducing the rate by which energy is used by ratepayer equipment

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and/or processes while maintaining or improving the customer's existing level of comfort and end-use functionality. Reduction in the rate by which energy is used, may be achieved by substituting more advanced technology, improving operational practices or by reorganizing the process to reduce waste heat, waste cooling, or energy. Demand response is also a form of energy efficiency.

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8. Energy Efficiency Savings – Energy (kWh, therms) and/or capacity (kW) savings determined by comparing measured energy use before and after implementation of an energy efficiency measure or by reference to a set of deemed savings approved by the Commission. Energy savings used for the purpose of calculating net benefits and cost effectiveness are calculated on the basis of the validated multi-year "lifetime" of installed energy efficiency measures.

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9. Evaluation, Measurement, and Verification (EM&V) – Studies and activities performed to determine the actual savings and other effects attributable to energy efficiency programs and measures. In addition, EM&V is used to assess the operational effectiveness of programs and to identify modifications that will enhance operations of such programs.

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Attachment HP-1

10. Measure – The equipment, materials and/or practices that, when put into use at a customer site, result in a measurable and verifiable reduction in either purchased energy consumption; measured energy or peak demand; or both.
11. Portfolio – The entire group of programs offered by an Administrator.
12. Program – A particular energy efficiency service or set of services directed to a particular population or market segment for which common characteristics are best addressed with a specifically targeted program offering.
13. Program Year – The year in which programs are administered and delivered. For the purposes of planning and reporting, a Program Year shall be considered a calendar year, January 1 through December 31.
14. Quick Start – A portfolio of energy efficiency programs selected from programs that have been widely and successfully implemented in other jurisdictions and can provide net benefits to utility customers. These programs can be implemented more quickly in Mississippi because they are already well-defined, have well-established track records, demonstrate cost effectiveness, and require fewer showings to the Commission.

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**103 Administration and Implementation of Energy Efficiency Programs**

**1. Filing for Commission Approvals**

- a. Quick Start Plans – Each electric and natural gas utility serving more than 25,000 customers (meters) and subject to the jurisdiction of the Commission shall file with the Commission for its approval a Quick Start Plan which identifies and outlines the implementation schedule of energy efficiency programs for its service territory. These Plans shall be filed not later than three (3) months following the order

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adopting this Rule. Utilities serving 25,000 customers (meters) or fewer are exempt from filing Quick Start Plans.

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b. Comprehensive Portfolio Plans – No later than 30 months from the date of the

Commission's order approving its Quick Start Plan, each electric and gas utility shall file a Comprehensive Portfolio Plan of energy efficiency programs. Utilities serving 25,000 or fewer customers (meters) are not exempt from this filing and shall submit descriptions of energy efficiency programs that are economically feasible to implement for their organization's size. In order to increase the energy efficiency opportunities for their customers, utilities with 25,000 or fewer customers are encouraged to submit program plans in collaboration with other utilities.

To ensure that submitted Comprehensive Portfolio programs reflect best practices as well as the actual needs of Mississippi ratepayers, utilities are encouraged to solicit input from customers, programs experts and other stakeholders in the development of their Comprehensive Portfolios.

c. Approval – A program, portfolio, or plan filed under these rules shall not be implemented until a Commission order is issued expressly approving the program, portfolio, or plan. The Commission shall establish a procedural schedule for the review of each program, portfolio, or plan filing.

2. Waivers

Exemptions from these rules may be granted by the Commission in accordance with the Commission's Rules of Practice and Procedure. Nothing in these rules shall preclude the Commission from modifying these rules on its own initiative or in response to a party's motion and after notice and hearing.

**104 Quick Start Plan Filing Requirements**

1. Service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination.

The objectives of Quick Start shall be: a) the development of the increased utility program capabilities and infrastructure necessary to support subsequent Comprehensive programs; b) the expansion of energy efficiency expertise throughout Mississippi; c) the careful identification of locally successful (and unsuccessful) energy efficiency program delivery strategies; and d) the initial delivery of energy savings benefits to a sizable cross section of utility customers.

Quick Start program filings shall include specific EM&V plans by which progress toward the achievement of the above objectives can be independently assessed in a manner compatible with best practices. To reflect best practices EM&V expenditures for Quick Start programs should represent approximately 5% of total program budgets.

Quick Start Plans shall include energy efficiency programs designed to cover the partial year remaining from the date of the Commission's order approving the Plan plus two successive full Program Years. Quick Start Plans may also include additional programs to be implemented in the first and/or second full Program Year. Quick Start Plans shall include energy efficiency programs that address all customer classes.

**2. Quick Start Energy Efficiency Programs.**

Energy efficiency programs should be capable of being implemented within four months of Plan approval.

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Attachment HP-1

All Quick Start programs shall be based on technologies that are commercially available. As appropriate, Quick Start programs shall be coordinated with and not duplicate related programs funded through other sources.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

Quick Start budgets shall be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods rather than to a larger number of smaller programs with minimal impacts.

It is important that programs within the Quick Start portfolio address the entire range of energy efficiency opportunities including "retrofit", "new construction" and "lost opportunity" customer scenarios. Utilities shall file plans to implement Quick Start energy efficiency programs from the following general list of categories;

**Deleted:** Utilities shall file plans to implement Quick Start energy efficiency programs developing individual programs from the following general list of categories.

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- a. *Customer and Technical Education – Building both technical expertise and customer awareness is an essential precondition to expanded Comprehensive programs.* This program would include the education of customers and technical energy professionals on energy efficiency opportunities and technologies. It should, to the greatest extent possible, be a consistent statewide group of messages. It should include education of energy auditors, construction professionals, facility engineers, technicians and equipment installers. The messages should encourage the efficient use of electricity and gas. The messages should increase awareness of opportunities to use electricity and natural gas more efficiently. This category of programs would apply to all customer classes.
- b. *Energy Audits and Evaluations Leading to Savings –* This would include home and commercial energy audits and audits of commercial and industrial processes and equipment. The audits and evaluations would produce recommendations for opportunities to implement site-specific efficiency and conservation measures. Programs would be designed for audits to lead to savings results and could include cost-effective and economically justified customer incentives to encourage the implementation of the site-specific measures identified in the audits. This category of programs would apply to all customer classes.
- c. *Inspection and Tune Up of Heating and Air Conditioning Systems –* This would be applicable to residential, commercial, and industrial systems. This category of programs would apply to all customer classes.
- d. *Lighting –* Improved lighting for residential, commercial, and industrial customers. This category of programs would apply to all customer classes and would take into

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consideration enhanced federal lighting efficiency standards that become effective during the Quick Start period.

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- e. *Appliances* – Programs that offer rebates or other incentives on high-efficiency appliances and may also work with upstream trade allies to increase the sales of these products through the distribution chain. This category of programs most often applies to residential and small commercial customers.

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- f. *Increased Deployment of Demand Response Programs* – Such programs already exist in Mississippi. This would look for additional opportunities to offer demand response programs including interruptible service, curtailment service, off-peak service, etc. In the near term, this category of programs would apply to commercial and industrial customer classes but may eventually extend to residential customers. While demand response programs can provide high value by reducing peak energy demand, the primary emphasis of the Quick Start programs shall be on programs that produce long term reductions in energy consumption for participating customers.

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- g. *Weatherization and Whole-Home Retrofits* – A residential weatherization or comprehensive retrofit program that would be based solely on efficiency criteria using established home assessment protocols and often targeting the least efficient homes first. This category of programs would apply to the residential customer class.

- h. *New Homes Program* – These residential programs provide incentives to builders who achieve a percentage of energy savings against a prescribed standard.

- i. *Commercial and Industrial Prescriptive Incentive Programs* – These programs offer a fixed-dollar incentive for multiple defined prescriptive measures (i.e., lighting,



HVAC replacements, occupancy sensors, motors, etc.).

- j. *Commercial and Industrial Custom Incentive Programs* – In these programs the Administrator works with the customer to develop site-specific energy efficiency measures, and the incentive is based both on the amount of energy saved and the total cost of the installation of the energy efficiency measures.

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- k. *Commercial and Industrial Retro-Commissioning* – Existing buildings comprehensively assessed and “tuned up” to optimize energy efficiency in their operations.

**3. Quick Start Plan Portfolio Description**

Each Quick Start Plan filing shall address the following portfolio elements:

- a. Demonstration that the portfolio of Quick Start programs serves all customer classes in rough proportion to the magnitude of retail energy sales associated with each class.
- b. Demonstration that programs within the portfolio are designed in such a manner as to effectively address “retrofit”, “new construction”, and “lost opportunity” measure installation scenarios”.
- c. Demonstration that the proposed programs have been successfully implemented in other jurisdictions.
- d. A Quick Start budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106)
- e. Demonstrated budgetary commitment of approximately 5% of total Quick Start program budgets to the EM&V of Quick Start programs.
- f. Any additional supporting information the Administrator may propose or the

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Commission may require.

Although estimates of program costs must be included in proposals, Quick Start programs are exempt from the requirement to provide cost-effectiveness showings under the cost-benefit tests of Section 105. Estimated energy and demand savings and an EM&V program shall be included for all Quick Start programs except a statewide education program.

**4. Quick Start Plan Individual Program Descriptions**

Each program in the Quick Start Plan should include the following general information:

- a. A general description of the program and the services to be provided;
- b. The target customer population to be addressed by the program and strategies for marketing the program to potential participants;
- c. The specific program objectives including participation levels, specific infrastructure development objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems etc;
- d. The identification of the specific independent EM&V activities, that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements;
- e. Anticipated implementation barriers and how they will be addressed;
- f. Any proposed customer incentives;
- g. Program's timeframe if the program term is limited;
- h. A plan for addressing over-subscription to the program and avoiding disruptive stop-

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start funding cycles;

- i. Estimated energy and peak demand savings and the basis for these savings estimates, which may use Deemed Savings;
- j. Estimated program costs and its proportion of the Quick Start budget; and
- k. Any additional information or analyses the Administrator may propose or the Commission may require.

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#### **105 Quick Start Program Reporting Requirements**

In order to facilitate on-going review and enhancements of Quick Start program progress Administrators shall provide, on a quarterly basis, reports of progress and program developments. These summaries shall include, at a minimum, the following information.

- 1. Program participation levels to date, by customer class
- 2. Estimates of energy and demand savings to date, by program
- 3. Program expenditures to date, broken down into general categories.
- 4. Summary of program marketing plans, activities, deliverables and possible enhancements of such efforts
- 5. Plans for, and progress toward the development of, utility DSM infrastructure, such as program staffing levels, project quality control, internal training, and project data tracking systems;
- 6. Program evaluation spending, planned and completed activities and results;
- 7. Summary of planned and completed training efforts for customers and trade allies;
- 8. Summary of program "challenges" and proposed strategies to address them.

9. Summary of progress toward achieving all other program objectives as stated in initial program filings.

**106 Comprehensive Portfolio Plan Filing Requirements**

During the Quick Start period the Commission will develop detailed filing requirements for the Comprehensive Portfolio. Such requirements will be based on best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility stakeholders. In general, service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. All programs (design, implementation, EM&V, etc.) shall be guided by Best Practices. As appropriate, Comprehensive Portfolio programs should be coordinated with and not duplicate related programs funded through other sources.

The Comprehensive Portfolio Plan shall include energy efficiency programs that address all customer classes. Plans shall cover at least one year and may cover up to three years. Except for pilot or trial programs, Comprehensive Portfolio budgets should be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods instead of to a larger number of smaller programs with minimal impacts. Except for pilot or trial programs, technologies supporting energy efficiency programs should be commercially available. Program cost allocations should follow cost-causation principles – there shall be no cross subsidization between customer classes.

**1. Comprehensive Portfolio Description and Support**

Program plans shall be consistent with and reflect the effects of all energy efficiency programs in the electric utilities resource plans or natural gas utilities procurement plans.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

During the Quick Start period the Commission will develop detailed requirements for the Comprehensive Portfolio program descriptions and support. Such requirements will be based on the best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility parties. In general, each Comprehensive Portfolio Plan filing shall address the following portfolio-level elements:

- a. Demonstration that the scope of the Comprehensive Portfolio Plan serves all customer classes;
- b. A showing of providing aggregate ratepayer benefits to the majority of ratepayers;
- c. Cost-benefit analysis (see Section 105) listing total costs and benefits, including expected savings goals for the portfolio;
- d. A Comprehensive Portfolio budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106); and



e. Any additional supporting information the utility may propose.

**2. Comprehensive Portfolio Plan Individual Program Description Requirements**

Program designs should reflect Best Practices. The proposed programs may continue to include, but are not limited to, those Quick Start programs that have been demonstrated to be effective. For program implementation, a focus should be placed on local and diverse equipment and service providers to the extent these are available and competitively priced.

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a. For the Comprehensive Portfolio and each program a utility shall describe, in qualitative and quantitative terms, how its proposal will further or accomplish any or all of the objectives or benefits identified in Section 101 that are reasonably applicable to the utility's proposal. Should the utility determine that its proposal does not address one or more of the listed objectives or benefits, the utility shall briefly explain why.

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b. Each program in the Comprehensive Portfolio should include the following information:

- i A general description of the program and the services to be provided;
- ii The target customer population to be addressed by the program and strategies for marketing the program to potential participants;
- iii The specific program objectives including participation levels and specific infrastructure objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems, etc.

Attachment HP-1

- iv Targets for customer participation and energy use reductions;
- v The identification of the specific independent EM&V activities that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements. The EM&V plan should appropriately balance the need to assess and improve program performance with EM&V costs. EM&V approaches and expenditure levels should be guided by Best Practices. Anticipated implementation barriers and how they will be addressed;
- vi Any proposed customer incentives;
- vii Program's timeframe if the program term is limited;
- viii A plan for addressing over-subscription to the program and avoiding disruptive stop-start funding cycles;
- ix The prescribed cost-benefit analyses (see Section 107);
- x Estimated energy and peak demand savings and the basis for these savings estimate, which may include Deemed Savings if approved by the Commission;
- xi Any additional information or analyses the service provider may propose or the Commission may require.

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Deleted: Portfolio EM&V cost targets should be approximately no more than five percent of total portfolio costs although EM&V costs for some individual programs may be higher;

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**3. Uniformity of Programs**

Programs addressing both electric and gas customers in the same service territory shall be coordinated to the extent reasonable.

**a. Customer Incentives**

Programs may include financial and other incentives to encourage customers to make energy efficient investments if the incentives are cost justified according to criteria established by the Commission.

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Incentives may include information, technical assistance, leasing programs, product giveaways and direct financial inducements. Financial inducements may include but are not limited to rebates, discounted products and services, and low-rate financing.

All customer incentives shall be considered in the cost-benefit testing of programs following the protocols set forth by the California Standard Practice Manual. Costs of customer incentives shall be considered a direct program cost.

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Incentives shall not be any higher than necessary to overcome the customer barriers to invest in the measure and should be reduced or eliminated as the measure becomes more of a standard practice.

**b. Statewide Programs**

The Commission, after notice and hearing, may direct utilities to offer uniform statewide energy efficiency and conservation programs if it determines such standardization to be the most cost-effective result and in the public interest. Utilities may request approval to offer statewide or region-wide programs for which public messages, the need for technical training, commercial terms and conditions, and customer reception are best served by such an approach.

**c. Pilot Programs**

The Commission may approve pilot energy efficiency programs. A pilot program

design is distinct from Quick Start and other program designs in that it shall include explicit questions that the pilot will address, explicit EM&V designed to address pilot questions, estimates of program costs and benefits. Pilot Programs shall be of limited duration until reassessment after a pre-determined period.

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Programs that are neither pilots nor Quick Start programs must comply with all of the plan filing requirements of this Section 106.

All costs for approved Pilot, Quick Start, and other programs shall be considered eligible for cost recovery.

#### **107 Cost-Benefit Tests**

Cost-benefit assessments for all energy efficiency programs shall be evaluated using the Total Resource Cost (TRC), the Program Administrator Cost (PAC) (also known as the Utility Cost Test (UCT)), the Participant (PCT), and the Rate Impact Measure (RIM) tests as defined in the California Standard Practices Manual: Economic Analysis of Demand Side Programs and Projects, July, 2002, ("Manual") and submitted to the Commission. The inputs for these tests shall be based as much as practicable on data local to Mississippi. The costs of program design; implementation; delivery; customer incentives; customer education and marketing; measurement of benefits; and administration are recognized parts of energy efficiency program costs that should be included in cost-benefit calculations according to the Manual. Cost-benefit results shall be presented for both an individual program and portfolio basis.

For purposes of cost effectiveness analysis, utilities or administrators, shall use evaluation periods that have been validated, and are in wide use, in jurisdictions with

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well-established comprehensive efficiency programs. Alternatively, evaluation periods may reflect the specific EM&V estimates of lifetimes of energy efficiency measures installed in the state of Mississippi. Utilities may submit additional economic analyses information in support of a proposed program or portfolio.

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Results of the tests shall be presented consistent with the descriptions shown in Table 1 or by other means approved by the Commission. In order to clarify the cost effectiveness criteria which best serve the public interest the Commission shall sponsor a public technical forum addressing the implications, and application of, various cost effectiveness criteria options. If outside funding is not available to support such a technical forum the costs of such forum will be borne by regulated utilities in proportion to their retail sales in Mississippi.

TABLE 1 - Cost-Benefit Tests

with Primary and Secondary Means of Expressing Test Results

| Primary  | Secondary   | Formatted: Line spacing: Double |
|--|---|---------------------------------|
| <i>Participant Test</i>  |   | Formatted: Line spacing: Double |
| Net present value ("NPV") (all participants)                                       | Discounted payback (years)  | Formatted: Line spacing: Double |
|  | Benefit-cost ratio ("BCR")  | Formatted: Line spacing: Double |
| <i>Ratepayer Impact Measure (RIM) Test</i>   |   | Formatted: Line spacing: Double |
| Lifecycle revenue impact per unit of energy (kWh or therm) or demand customer (kW) | Lifecycle revenue impact per unit                                   | Formatted: Line spacing: Double |
|  | Annual revenue impact<br>(by year, per kWh, kW, therm, or customer) |                                 |
| Net present value  | First-year revenue impact   | Formatted: Line spacing: Double |

Attachment HP-1

| Primary                                      | Secondary                                       | Formatted: Line spacing: Double |
|--|---|---------------------------------|
| <i>Total Resource Cost (TRC) Test</i>        |   |                                 |
| Net present value                            | BCR   | Formatted: Line spacing: Double |
|  | Levelized cost                                  |                                 |
|  | (cents or dollars per unit of energy or demand) | Formatted: Line spacing: Double |
| <i>Program Administrator Cost (PAC) Test</i> |   |                                 |
| Net present value                            | BCR   | Formatted: Line spacing: Double |
|  | Levelized cost                                  |                                 |

The Commission will rely on the formulas in the Manual and will assess the cost-benefit test results in the public interests.

**108** Cost Recovery

Cost recovery shall be limited to the incremental costs which represent the program costs that are not already included in the then-current utility rates and shall include full and timely recovery of program costs and lost contribution to fixed cost. The Commission may decide to limit the time period during which utilities may recover lost contributions to fixed cost.

To address disincentives for energy efficiency investments, the utilities may propose an approach to earn a return on energy efficiency investments through a shared-savings or performance-incentive mechanism to make these investments more like other investments on which utilities earn a return. It is the expectation of the Commission that such incentives will be associated with high levels of program performance as validated by best practice EM&V. Prior to the Comprehensive Portfolio filing deadlines, the Commission

intends to establish specific numerical energy savings targets expressed as percentages of energy sales based on the experience of Quick Start and other relevant information.

A utility may request energy efficiency cost recovery through a rider.

A utility may request that costs from approved program budgets be included in the rider.

A utility may request that cost recovery begin when the energy efficiency program is implemented and offered to customers. Utilities may also propose a mechanism to adjust budgets to deal with oversubscriptions and to avoid stop-start funding.

If a utility is recovering energy efficiency program costs through a rider, the utility shall file, contemporaneous with the Annual Report under Section 109, a re-determined Energy Efficiency Cost Rate ("EECR"). In support of this re-determined rate, the utility shall file a schedule of actual program costs for the reporting period, actual amounts collected under the rider for the reporting period, and approved program budgets for the current calendar year. The EECR shall be adjusted to reflect a reconciliation of any over- or under-recovery for the prior year and the approved budget for the current Program Year.

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#### 109 Annual Reporting Requirements for Comprehensive Programs

By April 1 annually, each electric and gas utility shall file an Annual Report addressing the performance of all approved energy efficiency programs. During the Quick Start period the Commission will develop detailed reporting requirements based on best practices as the input of utilities and other informed parties. Such requirements shall apply to a final summary report of the Quick Start programs as well as to all subsequent Comprehensive Portfolio programs. In general, the report shall present:

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1. The energy and demand savings results attributable to the activities of the entire



Attachment HP-1

Portfolio and each approved program. These results shall reflect EM&V requirements as established by the Commission. A summary of the EM&V methodologies which produced the reported estimates of energy and demand savings, reported to the Commission.

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2. The amounts spent on each energy efficiency program and the total amounts spent on all programs; and
3. Any recommendations for expansion, reduction, alteration, addition, or elimination of any programs with justifications for the recommendations.

**110 Records**

All energy efficiency programs and measures are subject to inspection by the Commission.

All records of energy efficiency programs shall be maintained in sufficient detail to permit a thorough audit and evaluation of all program costs and program performance.

This Section 110 does not limit the existing authority of the Mississippi Public Service Commission.

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**Chapter 29      CONSERVATION AND ENERGY EFFICIENCY  
PROGRAMS**

**25x25 Suggested Rule Modifications**

**September 16, 2011**

**Rule 29**

**100 Purpose**

The Commission has developed these rules to implement effective energy efficiency programs and standards in Mississippi that are compatible with similar best practice efforts in other jurisdictions. The rules apply both to electric and natural gas service providers subject to the jurisdiction of the Mississippi Public Service Commission. The rules define “Quick Start Programs” as an initial 30 month effort whose objective is to encourage the rapid implementation of energy efficiency programs and to provide experience on which Mississippi’s electric and natural gas service providers and the Commission can build Comprehensive Portfolios – long-term energy efficiency programs. The rules also define the elements of the Comprehensive Portfolios which will be submitted for Commission consideration prior to the end of the Quick Start period.

**101 Benefits and Objectives of Energy Efficiency Programs**

## Attachment HP-1

The overall objectives of conservation and energy efficiency programs are to encourage and enable utility customers to make the most efficient use of utility energy capacity and energy and to discourage the inefficient and wasteful use of energy. The key objectives and benefits of Mississippi energy efficiency programs are the following:

- 1- Produce energy savings directly attributable to program activities
- 2- Long term and permanent changes in behavior, attitudes, awareness and knowledge about energy savings and the use of energy efficiency technologies in order to achieve energy savings.
- 3- Permanent peak electric demand reductions
- 4- Energy cost savings and cost-effectiveness
- 5- Reliability enhancements
- 6- Energy security benefits
- 7- Environmental benefits
- 8- Economic development/competitiveness benefits
- 9- Increases in system-wide capacity
- 10- Accelerating the commercialization of advanced or emerging technologies
- 11- Improving affordability of energy for all customers;
- 12- Implementing programs in an efficient manner.

### 102 Definitions

1. Administrator – The entity, which may be the service provider, responsible for

creating and managing an energy efficiency program or portfolio.

2. Best Practice – An approach that extensive experience indicates is more effective at delivering a particular outcome (e.g., program design, implementation efficiency, cost effectiveness, EM&V) than other approaches. For the purpose of this rule, Best Practices are energy efficiency programs, measures and EM&V activities, and deemed savings successfully implemented in other jurisdictions and adapted for any economic, social, or demographic characteristics unique to Mississippi. Best Practices are identified by the National Action Plan for Energy Efficiency (NAPEE), by similar national organizations, and by utilities with significant long-term energy efficiency experience.
3. Comprehensive Portfolio – A collection of energy efficiency programs that, when taken together, provides financial, technical, outreach, marketing, training, and education support sufficient to achieve widespread implementation of all types of significant cost-effective energy-efficiency improvements in all categories of retail customers. Comprehensive Portfolios also reflect national best practices in all elements of program design, implementation and evaluation as well as the sufficiency of program staff and supporting program infrastructure.
4. Cost-effective – A standard used to describe a net-beneficial result for programs to be implemented, determined through a process that includes a review of relevant cost-benefit tests. A cost-effective program would be one that generally provides more net benefits than costs according to the specific cost effectiveness test or tests as specified by the Commission.
5. Deemed Savings – Pre-determined, validated estimates of energy and/or demand

savings attributable to particular energy efficiency measures. The development of such deemed savings shall conform to deemed savings best practices as identified by NAPEE and/or other similar national EM&V guidance. Deemed savings values must be revised periodically to reflect new technologies; new federal, state or local policies and codes; and additional experience.

6. Demand Response – (MPSC needs to include a definition)
7. Energy Efficiency – Reducing the rate by which energy is used by ratepayer equipment and/or processes while maintaining or improving the customer's existing level of comfort and end-use functionality. Reduction in the rate by which energy is used may be achieved by substituting more advanced technology, improving operational practices or by reorganizing the process to reduce waste heat, waste cooling, or energy. Demand response is also a form of energy efficiency.
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9. Evaluation, Measurement, and Verification (EM&V) – Studies and activities performed to determine the actual savings and other effects attributable to energy efficiency programs and measures. In addition, EM&V is used to assess the operational effectiveness of programs and to identify modifications that will enhance operations of such programs.

10. Measure – The equipment, materials and/or practices that, when put into use at a customer site, result in a measurable and verifiable reduction in either purchased energy consumption; measured energy or peak demand; or both.
11. Portfolio – The entire group of programs offered by an Administrator.
12. Program – A particular energy efficiency service or set of services directed to a particular population or market segment for which common characteristics are best addressed with a specifically targeted program offering.
13. Program Year – The year in which programs are administered and delivered. For the purposes of planning and reporting, a Program Year shall be considered a calendar year, January 1 through December 31.
14. Quick Start – A portfolio of energy efficiency programs selected from programs that have been widely and successfully implemented in other jurisdictions and can provide net benefits to utility customers. These programs can be implemented more quickly in Mississippi because they are already well-defined, have well-established track records, demonstrate cost effectiveness, and require fewer showings to the Commission.

### **103 Administration and Implementation of Energy Efficiency Programs**

#### **1. Filing for Commission Approvals**

- a. Quick Start Plans – Each electric and natural gas utility serving more than 25,000 customers (meters) and subject to the jurisdiction of the Commission shall file with the Commission for its approval a Quick Start Plan which identifies and outlines the implementation schedule of energy efficiency programs for its service territory. These Plans shall be filed not later than three (3) months following the order

adopting this Rule. Utilities serving 25,000 customers (meters) or fewer are exempt from filing Quick Start Plans.

- b. Comprehensive Portfolio Plans – No later than 30 months from the date of the Commission's order approving its Quick Start Plan, each electric and gas utility shall file a Comprehensive Portfolio Plan of energy efficiency programs. Utilities serving 25,000 or fewer customers (meters) are not exempt from this filing and shall submit descriptions of energy efficiency programs that are economically feasible to implement for their organization's size. In order to increase the energy efficiency opportunities for their customers, utilities with 25,000 or fewer customers are encouraged to submit program plans in collaboration with other utilities.

To ensure that submitted Comprehensive Portfolio programs reflect best practices as well as the actual needs of Mississippi ratepayers, utilities are encouraged to solicit input from customers, programs experts and other stakeholders in the development of their Comprehensive Portfolios.

- c. Approval – A program, portfolio, or plan filed under these rules shall not be implemented until a Commission order is issued expressly approving the program, portfolio, or plan. The Commission shall establish a procedural schedule for the review of each program, portfolio, or plan filing.

2. Waivers

Exemptions from these rules may be granted by the Commission in accordance with the Commission's Rules of Practice and Procedure. Nothing in these rules shall preclude the Commission from modifying these rules on its own initiative or in response to a party's motion and after notice and hearing.



**104 Quick Start Plan Filing Requirements**

1. Service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. The objectives of Quick Start shall be: a) the development of the increased utility program capabilities and infrastructure necessary to support subsequent Comprehensive programs; b) the expansion of energy efficiency expertise throughout Mississippi; c) the careful identification of locally successful (and unsuccessful) energy efficiency program delivery strategies; and d) the initial delivery of energy savings benefits to a sizable cross section of utility customers.

Quick Start program filings shall include specific EM&V plans by which progress toward the achievement of the above objectives can be independently assessed in a manner compatible with best practices. To reflect best practices EM&V expenditures for Quick Start programs should represent approximately 5% of total program budgets. Quick Start Plans shall include energy efficiency programs designed to cover the partial year remaining from the date of the Commission's order approving the Plan plus two successive full Program Years. Quick Start Plans may also include additional programs to be implemented in the first and/or second full Program Year. Quick Start Plans shall include energy efficiency programs that address all customer classes.

2. **Quick Start Energy Efficiency Programs**

Energy efficiency programs should be capable of being implemented within four months of Plan approval.

## Attachment HP-1

All Quick Start programs shall be based on technologies that are commercially available. As appropriate, Quick Start programs shall be coordinated with and not duplicate related programs funded through other sources.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

Quick Start budgets shall be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods rather than to a larger number of smaller programs with minimal impacts.

It is important that programs within the Quick Start portfolio address the entire range of energy efficiency opportunities including “retrofit”, “new construction” and “lost opportunity” customer scenarios. Utilities shall file plans to implement Quick Start energy efficiency programs from the following general list of categories:

- a. *Customer and Technical Education* – Building both technical expertise and customer awareness is an essential precondition to expanded Comprehensive programs. This program would include the education of customers and technical energy professionals on energy efficiency opportunities and technologies. . It should, to the greatest extent possible, be a consistent statewide group of messages. It should include education of energy auditors, construction professionals, facility engineers, technicians and equipment installers. The messages should encourage the efficient use of electricity and gas. The messages should increase awareness of opportunities to use electricity and natural gas more efficiently. This category of programs would apply to all customer classes.
- b. *Energy Audits and Evaluations Leading to Savings* – This would include home and commercial energy audits and audits of commercial and industrial processes and equipment. The audits and evaluations would produce recommendations for opportunities to implement site-specific efficiency and conservation measures. Programs would be designed for audits to lead to savings results and could include cost-effective and economically justified customer incentives to encourage the implementation of the site-specific measures identified in the audits. This category of programs would apply to all customer classes.
- c. *Inspection and Tune Up of Heating and Air Conditioning Systems* – This would be applicable to residential, commercial, and industrial systems. This category of programs would apply to all customer classes.
- d. *Lighting* – Improved lighting for residential, commercial, and industrial customers. This category of programs would apply to all customer classes and would take into

consideration enhanced federal lighting efficiency standards that become effective during the Quick Start period.

- e. *Appliances* – Programs that offer rebates or other incentives on high-efficiency appliances and may also work with upstream trade allies to increase the sales of these products through the distribution chain. This category of programs most often applies to residential and small commercial customers.
- f. *Increased Deployment of Demand Response Programs* – Such programs already exist in Mississippi. This would look for additional opportunities to offer demand response programs including interruptible service, curtailment service, off-peak service, etc. In the near term, this category of programs would apply to commercial and industrial customer classes but may eventually extend to residential customers. While demand response programs can provide high value by reducing peak energy demand, the primary emphasis of the Quick Start programs shall be on programs that produce long term reductions in energy consumption for participating customers.
- g. *Weatherization and Whole-Home Retrofits* – A residential weatherization or comprehensive retrofit program that would be based solely on efficiency criteria using established home assessment protocols and often targeting the least efficient homes first. This category of programs would apply to the residential customer class.
- h. *New Homes Program* – These residential programs provide incentives to builders who achieve a percentage of energy savings against a prescribed standard.
- i. *Commercial and Industrial Prescriptive Incentive Programs* – These programs offer a fixed-dollar incentive for multiple defined prescriptive measures (i.e., lighting,

HVAC replacements, occupancy sensors, motors, etc.).

- j. *Commercial and Industrial Custom Incentive Programs* – In these programs the Administrator works with the customer to develop site-specific energy efficiency measures, and the incentive is based both on the amount of energy saved and the total cost of the installation of the energy efficiency measures.
- k. *Commercial and Industrial Retro-Commissioning* – Existing buildings comprehensively assessed and “tuned up” to optimize energy efficiency in their operations.

### **3. Quick Start Plan Portfolio Description**

Each Quick Start Plan filing shall address the following portfolio elements:

- a. Demonstration that the portfolio of Quick Start programs serves all customer classes in rough proportion to the magnitude of retail energy sales associated with each class.
- b. Demonstration that programs within the portfolio are designed in such a manner as to effectively address “retrofit”, “new construction”, and “lost opportunity” measure installation scenarios”.
- c. Demonstration that the proposed programs have been successfully implemented in other jurisdictions.
- d. A Quick Start budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106)
- e. Demonstrated budgetary commitment of approximately 5% of total Quick Start program budgets to the EM&V of Quick Start programs.
- f. Any additional supporting information the Administrator may propose or the

Commission may require.

Although estimates of program costs must be included in proposals, Quick Start programs are exempt from the requirement to provide cost-effectiveness showings under the cost-benefit tests of Section 105. Estimated energy and demand savings and an EM&V program shall be included for all Quick Start programs except a statewide education program.

**4. Quick Start Plan Individual Program Descriptions**

Each program in the Quick Start Plan should include the following general information:

- a. A general description of the program and the services to be provided;
- b. The target customer population to be addressed by the program and strategies for marketing the program to potential participants;
- c. The specific program objectives including participation levels, specific infrastructure development objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems etc;
- d. The identification of the specific independent EM&V activities that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements;
- e. Anticipated implementation barriers and how they will be addressed;
- f. Any proposed customer incentives;
- g. Program's timeframe if the program term is limited;
- h. A plan for addressing over-subscription to the program and avoiding disruptive stop-

start funding cycles;

- i. Estimated energy and peak demand savings and the basis for these savings estimates, which may use Deemed Savings;
- j. Estimated program costs and its proportion of the Quick Start budget; and
- k. Any additional information or analyses the Administrator may propose or the Commission may require.

#### **105 Quick Start Program Reporting Requirements**

In order to facilitate on-going review and enhancements of Quick Start program progress Administrators shall provide, on a quarterly basis, reports of progress and program, developments. These summaries shall include, at a minimum, the following information.

- 1. Program participation levels to date, by customer class
- 2. Estimates of energy and demand savings to date, by program
- 3. Program expenditures to date, broken down into general categories.
- 4. Summary of program marketing plans, activities, deliverables and possible enhancements of such efforts
- 5. Plans for, and progress toward the development of, utility DSM infrastructure, such as program staffing levels, project quality control, internal training, and project data tracking systems;
- 6. Program evaluation spending, planned and completed activities and results;
- 7. Summary of planned and completed training efforts for customers and trade allies;
- 8. Summary of program “challenges” and proposed strategies to address them.



9. Summary of progress toward achieving all other program objectives as stated in initial program filings.

## **106 Comprehensive Portfolio Plan Filing Requirements**

During the Quick Start period the Commission will develop detailed filing requirements for the Comprehensive Portfolio. Such requirements will be based on best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility stakeholders. In general, service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. All programs (design, implementation, EM&V, etc.) shall be guided by Best Practices. As appropriate, Comprehensive Portfolio programs should be coordinated with and not duplicate related programs funded through other sources.

The Comprehensive Portfolio Plan shall include energy efficiency programs that address all customer classes. Plans shall cover at least one year and may cover up to three years.

Except for pilot or trial programs, Comprehensive Portfolio budgets should be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods instead of to a larger number of smaller programs with minimal impacts. Except for pilot or trial programs, technologies supporting energy efficiency programs should be commercially available. Program cost allocations should follow cost-causation principles -- there shall be no cross subsidization between customer classes.

**1. Comprehensive Portfolio Description and Support**

Program plans shall be consistent with and reflect the effects of all energy efficiency programs in the electric utilities resource plans or natural gas utilities procurement plans.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

During the Quick Start period the Commission will develop detailed requirements for the Comprehensive Portfolio program descriptions and support. Such requirements will be based on the best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility parties. In general, each Comprehensive Portfolio Plan filing shall address the following portfolio-level elements:

- a. Demonstration that the scope of the Comprehensive Portfolio Plan serves all customer classes;
- b. A showing of providing aggregate ratepayer benefits to the majority of ratepayers;
- c. Cost-benefit analysis (see Section 105) listing total costs and benefits, including expected savings goals for the portfolio;
- d. A Comprehensive Portfolio budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106); and

- e. Any additional supporting information the utility may propose.

**2. Comprehensive Portfolio Plan Individual Program Description Requirements**

Program designs should reflect Best Practices. The proposed programs may continue to include, but are not limited to, those Quick Start programs that have been demonstrated to be effective. For program implementation, a focus should be placed on local and diverse equipment and service providers to the extent these are available and competitively priced.

- a. For the Comprehensive Portfolio and each program a utility shall describe, in qualitative and quantitative terms, how its proposal will further or accomplish any or all of the objectives or benefits identified in Section 101 that are reasonably applicable to the utility's proposal. Should the utility determine that its proposal does not address one or more of the listed objectives or benefits, the utility shall briefly explain why.
- b. Each program in the Comprehensive Portfolio should include the following information:
  - i A general description of the program and the services to be provided;
  - ii The target customer population to be addressed by the program and strategies for marketing the program to potential participants;
  - iii The specific program objectives including participation levels and specific infrastructure objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems, etc.

- iv Targets for customer participation and energy use reductions;
- v The identification of the specific independent EM&V activities that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements. The EM&V plan should appropriately balance the need to assess and improve program performance with EM&V costs. EM&V approaches and expenditure levels should be guided by Best Practices. Anticipated implementation barriers and how they will be addressed;
- vi Any proposed customer incentives;
- vii Program's timeframe if the program term is limited;
- viii A plan for addressing over-subscription to the program and avoiding disruptive stop-start funding cycles;
- ix The prescribed cost-benefit analyses (see Section 107);
- x Estimated energy and peak demand savings and the basis for these savings estimate, which may include Deemed Savings if approved by the Commission;
- xi Any additional information or analyses the service provider may propose or the Commission may require.

**3. Uniformity of Programs**

Programs addressing both electric and gas customers in the same service territory shall be coordinated to the extent reasonable.

**a. Customer Incentives**

Programs may include financial and other incentives to encourage customers to make energy efficient investments if the incentives are cost justified according to criteria established by the Commission.

Incentives may include information, technical assistance, leasing programs, product giveaways and direct financial inducements. Financial inducements may include but are not limited to rebates, discounted products and services, and low-rate financing.

All customer incentives shall be considered in the cost-benefit testing of programs following the protocols set forth by the California Standard Practice Manual. Costs of customer incentives shall be considered a direct program cost.

Incentives shall not be any higher than necessary to overcome the customer barriers to invest in the measure and should be reduced or eliminated as the measure becomes more of a standard practice.

**b. Statewide Programs**

The Commission, after notice and hearing, may direct utilities to offer uniform statewide energy efficiency and conservation programs if it determines such standardization to be the most cost-effective result and in the public interest. Utilities may request approval to offer statewide or region-wide programs for which public messages, the need for technical training, commercial terms and conditions, and customer reception are best served by such an approach.

**c. Pilot Programs**

The Commission may approve pilot energy efficiency programs. A pilot program

design is distinct from Quick Start and other program designs in that it shall include explicit questions that the pilot will address, explicit EM&V designed to address pilot questions, estimates of program costs and benefits. Pilot Programs shall be of limited duration until reassessment after a pre-determined period.

Programs that are neither pilots nor Quick Start programs must comply with the entire plan filing requirements of this Section 106.

All costs for approved Pilot, Quick Start, and other programs shall be considered eligible for cost recovery.

#### **107 Cost-Benefit Tests**

Cost-benefit assessments for all energy efficiency programs shall be evaluated using the Total Resource Cost (TRC), the Program Administrator Cost (PAC) (also known as the Utility Cost Test (UCT)), the Participant (PCT), and the Rate Impact Measure (RIM) tests as defined in the California Standard Practices Manual: Economic Analysis of Demand Side Programs and Projects, July, 2002, ("Manual") and submitted to the Commission. The inputs for these tests shall be based as much as practicable on data local to Mississippi. The costs of program design; implementation; delivery; customer incentives; customer education and marketing; measurement of benefits; and administration are recognized parts of energy efficiency program costs that should be included in cost-benefit calculations according to the Manual. Cost-benefit results shall be presented for both an individual program and portfolio basis.

For purposes of cost effectiveness analysis utilities or administrators shall use evaluation periods that have been validated, and are in wide use, in jurisdictions with well-

established comprehensive efficiency programs. Alternatively, evaluation periods may reflect the specific EM&V estimates of lifetimes of energy efficiency measures installed in the state of Mississippi. Utilities may submit additional economic analyses information in support of a proposed program or portfolio.

Results of the tests shall be presented consistent with the descriptions shown in Table 1 or by other means approved by the Commission. In order to clarify the cost effectiveness criteria which best serve the public interest the Commission shall sponsor a public technical forum addressing the implications, and application of, various cost effectiveness criteria options. If outside funding is not available to support such a technical forum the costs of such forum will be borne by regulated utilities in proportion to their retail sales in Mississippi.

**TABLE 1 - Cost-Benefit Tests**  
**with Primary and Secondary Means of Expressing Test Results**

| Primary  | Secondary   |
|--|---|
| <i>Participant Test</i>  |   |
| Net present value ("NPV") (all participants)                                       | Discounted payback (years)<br>Benefit-cost ratio ("BCR")<br>Net present value (average participant)   |
| <i>Ratepayer Impact Measure (RIM) Test</i>   |   |
| Lifecycle revenue impact per unit of energy (kWh or therm) or demand customer (kW) | Lifecycle revenue impact per unit<br>Annual revenue impact<br>(by year, per kWh, kW, therm, or customer)<br>First-year revenue impact<br>(per kWh, kW, therm, or customer)<br>BCR |
| Net present value  |   |



| Primary                                      | Secondary  |
|--|--|
| <i>Total Resource Cost (TRC) Test</i>        |  |
| Net present value                            | BCR<br>Levelized cost<br>(cents or dollars per unit of energy or demand) |
| <i>Program Administrator Cost (PAC) Test</i> |  |
| Net present value                            | BCR<br>Levelized cost<br>(cents or dollars per unit of energy or demand) |

The Commission will rely on the formulas in the Manual and will assess the cost-benefit test results in the public interests.

#### 108 Cost Recovery

Cost recovery shall be limited to the incremental costs which represent the program costs that are not already included in the then-current utility rates and shall include full and timely recovery of program costs and lost contribution to fixed cost. The Commission may decide to limit the time period during which utilities may recover lost contributions to fixed cost.

To address disincentives for energy efficiency investments, the utilities may propose an approach to earn a return on energy efficiency investments through a shared-savings or performance-incentive mechanism to make these investments more like other investments on which utilities earn a return. It is the expectation of the Commission that such incentives will be associated with high levels of program performance as validated by best practice EM&V. Prior to the Comprehensive Portfolio filing deadlines, the Commission

intends to establish specific numerical energy savings targets expressed as percentages of energy sales based on the experience of Quick Start and other relevant information.

A utility may request energy efficiency cost recovery through a rider.

A utility may request that costs from approved program budgets be included in the rider.

A utility may request that cost recovery begin when the energy efficiency program is implemented and offered to customers. Utilities may also propose a mechanism to adjust budgets to deal with oversubscriptions and to avoid stop-start funding.

If a utility is recovering energy efficiency program costs through a rider, the utility shall file, contemporaneous with the Annual Report under Section 109, a re-determined Energy Efficiency Cost Rate ("EECR"). In support of this re-determined rate, the utility shall file a schedule of actual program costs for the reporting period, actual amounts collected under the rider for the reporting period, and approved program budgets for the current calendar year. The EECR shall be adjusted to reflect a reconciliation of any over- or under-recovery for the prior year and the approved budget for the current Program Year.

#### **109 Annual Reporting Requirements for Comprehensive Programs**

By April 1 annually, each electric and gas utility shall file an Annual Report addressing the performance of all approved energy efficiency programs. During the Quick Start period the Commission will develop detailed reporting requirements based on best practices as the input of utilities and other informed parties. Such requirements shall apply to a final summary report of the Quick Start programs as well as to all subsequent Comprehensive Portfolio programs. In general, the report shall present:

1. The energy and demand savings results attributable to the activities of the entire Portfolio and each approved program. These results shall reflect EM&V requirements as established by the Commission. A summary of the EM&V methodologies which produced the reported estimates of energy and demand savings reported to the Commission.
2. The amounts spent on each energy efficiency program and the total amounts spent on all programs; and
3. Any recommendations for expansion, reduction, alteration, addition, or elimination of any programs with justifications for the recommendations.

#### **110 Records**

All energy efficiency programs and measures are subject to inspection by the Commission.

All records of energy efficiency programs shall be maintained in sufficient detail to permit a thorough audit and evaluation of all program costs and program performance.

This Section 110 does not limit the existing authority of the Mississippi Public Service Commission.

**Chapter 29      CONSERVATION AND ENERGY EFFICIENCY  
PROGRAMS**

**25x25 Suggested Rule Modifications**

**September 16, 2011**

**Rule 29**

**100    Purpose**

The Commission has developed these rules to implement effective energy efficiency programs and standards in Mississippi that are compatible with similar best practice efforts in other jurisdictions. The rules apply both to electric and natural gas service providers subject to the jurisdiction of the Mississippi Public Service Commission. The rules define “Quick Start Programs” as an initial 30 month effort whose objective is to encourage the rapid implementation of energy efficiency programs and to provide experience on which Mississippi’s electric and natural gas service providers and the Commission can build Comprehensive Portfolios – long-term energy efficiency programs. The rules also define the elements of the Comprehensive Portfolios which will be submitted for Commission consideration prior to the end of the Quick Start period.

**101    Benefits and Objectives of Energy Efficiency Programs**

## Attachment HP-1

The overall objectives of conservation and energy efficiency programs are to encourage and enable utility customers to make the most efficient use of utility energy capacity and energy and to discourage the inefficient and wasteful use of energy. The key objectives and benefits of Mississippi energy efficiency programs are the following:

- 1- Produce energy savings directly attributable to program activities
- 2- Long term and permanent changes in behavior, attitudes, awareness and knowledge about energy savings and the use of energy efficiency technologies in order to achieve energy savings.
- 3- Permanent peak electric demand reductions
- 4- Energy cost savings and cost-effectiveness
- 5- Reliability enhancements
- 6- Energy security benefits
- 7- Environmental benefits
- 8- Economic development/competitiveness benefits
- 9- Increases in system-wide capacity
- 10- Accelerating the commercialization of advanced or emerging technologies
- 11- Improving affordability of energy for all customers;
- 12- Implementing programs in an efficient manner.

### 102 Definitions

1. Administrator -- The entity, which may be the service provider, responsible for

creating and managing an energy efficiency program or portfolio.

2. Best Practice – An approach that extensive experience indicates is more effective at delivering a particular outcome (*e.g.*, program design, implementation efficiency, cost effectiveness, EM&V) than other approaches. For the purpose of this rule, Best Practices are energy efficiency programs, measures and EM&V activities, and deemed savings successfully implemented in other jurisdictions and adapted for any economic, social, or demographic characteristics unique to Mississippi. Best Practices are identified by the National Action Plan for Energy Efficiency (NAPEE), by similar national organizations, and by utilities with significant long-term energy efficiency experience.
3. Comprehensive Portfolio – A collection of energy efficiency programs that, when taken together, provides financial, technical, outreach, marketing, training, and education support sufficient to achieve widespread implementation of all types of significant cost-effective energy-efficiency improvements in all categories of retail customers. Comprehensive Portfolios also reflect national best practices in all elements of program design, implementation and evaluation as well as the sufficiency of program staff and supporting program infrastructure.
4. Cost-effective – A standard used to describe a net-beneficial result for programs to be implemented, determined through a process that includes a review of relevant cost-benefit tests. A cost-effective program would be one that generally provides more net benefits than costs according to the specific cost effectiveness test or tests as specified by the Commission.
5. Deemed Savings – Pre-determined, validated estimates of energy and/or demand

savings attributable to particular energy efficiency measures. The development of such deemed savings shall conform to deemed savings best practices as identified by NAPEE and/or other similar national EM&V guidance. Deemed savings values must be revised periodically to reflect new technologies; new federal, state or local policies and codes; and additional experience.

6. Demand Response – (MPSC needs to include a definition)
7. Energy Efficiency – Reducing the rate by which energy is used by ratepayer equipment and/or processes while maintaining or improving the customer's existing level of comfort and end-use functionality. Reduction in the rate by which energy is used may be achieved by substituting more advanced technology, improving operational practices or by reorganizing the process to reduce waste heat, waste cooling, or energy. Demand response is also a form of energy efficiency.
8. Energy Efficiency Savings – Energy (kWh, therms) and/or capacity (kW) savings determined by comparing measured energy use before and after implementation of an energy efficiency measure or by reference to a set of deemed savings approved by the Commission. Energy savings used for the purpose of calculating net benefits and cost effectiveness are calculated on the basis of the validated multi-year “lifetime” of installed energy efficiency measures.
9. Evaluation, Measurement, and Verification (EM&V) – Studies and activities performed to determine the actual savings and other effects attributable to energy efficiency programs and measures. In addition, EM&V is used to assess the operational effectiveness of programs and to identify modifications that will enhance operations of such programs.

10. Measure – The equipment, materials and/or practices that, when put into use at a customer site, result in a measurable and verifiable reduction in either purchased energy consumption; measured energy or peak demand; or both.
11. Portfolio – The entire group of programs offered by an Administrator.
12. Program – A particular energy efficiency service or set of services directed to a particular population or market segment for which common characteristics are best addressed with a specifically targeted program offering.
13. Program Year – The year in which programs are administered and delivered. For the purposes of planning and reporting, a Program Year shall be considered a calendar year, January 1 through December 31.
14. Quick Start – A portfolio of energy efficiency programs selected from programs that have been widely and successfully implemented in other jurisdictions and can provide net benefits to utility customers. These programs can be implemented more quickly in Mississippi because they are already well-defined, have well-established track records, demonstrate cost effectiveness, and require fewer showings to the Commission.

### **103 Administration and Implementation of Energy Efficiency Programs**

#### **1. Filing for Commission Approvals**

- a. Quick Start Plans – Each electric and natural gas utility serving more than 25,000 customers (meters) and subject to the jurisdiction of the Commission shall file with the Commission for its approval a Quick Start Plan which identifies and outlines the implementation schedule of energy efficiency programs for its service territory. These Plans shall be filed not later than three (3) months following the order



adopting this Rule. Utilities serving 25,000 customers (meters) or fewer are exempt from filing Quick Start Plans.

- b. Comprehensive Portfolio Plans – No later than 30 months from the date of the Commission's order approving its Quick Start Plan, each electric and gas utility shall file a Comprehensive Portfolio Plan of energy efficiency programs. Utilities serving 25,000 or fewer customers (meters) are not exempt from this filing and shall submit descriptions of energy efficiency programs that are economically feasible to implement for their organization's size. In order to increase the energy efficiency opportunities for their customers, utilities with 25,000 or fewer customers are encouraged to submit program plans in collaboration with other utilities.

To ensure that submitted Comprehensive Portfolio programs reflect best practices as well as the actual needs of Mississippi ratepayers, utilities are encouraged to solicit input from customers, programs experts and other stakeholders in the development of their Comprehensive Portfolios.

- c. Approval – A program, portfolio, or plan filed under these rules shall not be implemented until a Commission order is issued expressly approving the program, portfolio, or plan. The Commission shall establish a procedural schedule for the review of each program, portfolio, or plan filing.

2. Waivers

Exemptions from these rules may be granted by the Commission in accordance with the Commission's Rules of Practice and Procedure. Nothing in these rules shall preclude the Commission from modifying these rules on its own initiative or in response to a party's motion and after notice and hearing.

**104 Quick Start Plan Filing Requirements**

1. Service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. The objectives of Quick Start shall be: a) the development of the increased utility program capabilities and infrastructure necessary to support subsequent Comprehensive programs; b) the expansion of energy efficiency expertise throughout Mississippi; c) the careful identification of locally successful (and unsuccessful) energy efficiency program delivery strategies; and d) the initial delivery of energy savings benefits to a sizable cross section of utility customers.

Quick Start program filings shall include specific EM&V plans by which progress toward the achievement of the above objectives can be independently assessed in a manner compatible with best practices. To reflect best practices EM&V expenditures for Quick Start programs should represent approximately 5% of total program budgets. Quick Start Plans shall include energy efficiency programs designed to cover the partial year remaining from the date of the Commission's order approving the Plan plus two successive full Program Years. Quick Start Plans may also include additional programs to be implemented in the first and/or second full Program Year. Quick Start Plans shall include energy efficiency programs that address all customer classes.

2. **Quick Start Energy Efficiency Programs**

Energy efficiency programs should be capable of being implemented within four months of Plan approval.

## Attachment HP-1

All Quick Start programs shall be based on technologies that are commercially available. As appropriate, Quick Start programs shall be coordinated with and not duplicate related programs funded through other sources.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

Quick Start budgets shall be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods rather than to a larger number of smaller programs with minimal impacts.

It is important that programs within the Quick Start portfolio address the entire range of energy efficiency opportunities including “retrofit”, “new construction” and “lost opportunity” customer scenarios. Utilities shall file plans to implement Quick Start energy efficiency programs from the following general list of categories:

- a. *Customer and Technical Education* – Building both technical expertise and customer awareness is an essential precondition to expanded Comprehensive programs. This program would include the education of customers and technical energy professionals on energy efficiency opportunities and technologies. . It should, to the greatest extent possible, be a consistent statewide group of messages. It should include education of energy auditors, construction professionals, facility engineers, technicians and equipment installers. The messages should encourage the efficient use of electricity and gas. The messages should increase awareness of opportunities to use electricity and natural gas more efficiently. This category of programs would apply to all customer classes.
- b. *Energy Audits and Evaluations Leading to Savings* – This would include home and commercial energy audits and audits of commercial and industrial processes and equipment. The audits and evaluations would produce recommendations for opportunities to implement site-specific efficiency and conservation measures. Programs would be designed for audits to lead to savings results and could include cost-effective and economically justified customer incentives to encourage the implementation of the site-specific measures identified in the audits. This category of programs would apply to all customer classes.
- c. *Inspection and Tune Up of Heating and Air Conditioning Systems* – This would be applicable to residential, commercial, and industrial systems. This category of programs would apply to all customer classes.
- d. *Lighting* – Improved lighting for residential, commercial, and industrial customers. This category of programs would apply to all customer classes and would take into

consideration enhanced federal lighting efficiency standards that become effective during the Quick Start period.

- e. *Appliances* – Programs that offer rebates or other incentives on high-efficiency appliances and may also work with upstream trade allies to increase the sales of these products through the distribution chain. This category of programs most often applies to residential and small commercial customers.
- f. *Increased Deployment of Demand Response Programs* – Such programs already exist in Mississippi. This would look for additional opportunities to offer demand response programs including interruptible service, curtailment service, off-peak service, etc. In the near term, this category of programs would apply to commercial and industrial customer classes but may eventually extend to residential customers. While demand response programs can provide high value by reducing peak energy demand, the primary emphasis of the Quick Start programs shall be on programs that produce long term reductions in energy consumption for participating customers.
- g. *Weatherization and Whole-Home Retrofits* – A residential weatherization or comprehensive retrofit program that would be based solely on efficiency criteria using established home assessment protocols and often targeting the least efficient homes first. This category of programs would apply to the residential customer class.
- h. *New Homes Program* – These residential programs provide incentives to builders who achieve a percentage of energy savings against a prescribed standard.
- i. *Commercial and Industrial Prescriptive Incentive Programs* – These programs offer a fixed-dollar incentive for multiple defined prescriptive measures (i.e., lighting,

HVAC replacements, occupancy sensors, motors, etc.).

- j. *Commercial and Industrial Custom Incentive Programs* – In these programs the Administrator works with the customer to develop site-specific energy efficiency measures, and the incentive is based both on the amount of energy saved and the total cost of the installation of the energy efficiency measures.
- k. *Commercial and Industrial Retro-Commissioning* – Existing buildings comprehensively assessed and “tuned up” to optimize energy efficiency in their operations.

### **3. Quick Start Plan Portfolio Description**

Each Quick Start Plan filing shall address the following portfolio elements:

- a. Demonstration that the portfolio of Quick Start programs serves all customer classes in rough proportion to the magnitude of retail energy sales associated with each class.
- b. Demonstration that programs within the portfolio are designed in such a manner as to effectively address “retrofit”, “new construction”, and “lost opportunity” measure installation scenarios”.
- c. Demonstration that the proposed programs have been successfully implemented in other jurisdictions.
- d. A Quick Start budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106)
- e. Demonstrated budgetary commitment of approximately 5% of total Quick Start program budgets to the EM&V of Quick Start programs.
- f. Any additional supporting information the Administrator may propose or the

Commission may require.

Although estimates of program costs must be included in proposals, Quick Start programs are exempt from the requirement to provide cost-effectiveness showings under the cost-benefit tests of Section 105. Estimated energy and demand savings and an EM&V program shall be included for all Quick Start programs except a statewide education program.

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Each program in the Quick Start Plan should include the following general information:

- a. A general description of the program and the services to be provided;
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- c. The specific program objectives including participation levels, specific infrastructure development objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems etc;
- d. The identification of the specific independent EM&V activities that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements;
- e. Anticipated implementation barriers and how they will be addressed;
- f. Any proposed customer incentives;
- g. Program's timeframe if the program term is limited;
- h. A plan for addressing over-subscription to the program and avoiding disruptive stop-

start funding cycles;

- i. Estimated energy and peak demand savings and the basis for these savings estimates, which may use Deemed Savings;
- j. Estimated program costs and its proportion of the Quick Start budget; and
- k. Any additional information or analyses the Administrator may propose or the Commission may require.

#### **105 Quick Start Program Reporting Requirements**

In order to facilitate on-going review and enhancements of Quick Start program progress Administrators shall provide, on a quarterly basis, reports of progress and program, developments. These summaries shall include, at a minimum, the following information.

- 1. Program participation levels to date, by customer class
- 2. Estimates of energy and demand savings to date, by program
- 3. Program expenditures to date, broken down into general categories.
- 4. Summary of program marketing plans, activities, deliverables and possible enhancements of such efforts
- 5. Plans for, and progress toward the development of, utility DSM infrastructure, such as program staffing levels, project quality control, internal training, and project data tracking systems;
- 6. Program evaluation spending, planned and completed activities and results;
- 7. Summary of planned and completed training efforts for customers and trade allies;
- 8. Summary of program "challenges" and proposed strategies to address them.



9. Summary of progress toward achieving all other program objectives as stated in initial program filings.

## **106 Comprehensive Portfolio Plan Filing Requirements**

During the Quick Start period the Commission will develop detailed filing requirements for the Comprehensive Portfolio. Such requirements will be based on best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility stakeholders. In general, service providers shall propose general program designs, specific programs, and specific measures and may propose programs and/or measures in any combination. All programs (design, implementation, EM&V, etc.) shall be guided by Best Practices. As appropriate, Comprehensive Portfolio programs should be coordinated with and not duplicate related programs funded through other sources.

The Comprehensive Portfolio Plan shall include energy efficiency programs that address all customer classes. Plans shall cover at least one year and may cover up to three years. Except for pilot or trial programs, Comprehensive Portfolio budgets should be applied to programs of sufficient scale to provide meaningful energy and/or demand reductions for the applicable program time periods instead of to a larger number of smaller programs with minimal impacts. Except for pilot or trial programs, technologies supporting energy efficiency programs should be commercially available. Program cost allocations should follow cost-causation principles – there shall be no cross subsidization between customer classes.

**1. Comprehensive Portfolio Description and Support**

Program plans shall be consistent with and reflect the effects of all energy efficiency programs in the electric utilities resource plans or natural gas utilities procurement plans.

Programs filed by natural gas and electric utilities shall comply with the standards and rules regarding promotional practices as set forth by Commission Order in Docket 1994-UA-115.

During the Quick Start period the Commission will develop detailed requirements for the Comprehensive Portfolio program descriptions and support. Such requirements will be based on the best practices in other regulatory jurisdictions as well as input from experts and utility and non-utility parties. In general, each Comprehensive Portfolio Plan filing shall address the following portfolio-level elements:

- a. Demonstration that the scope of the Comprehensive Portfolio Plan serves all customer classes;
- b. A showing of providing aggregate ratepayer benefits to the majority of ratepayers;
- c. Cost-benefit analysis (see Section 105) listing total costs and benefits, including expected savings goals for the portfolio;
- d. A Comprehensive Portfolio budget and cost recovery proposal to be collected in an energy efficiency rider (see Section 106); and

- e. Any additional supporting information the utility may propose.

**2. Comprehensive Portfolio Plan Individual Program Description Requirements**

Program designs should reflect Best Practices. The proposed programs may continue to include, but are not limited to, those Quick Start programs that have been demonstrated to be effective. For program implementation, a focus should be placed on local and diverse equipment and service providers to the extent these are available and competitively priced.

- a. For the Comprehensive Portfolio and each program a utility shall describe, in qualitative and quantitative terms, how its proposal will further or accomplish any or all of the objectives or benefits identified in Section 101 that are reasonably applicable to the utility's proposal. Should the utility determine that its proposal does not address one or more of the listed objectives or benefits, the utility shall briefly explain why.
- b. Each program in the Comprehensive Portfolio should include the following information:
  - i A general description of the program and the services to be provided;
  - ii The target customer population to be addressed by the program and strategies for marketing the program to potential participants;
  - iii The specific program objectives including participation levels and specific infrastructure objectives including program staffing, expertise development, acquisition of necessary program tools, technician training, data systems, etc.

- iv Targets for customer participation and energy use reductions;
- v The identification of the specific independent EM&V activities that will be implemented to determine whether the program has achieved its stated objectives as well as the identification of possible program enhancements. The EM&V plan should appropriately balance the need to assess and improve program performance with EM&V costs. EM&V approaches and expenditure levels should be guided by Best Practices. Anticipated implementation barriers and how they will be addressed;
- vi Any proposed customer incentives;
- vii Program's timeframe if the program term is limited;
- viii A plan for addressing over-subscription to the program and avoiding disruptive stop-start funding cycles;
- ix The prescribed cost-benefit analyses (see Section 107);
- x Estimated energy and peak demand savings and the basis for these savings estimate, which may include Deemed Savings if approved by the Commission;
- xi Any additional information or analyses the service provider may propose or the Commission may require.

### **3. Uniformity of Programs**

Programs addressing both electric and gas customers in the same service territory shall be coordinated to the extent reasonable.

**a. Customer Incentives**

Programs may include financial and other incentives to encourage customers to make energy efficient investments if the incentives are cost justified according to criteria established by the Commission.

Incentives may include information, technical assistance, leasing programs, product giveaways and direct financial inducements. Financial inducements may include but are not limited to rebates, discounted products and services, and low-rate financing.

All customer incentives shall be considered in the cost-benefit testing of programs following the protocols set forth by the California Standard Practice Manual. Costs of customer incentives shall be considered a direct program cost.

Incentives shall not be any higher than necessary to overcome the customer barriers to invest in the measure and should be reduced or eliminated as the measure becomes more of a standard practice.

**b. Statewide Programs**

The Commission, after notice and hearing, may direct utilities to offer uniform statewide energy efficiency and conservation programs if it determines such standardization to be the most cost-effective result and in the public interest. Utilities may request approval to offer statewide or region-wide programs for which public messages, the need for technical training, commercial terms and conditions, and customer reception are best served by such an approach.

**c. Pilot Programs**

The Commission may approve pilot energy efficiency programs. A pilot program

design is distinct from Quick Start and other program designs in that it shall include explicit questions that the pilot will address, explicit EM&V designed to address pilot questions, estimates of program costs and benefits. Pilot Programs shall be of limited duration until reassessment after a pre-determined period.

Programs that are neither pilots nor Quick Start programs must comply with the entire plan filing requirements of this Section 106.

All costs for approved Pilot, Quick Start, and other programs shall be considered eligible for cost recovery.

#### **107 Cost-Benefit Tests**

Cost-benefit assessments for all energy efficiency programs shall be evaluated using the Total Resource Cost (TRC), the Program Administrator Cost (PAC) (also known as the Utility Cost Test (UCT)), the Participant (PCT), and the Rate Impact Measure (RIM) tests as defined in the California Standard Practices Manual: Economic Analysis of Demand Side Programs and Projects, July, 2002, ("Manual") and submitted to the Commission. The inputs for these tests shall be based as much as practicable on data local to Mississippi. The costs of program design; implementation; delivery; customer incentives; customer education and marketing; measurement of benefits; and administration are recognized parts of energy efficiency program costs that should be included in cost-benefit calculations according to the Manual. Cost-benefit results shall be presented for both an individual program and portfolio basis.

For purposes of cost effectiveness analysis utilities or administrators shall use evaluation periods that have been validated, and are in wide use, in jurisdictions with well-

established comprehensive efficiency programs. Alternatively, evaluation periods may reflect the specific EM&V estimates of lifetimes of energy efficiency measures installed in the state of Mississippi. Utilities may submit additional economic analyses information in support of a proposed program or portfolio.

Results of the tests shall be presented consistent with the descriptions shown in Table 1 or by other means approved by the Commission. In order to clarify the cost effectiveness criteria which best serve the public interest the Commission shall sponsor a public technical forum addressing the implications, and application of, various cost effectiveness criteria options. If outside funding is not available to support such a technical forum the costs of such forum will be borne by regulated utilities in proportion to their retail sales in Mississippi.

**TABLE 1 - Cost-Benefit Tests**  
**with Primary and Secondary Means of Expressing Test Results**

| <b>Primary</b>   | <b>Secondary</b>   |
|--|--|
| <b><i>Participant Test</i></b>   |  |
| Net present value ("NPV") (all participants)                                       | Discounted payback (years)<br>Benefit-cost ratio ("BCR")<br>Net present value (average participant)      |
| <b><i>Ratepayer Impact Measure (RIM) Test</i></b>                                  |  |
| Lifecycle revenue impact per unit of energy (kWh or therm) or demand customer (kW) | Lifecycle revenue impact per unit<br>Annual revenue impact<br>(by year, per kWh, kW, therm, or customer) |
| Net present value  | First-year revenue impact<br>(per kWh, kW, therm, or customer)<br>BCR                                    |

| Primary                                      | Secondary  |
|--|--|
| <i>Total Resource Cost (TRC) Test</i>        |  |
| Net present value                            | BCR<br>Levelized cost<br>(cents or dollars per unit of energy or demand) |
| <i>Program Administrator Cost (PAC) Test</i> |  |
| Net present value                            | BCR<br>Levelized cost<br>(cents or dollars per unit of energy or demand) |

The Commission will rely on the formulas in the Manual and will assess the cost-benefit test results in the public interests.

#### 108 Cost Recovery

Cost recovery shall be limited to the incremental costs which represent the program costs that are not already included in the then-current utility rates and shall include full and timely recovery of program costs and lost contribution to fixed cost. The Commission may decide to limit the time period during which utilities may recover lost contributions to fixed cost.

To address disincentives for energy efficiency investments, the utilities may propose an approach to earn a return on energy efficiency investments through a shared-savings or performance-incentive mechanism to make these investments more like other investments on which utilities earn a return. It is the expectation of the Commission that such incentives will be associated with high levels of program performance as validated by best practice EM&V. Prior to the Comprehensive Portfolio filing deadlines, the Commission



intends to establish specific numerical energy savings targets expressed as percentages of energy sales based on the experience of Quick Start and other relevant information.

A utility may request energy efficiency cost recovery through a rider.

A utility may request that costs from approved program budgets be included in the rider.

A utility may request that cost recovery begin when the energy efficiency program is implemented and offered to customers. Utilities may also propose a mechanism to adjust budgets to deal with oversubscriptions and to avoid stop-start funding.

If a utility is recovering energy efficiency program costs through a rider, the utility shall file, contemporaneous with the Annual Report under Section 109, a re-determined Energy Efficiency Cost Rate ("EECR"). In support of this re-determined rate, the utility shall file a schedule of actual program costs for the reporting period, actual amounts collected under the rider for the reporting period, and approved program budgets for the current calendar year. The EECR shall be adjusted to reflect a reconciliation of any over- or under-recovery for the prior year and the approved budget for the current Program Year.

#### **109 Annual Reporting Requirements for Comprehensive Programs**

By April 1 annually, each electric and gas utility shall file an Annual Report addressing the performance of all approved energy efficiency programs. During the Quick Start period the Commission will develop detailed reporting requirements based on best practices as the input of utilities and other informed parties. Such requirements shall apply to a final summary report of the Quick Start programs as well as to all subsequent Comprehensive Portfolio programs. In general, the report shall present:

1. The energy and demand savings results attributable to the activities of the entire Portfolio and each approved program. These results shall reflect EM&V requirements as established by the Commission. A summary of the EM&V methodologies which produced the reported estimates of energy and demand savings reported to the Commission.
2. The amounts spent on each energy efficiency program and the total amounts spent on all programs; and
3. Any recommendations for expansion, reduction, alteration, addition, or elimination of any programs with justifications for the recommendations.

#### **110 Records**

All energy efficiency programs and measures are subject to inspection by the Commission.

All records of energy efficiency programs shall be maintained in sufficient detail to permit a thorough audit and evaluation of all program costs and program performance.

This Section 110 does not limit the existing authority of the Mississippi Public Service Commission.