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Witness:	John A. Rogers
Sponsoring Party:	MO PSC Staff
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MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

SURREBUTTAL TESTIMONY

OF

JOHN A. ROGERS

KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. EO-2012-0009

Jefferson City, Missouri
May 2012

** **Denotes Highly Confidential Information** **

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism	)))))	Case No. EO-2012-0009

AFFIDAVIT OF JOHN A. ROGERS

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

John A. Rogers, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 33 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

John A. Rogers

Subscribed and sworn to before me this 17th day of May, 2012.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Notary Public

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KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. EO-2012-0009

Q. Please state your name and business address.

A. My name is John A. Rogers, and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

Q. What is your present position at the Missouri Public Service Commission ("Commission")?

A. I am a Utility Regulatory Manager in the Energy Unit of the Regulatory Review Division.

Q. Are you the same John A. Rogers that filed rebuttal testimony in this case on March 20, 2012?

A. Yes, I am.

Q. Would you please summarize the purpose of your surrebuttal testimony?

A. I make a correction to my rebuttal testimony Schedule JAR-7. I briefly discuss the technical conference process involving KCP&L Greater Missouri Operations Company ("GMO" or "Company") and the parties to this case. I discuss certain rebuttal testimony of other parties' witnesses in this case and identify whether this rebuttal testimony 1) supports the recommendations in the Commission Staff's ("Staff's") rebuttal testimony and/or 2) causes Staff to change its recommendations in this case.[1]

[1] The fact that I do not respond to the rebuttal testimony of other parties' witnesses on an issue or their position on an issue does not mean that Staff agrees with what they say.

Q. Do you have any corrections to your rebuttal testimony filed on March 20, 2012?

A. Yes. I incorrectly labeled the units for the incremental and cumulative annual energy savings and annual demand savings values as MWh and MW on Schedule JAR-7. The correct labels are kWh for annual energy savings and kW for annual demand savings. Attached to this surrebuttal testimony as Schedule JAR-9 is a revision of Schedule JAR-7 pre-filed with my rebuttal testimony. Schedule JAR-9 includes the correct units for annual energy savings (kWh) and for annual demand savings (kW) which Staff recommends be approved as incremental and cumulative annual energy and demand savings targets for GMO's proposed demand-side management ("DSM") programs.

Staff's revised recommendations concerning certain MEEIA rules requiring actions o r decisions by the Commission

Q. As a result of reviewing the rebuttal testimony of other parties, is Staff revising any of its recommendations in this case?

A. Yes. Staff is revising three of its recommendations.

Concerning the Commission's guideline to review progress toward an expectation that the electric utility's demand-side programs can achieve a goal of all cost-effective demand-side savings found in Rule 4 CSR 240-20.094(2)(A) and (B), Staff is revising the recommendation I presented in my rebuttal testimony (p. 3, lines 23-26) to:

The Commission reject GMO's demand-side program plan[2] and order GMO to file an achievable, realistic and specific demand-side program plan[3] for its DSM programs *to include estimates of annual energy and demand savings through the use of net-to-gross ("NTG") ratios from evaluation, measurement and verification ("EM&V") reports*[4] to be delivered according to a specified implementation plan and budget as required by Rule 4 CSR 240-20.094(1)(K).[5]

Concerning Rule 4 CSR 240-20.093(2)(C) regarding the approval of the establishment of a demand-side investment mechanism ("DSIM"), Staff is revising the recommendation I presented in my rebuttal testimony (p. 8, lines 18-21) to:

The Commission reject GMO's proposed shared benefits incentive component of its DSIM and approve a **net**[6] shared benefits mechanism to book a regulatory asset equal to GMO's proposed shared benefit incentive component to be trued-up based on measured and verified annual **net** shared benefits[7] as a result of EM&V. The net

[2] GMO's demand-side program plan as filed has no specific implementation schedule and is not achievable, since GMO has all of its DSM programs operating at the assumed 0.5% of sales "annual run rate" beginning in January 2012, and an order in this case is not expected until June 19, 2012. Further, in an email to Staff, GMO revealed that it will take approximately six (6) months before the Company can begin implementation of its five (5) new DSM programs following an order approving these programs.

[3] Rule 4 CSR 240-20.094(1)(K) provides: Demand-side program plan means a particular combination of demand-side programs to be delivered according to a specified implementation schedule and budget.

[4] NTG ratios for GMO's "current" DSM programs which are proposed DSM programs in this case should be based on the EM&V for these programs (see rebuttal testimony of Allen D. Dennis, Schedules ADD-3 through ADD-10). For GMO's "new" proposed DSM programs the NTG ratios should be based the "Program Energy Savings (kWh) – gross" and the "Program Energy Savings (kWh) – net" contained on pages 7, 8, 25, 26, 35, 36, 44, and 45 of Schedule ADD-2 of the direct testimony of Allen D. Dennis.

[5] This recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at p. 3, lines 23 – 26.

[6] Annual net shared benefits as defined in 4 CSR 240-20.093(1)(C), 4 CSR 240-20.094(1)(C) and 4 CSR 240-3.163(1)(A).

[7] Rule 4 CSR 240-20.093(1)(C) provides: "Annual net shared benefits means the utility's avoided costs measured and documented through evaluation, measurement and verification (EM&V) reports for approved demand-side programs less the sum of the programs' costs including design, administration, delivery, end-use measures, incentive, EM&V, utility market potential studies, and technical resource manual on an annual basis."

shared benefits component should be 16%[8] of annual net shared benefits calculated using net energy and demand savings, i.e., annual energy and demand savings after accounting for free-ridership and spillover as opposed to the 12% of gross shared benefits using gross energy and demand savings.[9]

Concerning Rule 4 CSR 240-20.093(2)(C) regarding the approval of the establishment of a DSIM, Staff is revising the recommendation I presented in my rebuttal testimony (p. 9, lines 1-5) to:

> The Commission reject GMO's performance incentive component and approve the following alternative performance incentive component for GMO as a way to more effectively incent GMO to achieve the goal of all cost-effective demand-side savings and to reward GMO for its actual achievement toward that goal.
>
> The following performance incentive component for net energy savings:
>
> - If GMO achieves at least 70% of the three-year cumulative energy savings target, GMO will receive $800,000 annually.
> - If GMO achieves more than 70% of the three-year cumulative energy savings target, GMO will receive an additional $24,000 annually for each 1% of additional energy savings achieved between 70% and 120% of the target.
> - If GMO achieves more than 120% of the three-year cumulative energy savings target, GMO will receive an additional $64,000 annually for each 1% of additional energy savings achieved between 120% and 130% of the target.

[8] Staff Data Requests 35 and 36 asked, "What are the estimated annual net shared benefits as defined in 4 CSR 240-20.093(C) for each of the Company's demand-side programs and for the Company's demand-side programs plan in total?" and "What percentage of annual net shared benefits as defined in 4 CSR 240-20.093(C) would GMO need in order to have comparable earnings (based on net present value of annual earnings using the Company's cost of capital) to the earning of the proposed DSIM with 12% shared benefit?" It should be noted that the 16% figure assumes a net-to-gross ratio of 1. Staff recommends that actual net-to-gross values should be measured and verified through full EM&V.

[9] This recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at p. 8, lines 18 – 21.

% of Cumulative 3-Year Energy Savings Target	Annual Performance Incentive
130%	$2,640,000
120%	$2,000,000
110%	$1,760,000
100%	$1,520,000
90%	$1,280,000
80%	$1,040,000
70%	$800,000

The following performance incentive component for net demand savings:

- If GMO achieves at least 70% of the three-year cumulative demand savings target, GMO will receive $200,000 annually.
- If GMO achieves more than 70% of the three-year cumulative demand savings target, GMO will receive an additional $6,000 annually for each 1% of additional demand savings achieved between 70% and 120% of the target.
- If GMO achieves more than 120% of the three-year cumulative demand savings target, GMO will receive an additional $16,000 annually for each 1% of additional demand savings achieved between 120% and 130% of the target.

% of Cumulative 3-Year Demand Savings Target	Annual Performance Incentive
130%	$660,000
120%	$500,000
110%	$440,000
100%	$380,000
90%	$320,000
80%	$260,000
70%	$200,000

The above recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at page 9, lines 1 – 5.

Staff's additional recommendation concerning variance from the Commission's MEEIA rules required for approval of GMO's DSIM

Q. Has Staff identified any variances beyond those it has already identified which are required, but which GMO is not requesting?

A. Yes. Staff has identified a third issue for which variances are required, but which GMO has not requested variances. GMO needs variances from the rules that require

that the utility incentive revenue requirement and/or the utility incentive component of a DSIM be based on "a portion of annual net shared benefits achieved and documented through EM&V reports for approved demand-side programs."

Q. What is Staff's recommendation regarding these required variances?

A. Staff recommends that:

The Commission grant GMO variances from Rules 4 CSR 240-20.093(1)(Q) and (EE), 4 CSR 240-20.093(2)(H), and 4 CSR 240-20.094(1)(M) and (Z), since GMO is requesting and Staff is recommending approval of a utility performance incentive which is based on "fixed dollar award that varies across multiple tiers of performance"[10] as Staff recommends above.

Organization of surrebuttal testimony

Q. How is the remainder of your surrebuttal testimony organized?

A. My testimony is organized into the following sections:

1. Summary of the technical conference process;
2. Estimated annual energy and demand savings for each proposed DSM program;
3. Annual energy and demand savings targets;
4. Net shared benefits component of a DSIM; and
5. Performance incentive component of a DSIM.

Summary of the technical conference process

Q. Would you describe the technical conference process GMO and the parties to this case used?

[10] This recommendation is similar to the recommendation in the *rebuttal testimony of Adam Bickford* at p. 20, l. 12 through p. 21, l. 12.

A. Yes. A total of nine (9) weekly technical conferences[11] were held and proved to be very productive and informative. Parties provided questions prior to the weekly technical conferences, and GMO was responsive and timely in providing the answers to questions and the supporting analyses on a wide range of issues[12] in this case. Staff thanks GMO and all the parties for their participation in, and support of, the technical conference process.

Estimated annual energy and demand savings for each proposed DSM program

Q. What is the most significant issue presented in the rebuttal testimony of other parties that impacts the annual energy (kWh) and demand (kW) savings for GMO's proposed DSM programs and for GMO's proposed DSIM?

A. The most significant issue is the use of NTG ratios.

Q. What are NTG ratios?

A. NRDC[13] witness Philip Mosenthal provides the following explanation in his rebuttal testimony which accurately describes them:

> Net-to-gross ratios generally adjust for two primary things: free-ridership and spillover. Free riders are customers who participate in a program but who would have installed the efficiency measure anyway. As a result, a pure free rider does not actually create any new (or "net") savings compared to the reference case of no DSM program because by definition they would have installed the measure anyway. Spillover refers to customers who were influenced by the program (either in the short or long term) to save energy, although did not directly participate in a program and were not tracked and accounted for in program savings data. For example, a customer may choose to install a high efficiency measure because of vendor recommendations and program marketing that are due to the program strategies, but may never actually complete a rebate form and get counted by the program tracking

[11] Technical conferences were held weekly beginning on January 26, 2012 and concluding on March 22, 2012.
[12] Focus of the technical conferences included: 1) design of estimated annual energy and demand savings for proposed DSM programs, 2) financial analysis, accounting issues and operational issues related to the proposed DSIM, and 3) quantitative analysis needed to support Commission's approval of variances from its MEEIA rules necessary for approval of DSM programs and a DSIM.
[13] Mr. Mosenthal presents testimony on behalf of the Natural Resources Defense Council (NRDC), Sierra Club, and Renew Missouri.

> system. To estimate the actual net savings attributable to the DSM program (compared to what would have occurred if the program did not exist), the gross tracked savings from all the measures installed in the program must be adjusted for these factors.[14]

Q. How does GMO propose to use NTG ratios?

A. GMO proposes to use a NTG ratio of 1.0 when estimating the annual energy (kWh) and demand (kW) savings for its proposed DSM programs and a NTG ratio of 1.0 when determining "actual" annual energy and demand savings when measuring DSM programs' performance results for use in its proposed DSIM.

Q. What does a NTG ratio of 1.0 mean?

A. It could mean that there are no free-riders or spillover, or that free-rider effect is the same as the spillover effect. If there are free-riders and no spillover, or if the effect of free-riders is greater than the effect of spillover, the NTG ratio would be less than one. If there are no free-riders, but there is spillover, or if the effect of free-riders is less than the effect of spillover, the NTG ratio would be greater than one.

Q. Should the Commission be concerned about GMO's assumption that the NTG is equal to 1.0 when estimating annual energy and demand savings?

A. Yes, it should. Mr. Mosenthal provides the following discussion, concerns and recommendations regarding NTG ratios in his rebuttal testimony (which is labeled "direct testimony"):

> Q. Can you provide an example of how deeming of a single 1.0 NTG ratio for all programs and measures in DSIM creates perverse incentives?
>
> A. Yes. Different programs, technologies and strategies will result in different NTG ratios, and utilities delivering programs can have significant influence over ultimate NTG ratios, even within a specific market, technology or program. For example, compact fluorescent lamp (CFL) promotions often have low NTG ratios compared with some other programs or measures. While

[14] *Rebuttal testimony of Philip Mosenthal*, p. 11, lines 6 – 19.

they are still cost-effective and worthwhile to capture, because the market has significantly transformed in recent years, a large portion of participants are likely to be free riders who would have purchased the CFLs anyway. On the flip side, LED lamps are a relatively new technology, are significantly more expensive than CFLs, and enjoy much less customer awareness. As a result, LED lamp promotion would likely have a very high NTG ratio. LED lamps also offer significant cost-effective efficiency, with the promise that programs focused on this technology can spur even greater innovation and price declines over time, ultimately resulting in greater and more cost-effective savings.

Under the current DSIM, GMO would count a kWh of gross savings equally from these two technologies. However, if the actual NTG ratios for CFLs was 0.5 and for LEDs 1.0, then each kWh of gross LED savings would actually be worth twice as much to ratepayers and society, and result in twice as much lost revenue to GMO. However, because CFLs are cheaper and savings from them are easier to capture at this stage GMO would have a perverse incentive to pursuing more CFLs at the expense of efforts to promote LEDs, thereby resulting in lower overall net benefits to ratepayers but likely higher earnings to GMO. Because of GMO's single-value deeming approach, under this scenario GMO would recover double the actual lost revenue for every kWh associated with additional CFLs (over and above the proportional amount assumed in GMO's plan), possibly resulting in a windfall to GMO under DSIM.

While the above is just one example, there are numerous ways a utility can influence NTG ratios. As a result, *rewarding the utility financially for only gross rather than net savings can encourage a utility to pursue gross savings that actually are less worthwhile in terms of net savings, or even intentionally target free riders which would drive down actual NTG ratios. Because actual net savings drive lost margins, GMO would benefit from collecting DSIM on gross savings but actually minimizing the true net savings. I am not suggesting GMO has any intent to do this, or that it would. However, I believe it is bad policy to create perverse incentive, and ultimately unfair to utility staff, who will naturally feel some conflict between maximizing overall societal benefits versus maximizing shareholder earnings.*[15]

(Emphasis added)

Q. Does Staff agree with Mr. Mosenthal's foregoing testimony about NTG ratios?

A. Yes.

Q. Do other Staff witnesses provide testimony on the importance of using NTG ratios based on full EM&V reports to verify DSM program energy and demand savings?

[15] *Rebuttal testimony of Philip Mosenthal*, p. 12, l. 12 through p. 14, l. 5.

A. Yes. In his surrebuttal testimony in this case, when responding to the rebuttal testimonies of witnesses for NRDC, and Office of the Public Counsel ("OPC"), Staff witness Michael L. Stahlman addresses the importance of NTG ratios from full EM&V reports for verifying DSM program energy and demand savings.

Q. How are NTG ratios best determined?

A. NTG ratios can only be accurately estimated from a full EM&V that is purposely designed to collect information for each program regarding free-riders and spillover, and that are conducted by an independent, knowledgeable evaluator.

Q. Why are NTG ratios from full EM&V reports so important to planning for and evaluating the energy and demand saving of DSM programs under the Missouri Energy Efficiency Investment Act ("MEEIA")[16]?

A. There are two reasons. First, the MEEIA provides that the Commission shall "provide timely earnings opportunities associated with cost-effective measurable and verifiable efficiency savings."[17] Upon advice from Staff counsel, based on how the Commission has implemented this statutory requirement in its rules, the Commission has interpreted this statutory language to mean that any earnings opportunities must result from measurable and verifiable efficiency savings. To assume that all NTG ratios are equal to 1.0 does not meet the Commission's interpretation of the statutory requirement that an earnings opportunity result from measurable and verifiable efficiency savings because, as even GMO acknowledges, the NTG ratios from the first round of EM&V for its current programs are less than 1.0.[18] Simply counting measures for which rebates have been paid and then assuming a NTG ratio equal to 1.0 does not come close to meeting the statutory requirement for

[16] Section 393.1075 RSMo.
[17] Section 393.1075. 3. (3)
[18] *Direct testimony of Dennis D. Allen,* Schedules ADD-3 through ADD-10.

determining efficiency savings. Only through a full EM&V can actual efficiency savings be measured and verified, and then used to determine an appropriate earnings opportunity. The MEEIA requires that, in order to balance the risk and reward for both the Company and for its customers, the efficiency savings results from EM&V must be used to determine earning opportunities.

Second, this is GMO's first MEEIA filing. If the Commission approves the use of assumed NTG ratios equal to 1.0 in this first MEEIA case, the Commission, the Company and all the parties will be deprived of the opportunity to learn from a more rigorous EM&V process at the outset of implementing DSM programs under the MEEIA and to understand exactly how EM&V may or may not impact efficiency savings for use in planning for and evaluating the results of DSM programs.

Q. As a result of Mr. Mosenthal's rebuttal testimony concerning NTG ratios and other considerations, has Staff revised any of its recommendations concerning the Company's demand-side program plan?

A. Yes. Concerning Rule 4 CSR 240-20.094(2)(A) and (B), Staff is revising the recommendation I presented in my rebuttal testimony (p. 3, lines 23-26) to:

> The Commission reject GMO's demand-side program plan[19] and order GMO to file an achievable, realistic and specific demand-side program plan[20] for its DSM programs *to include estimates of annual energy and demand savings through the use*

[19] GMO's demand-side program plan as filed has no specific implementation schedule and is not achievable, since GMO has all of its DSM programs operating at the assumed 0.5% of sales "annual run rate" beginning in January 2012, and an order in this case is not expected until June 19, 2012. Further, in an email to Staff, GMO revealed that it will take approximately six (6) months before the Company can begin implementation of its five (5) new DSM programs following an order approving these programs.

[20] Rule 4 CSR 240-20.094(1)(K) provides: Demand-side program plan means a particular combination of demand-side programs to be delivered according to a specified implementation schedule and budget.

of NTG ratios from EM&V reports[21] to be delivered according to a specified implementation plan and budget as required by Rule 4 CSR 240-20.094(1)(K).[22]

Annual energy and demand savings targets

Q. Has Mr. Mosenthal's rebuttal testimony concerning NTG ratios caused Staff to change its recommendations concerning annual energy and demand savings targets?

Q. No, it has not.

Q. Why not?

A. GMO has used a "top-down" approach for determining these targets; meaning it first determined the level of annual energy savings (0.5% of estimated annual sales each year) and annual demand savings (incremental 1.0% of estimated peak demand levels each year) it desired to achieve and then designed DSM programs to meet these levels of savings. Therefore, Mr. Mosenthal's concerns do not arise in how GMO determined the targets. Staff proposes no change to its recommendation that the Commission approve the annual energy and demand savings levels presented in Schedule JAR-7 pre-filed with my rebuttal testimony, and corrected in this testimony in Schedule JAR-9, as the annual energy and demand savings targets for GMO's DSM programs.

Q. Will GMO's budgets for its proposed DSM programs change if the annual energy and demand savings levels in Schedule JAR-9 are "net savings" and not "gross savings"?

[21] NTG ratios for GMO's "current" DSM programs which are proposed DSM programs in this case should be based on the EM&V for these programs (see rebuttal testimony of Allen D. Dennis, Schedules ADD-3 through ADD-10). For GMO's "new" proposed DSM programs the NTG ratios should be based the "Program Energy Savings (kWh) – gross" and the "Program Energy Savings (kWh) – net" contained on pages 7, 8, 25, 26, 35, 36, 44, and 45 of Schedule ADD-2 of the direct testimony of Allen D. Dennis.

[22] This recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at p. 3, lines 23 – 26.

A. Yes. From the information available[23] in this case, Staff estimates the NTG for GMO's program plan to be equal to approximately 0.8. Since the NTG ratios for GMO's programs are all less than one (1.0)[24], it will be necessary for GMO to increase its planned level of spending to achieve the annual energy and demand savings levels in Schedule JAR-9 on a net savings basis.

Q. Has Mr. Mosenthal made statements in his testimony that you feel need to be addressed?

A. Yes. Mr. Mosenthal states on page 9, lines 1-10, of his rebuttal testimony, the following: "*MEEIA's default targets* for the first 3 years are 0.3%, 0.5% and 0.7%, or a cumulative savings of 1.5% by the end of the 3-year period. … I would expect that GMO may find they can ramp up to higher levels, which I encourage them to do so they are better able to handle higher goals in years 4-6, consistent with *the minimum targets* articulated in the MEEIA rules, or higher." (Emphasis added)

Q. What about this testimony do you feel needs to be addressed?

A. What Mr. Mosenthal identifies as "targets" in the MEEIA rules are, instead, "soft goals" or guidelines. The Commission has made it abundantly clear the "soft goals" in Rule 4 CSR 240-20.094(2)(A) and (B) are not mandatory and are to be used by the Commission as only one guideline to review progress toward an expectation that the electric utility's demand-side programs can achieve the goal of all cost-effective demand-side savings. In the Commission's *Report and Order* concerning Rule 4 CSR 240-20.094 in File No. EX-2010-0368, the Commission states in its COMMENT # 7 – GUIDELINES TO REVIEW PROGRESS TOWARD AN EXPECTATION THAT THE ELECTRIC UTILITY'S

[23] *Direct testimony of Allen D. Dennis*, Schedules ADD-3 through ADD-10.
[24] Low-Income Weatherization program and Residential Energy Report program (an education program) do not have calculated NTG ratios, since EM&V is not required for these programs.

DEMAND-SIDE PROGRAMS CAN ACHIEVE A GOAL OF ALL COST-EFFECTIVE DEMAND-SIDE SAVINGS (GENERALLY):

> RESPONSE: Rulemaking is an exercise of the Commission's quasi-legislative power. Interim goals are well within the rulemaking authority granted to the commission in 393.1075.11. An administrative agency has reasonable latitude regarding what methods and procedures to adopt in carrying out its statutory duties. The legislative delegation of powers and duties includes by implication everything necessary to carry out the power or duty and make it effectual or complete. "Where the grant of power is clear, the details for its exercise need be given only within practical limits. The rest may be left to the administrative agency delegated the duty to accomplish the legislative purpose." *AT&T v. Wallmann*, 827 S.W2d 217, 224-225 (Mo App. WD 1992). Moreover, the "soft-goals" at issue are guidelines to review progress and are not mandatory.
>
> During the workshops for the proposed rule, the comment period and the rulemaking hearing, information regarding the targets and goals employed in other states was presented to the commission, including, but not limited to, targets and goals in the states of Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Ohio and Wisconsin. Based upon this information, and the level of DSM currently implemented by Missouri utilities, the commission's staff believed that the initial goals supported by MDNR, GRELC and NRDC were too aggressive and it reduced the goals to the current levels delineated in the proposed rule. As the rules are currently drafted, if the annual incremental and cumulative energy and demand savings differ from the results of the utility's potential study, the commission has the ability to use the utility-specific results of the potential study as a guideline to review progress toward an expectation that the electric utility's demand-side programs can achieve a goal of all cost-effective demand-side savings. If the goals in the proposed rule are used as opposed to the utility's own potential study, they too are merely a guideline to review progress. Because the goals are not mandatory, OPC's concern about them being too steep is unfounded. The commission will make no changes to the language identified by these comments in the proposed rule in relation to the goals contained in 4 CSR 240-20.094(2)(A) or (B).[25]

Therefore, the Commission has no obligation under its MEEIA rules to use any of the "soft goals" in Rule 4 CSR 240-20.094(2)(A) and (B) as "MEEIA's default targets" or "minimum targets" as Mr. Mosenthal asserts in his rebuttal testimony.

[25] *Final Order of Rulemaking*, dated March 14, 2011, File No. EX-2010-0368, pages 11 – 12.

Net shared benefits component of a DSIM

Q. Has any party other than Staff expressed concern with using shared benefits rather than net shared benefits in the utility incentive component of GMO's DSIM?

A. Yes. Office of Public Counsel witness Ryan Kind states:

> Sharing net benefits is more appropriate than sharing total benefits because it creates dual incentives for the utility to both: (1) minimize the direct costs of program implementation and (2) maximize the amount of MWhs and MWs reductions from demand-side programs. With such dual incentives, utilities are encouraged to get the greatest usage reductions per program dollar spent (i.e. the "biggest bang for the buck"), instead of being encouraged to get a high amount of usage reductions, regardless of the cost/kWh that customers pay the utility for achieving the savings. This is a crucial difference from the point of view of the customers who are funding these programs.[26]

Q. Do you know what percentage of annual **net** shared benefits would correspond to GMO's proposed 12% of shared benefits for GMO to overcome its throughput disincentive?

A. Yes. During the March 15, 2012 technical conference, GMO presented its analysis (based upon a NTG ratio of one (1.0)) which shows that 16% of annual **net** shared benefits equates to the 12% of annual shared benefits required for GMO to overcome its throughput disincentive.[27]

Q. Does Staff agree with the recommendation by OPC to require that the sharing be based on net benefits, not gross benefits?

A. Yes.

Q. Then is Staff revising any of its recommendations?

[26] *Rebuttal testimony of Ryan Kind*, p. 21, lines 4 – 11.

[27] Staff Data Requests 35 and 36 asked, "What are the estimated annual net shared benefits as defined in 4 CSR 240-20.093(C) for each of the Company's demand-side programs and for the Company's demand-side programs plan in total?" and "What percentage of annual net shared benefits as defined in 4 CSR 240-20.093(C) would GMO need in order to have comparable earnings (based on net present value of annual earnings using the Company's cost of capital) to the earning of the proposed DSIM with 12% shared benefit?" It should be noted that the 16% figure assumes a net-to-gross ratio of 1. Staff recommends that actual net-to-gross values should be measured and verified through full EM&V.

A. Yes. In light of the foregoing issues Mr. Kind raised, Staff is revising its recommendation concerning the shared benefits component of GMO's DSIM to, instead, be based on **net** shared benefits, i.e., the benefits after consideration of effects such as free-ridership and spillover. Therefore, concerning Rule 4 CSR 240-20.093(2)(C), Staff is revising the recommendation I presented in my rebuttal testimony (p. 8, lines 18-21) to:

> The Commission reject GMO's proposed shared benefits incentive component of its DSIM and approve a **net**[28] shared benefits mechanism to book a regulatory asset equal to GMO's proposed shared benefit incentive component to be trued up based on measured and verified annual **net** shared benefits as a result of EM&V. The net shared benefits component should be 16%[29] of annual **net** shared benefits calculated using net energy and demand savings, i.e., annual energy and demand savings after accounting for free-ridership and spillover as opposed to the 12% of gross shared benefits using gross energy and demand savings.[30]

Q. Does OPC oppose the Company's proposed shared net benefits component?

A. Yes. OPC witness Mr. Kind recommends:

> GMO's shared benefits mechanism would essentially allow the Company to recover "lost revenues" from its DSM programs above the level of lost revenues as this term is defined in 4 CSR 240-20.093(1)(Y). This is significantly more lost revenues than allowed by the DSIM rules, which clearly

[28] Annual net shared benefits as defined in 4 CSR 240-20.093(1)(C), 4 CSR 240-20.094(1)(C) and 4 CSR 240-3.163(1)(A) which provides: "Annual net shared benefits means the utility's avoided costs measured and documented through evaluation, measurement and verification (EM&V) reports for approved demand-side programs less the sum of the programs' costs including design, administration, delivery, end-use measures, incentive, EM&V, utility market potential studies, and technical resource manual on an annual basis."

[29] Staff Data Requests 35 and 36 asked, "What are the estimated annual net shared benefits as defined in 4 CSR 240-20.093(C) for each of the Company's demand-side programs and for the Company's demand-side programs plan in total?" and "What percentage of annual net shared benefits as defined in 4 CSR 240-20.093(C) would GMO need in order to have comparable earnings (based on net present value of annual earnings using the Company's cost of capital) to the earning of the proposed DSIM with 12% shared benefit?" It should be noted that the 16% figure assumes a net-to-gross ratio of 1. Staff recommends that actual net-to-gross values should be measured and verified through full EM&V.

[30] This recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at p. 8, lines 18 – 21.

> limit the lost revenue recovery to those that result from Commission-approved DSM programs that cause sales to drop below the sales level used to set the rates in the most recent rate case. The GMO DSIM proposal is designed to further over collect lost revenues because it includes recovery of lost revenues through the mechanism provided for in 4 CSR 240-20.093(2)(G) in addition to the lost revenue recovery that would occur from GMO's shared benefits mechanism. GMO's shared benefits incentive is redundant with its performance incentive, and is thus inappropriate and unnecessary.[31]

Q. Does Mr. Kind recommend that the Commission require the Company modify its performance incentive in a way to add GMO's lost revenues due to its DSM programs?

A. Yes. Mr. Kind's recommendation includes:

> The Company should establish a separate, transparent lost revenues recovery mechanism designed to recover those lost revenues that are allowed by the DSIM rules, i.e., those lost revenues associated with the utility's demand-side programs that occur when sales turn out to be lower than the sales used to set rates in the most recent rate case.[32]

Q. What DSIM rule is Mr. Kind referring to in his rebuttal testimony?

A. Rule 4 CSR 240-20.093(2)(G)1.

Q. Does Staff recommend GMO's Commission-approved DSIM in this case include a lost revenue component of a DSIM?

A. No.

Q. Why not?

A. Staff's recommendation is that the Commission reject GMO's proposed shared benefits incentive component of its DSIM and approve a **net**[33] shared benefits mechanism to book a regulatory asset equal to GMO's proposed shared benefit incentive component to be

[31] *Rebuttal testimony of Ryan Kind*, p. 3, lines 1- 12.
[32] *Rebuttal testimony of Ryan Kind*, p. 4, lines 26 – 30.
[33] Annual net shared benefits as defined in 4 CSR 240-20.093(1)(C), 4 CSR 240-20.094(1)(C) and 4 CSR 240-3.163(1)(A).

trued-up based on measured and verified annual **net** shared benefits[34] as a result of EM&V. The net shared benefits component should be 16%[35] of annual **net** shared benefits calculated using net energy and demand savings, i.e., annual energy and demand savings after accounting for free-ridership and spillover as opposed to the 12% of gross shared benefits using gross energy and demand savings.[36]

Q. Will Staff's recommendation that the Commission reject GMO's proposed shared benefits incentive component of its DSIM and approve a **net**[37] shared benefits mechanism to book a regulatory asset equal to GMO's proposed shared benefit incentive component to be trued-up based on measured and verified annual **net** shared benefits[38] as a result of EM&V address the Company's throughput incentive?

A. No. A performance incentive[39] component of a DSIM is necessary to address the Company's throughput incentive.

[34] Rule 4 CSR 240-20.093(1)(C) provides: "Annual net shared benefits means the utility's avoided costs measured and documented through evaluation, measurement and verification (EM&V) reports for approved demand-side programs less the sum of the programs' costs including design, administration, delivery, end-use measures, incentive, EM&V, utility market potential studies, and technical resource manual on an annual basis."

[35] Staff Data Requests 35 and 36 asked, "What are the estimated annual net shared benefits as defined in 4 CSR 240-20.093(C) for each of the Company's demand-side programs and for the Company's demand-side programs plan in total?" and "What percentage of annual net shared benefits as defined in 4 CSR 240-20.093(C) would GMO need in order to have comparable earnings (based on net present value of annual earnings using the Company's cost of capital) to the earning of the proposed DSIM with 12% shared benefit?" It should be noted that the 16% figure assumes a net-to-gross ratio of 1. Staff recommends that actual net-to-gross values should be measured and verified through full EM&V.

[36] This recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at p. 8, lines 18 – 21.

[37] Annual net shared benefits as defined in 4 CSR 240-20.093(1)(C), 4 CSR 240-20.094(1)(C) and 4 CSR 240-3.163(1)(A).

[38] Rule 4 CSR 240-20.093(1)(C) provides: "Annual net shared benefits means the utility's avoided costs measured and documented through evaluation, measurement and verification (EM&V) reports for approved demand-side programs less the sum of the programs' costs including design, administration, delivery, end-use measures, incentive, EM&V, utility market potential studies, and technical resource manual on an annual basis."

[39] 4 CSR 240-20.093(2)(H) provides guidance on a utility incentive component of a DSIM.

Performance incentive component of a DSIM

Q. What does Staff consider to be the two most significant issues the other parties present in their rebuttal testimony regarding the Company's proposed performance incentive component of its DSIM?

A. The two most significant issues concern: 1) the award amounts for the performance incentive proposed by OPC, and 2) the weighting of annual energy and demand savings achievement towards the Commission-approved annual energy and demand savings targets.

Q. What does OPC recommend regarding GMO's proposed performance incentive component of its DSIM?

A. OPC witness Ryan Kind recommends the performance incentive mechanism contained in his Table 5, Table 6 and Figure 1 of his rebuttal testimony. Mr. Kind also provides a comparison of his recommended performance incentive mechanism to that proposed by GMO in his Table 7 of his rebuttal testimony. At 100% achievement of the Commission-approved 3-year cumulative energy and demand savings targets OPC recommends a performance incentive award of $3.9 million.

Q. What comparable award levels do other parties recommend for 100% achievement of the Commission-approved 3-year cumulative energy and demand savings targets?

A. The recommended comparable award levels for 100% achievement of the Commission-approved 3-year cumulative energy and demand savings targets are $5.7 million,[40] $6.7 million,[41] and $6.0 million[42] for Staff, DNR and NRDC, respectively.

Q. Why is OPC's recommendation so different from those of Staff, DNR and NRDC?

A. OPC structures the award levels based on a percentage of the costs of the DSM programs based on the practice in other states of basing the performance award amount on a percentage of costs of the DSM programs. Further, Mr. Kind provides Table 1[43] in his rebuttal testimony to summarize the performance incentive mechanisms for 18 states that is contained in a survey performed by the American Council for an Energy-Efficient Economy ("ACEEE").[44]

Q. Does Staff agree with the approach of basing the DSM program performance incentive award levels for GMO on a percentage of the costs of the DSM programs similar to the award mechanism in other states?

A. Staff does not believe the award mechanisms of many other states are necessarily relevant for Missouri. As Missouri is taking its first steps forward under the MEEIA, it is useful to look to other states for their experience in such matters when evaluating DSIM proposals for Missouri. However, care must be taken to consider the

[40] See *Rebuttal testimony of John A. Rogers*, p. 46, lines 5 – 9, for the annual performance incentive amounts that would have to be multiplied by three (3) to derive the 3-year award amount, i.e., $1,900,000 X 3 = $5,700,000.
[41] See *Rebuttal testimony of Adam Bickford*, Schedule AB-4, which indicates that 100% of savings targets achieved, GMO would receive 20.5% of net shared benefits, which are estimated to be $6,718,769.
[42] See *Rebuttal testimony of Philip Mosenthal*, p. 32, lines 1 – 3, which indicates that 100% achieved savings results in an annual financial award of $2 million, and therefore a 3-year award of $6 million.
[43] *Rebuttal testimony of Ryan Kind*, p. 12.
[44] Hayes, Nadel, Kushler, York, *Carrots for Utilities: Providing Financial Returns for Utility Investments in Energy Efficiency*, ACEEE, Report Number U111, January 2011.

"framework" for the energy policy and energy utility regulation within each state when considering a performance incentive mechanism for a utility in that state.

Q. Does Staff have information about the "framework" for the energy policy and energy utility regulation within different states?

A. Yes. It is presented in my attached Schedules JAR-1, JAR-2, JAR-3, JAR-4, JAR-5 and JAR-8.

Q. Why is Staff presenting this information?

A. Staff proposes the Commission and parties to this case consider this information when reviewing GMO's performance incentive under the MEEIA.

Q. Would you describe the information in these schedules?

A. Schedules JAR-1, JAR-2, JAR-3, JAR-4 and JAR-5 include the following information for each of the 50 states:

- First column – *statewide average electricity prices* based on United States Energy Information Administration ("EIA") for 2009 total electricity industry average price;
- Second column – *states;*
- Third column – percentage of total possible score for *utility and public benefits fund efficiency programs and policies* components within the ACEEE 2011 Energy Efficiency Scorecard;[45]
- Fourth column – percentage of total possible score for *transportation, building energy code, combined heat and power, state government initiatives, and*

[45] American Council for an Energy-Efficient Economy, Report Number E115.

appliance efficiency standards components within the ACEEE 2011 Energy Efficiency Scorecard;

- Fifth column – identifies whether a state has an *energy efficiency resource standard ("EERS"), tailored utility energy and/or demand savings targets ("Targets"), or a combination of EERS and renewable energy standards ("EERS-RES")* within the ACEEE's report titled *Energy Efficiency Resource Standards: A Progress Report on State Experience*;[46]
- Sixth column – indicates whether a state has a fixed cost recovery mechanism for *decoupling ("Decoupling") or recovery of lost revenues ("Lost Rev.")* within The Edison Foundation – Institute for Energy Efficiency's report titled *State Electric Efficiency Regulatory Frameworks*, June 2011; and
- Seventh column - indicates whether a state has performance incentive mechanism within The Edison Foundation – Institute for Energy Efficiency's report titled *State Electric Efficiency Regulatory Frameworks*, June 2011.

Schedule JAR-1 rank orders the states based on the information in the other schedules that underlies an overall score on the ACEEE 2011Energy Efficiency Scorecard from high overall score to low overall score.

Schedule JAR-2 rank orders the states based on *statewide average electricity prices* ("Average Cents/kWh (1)") in the first column from high to low.

Schedule JAR-3 rank orders the states based on percentage of total possible score for *utility and public benefits fund efficiency programs and policies* ("Utility EE Index (2)") in the third column from high percentage to low percentage.

[46] American Council for an Energy-Efficient Economy, Report Number U112.

Schedule JAR-4 rank orders the states based on percentage of total possible score for *transportation, building energy code, combined heat and power, state government initiatives, and appliance efficiency standards* ("Non-Utility Index (3)") in the fourth column from high percentage to low percentage.

Schedule JAR-5 groups states that have Targets, Energy Efficiency Requirement Standards-Renewable Energy Standards ("EERS-RES"), Energy Efficiency Requirement Standards ("EERS") or no energy efficiency standards.

Q. What observations do you make from Schedules JAR-1, JAR-2, JAR-3, JAR-4 and JAR-5?

A. I make the following observations from Schedule JAR-1:

- States with the higher overall scores on the ACEEE 2011 Energy Efficiency Scorecard tend to have very strong overall state level energy policy for EERS, Targets and/or EERS-RES, and for energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives;
- States with the lower overall scores on the ACEEE 2011 Energy Efficiency Scorecard tend to have weaker or no overall state level energy policy for EERS, Targets and/or EERS-RES, and for energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives; and
- Missouri scores 43 out of 50 on overall score for ACEEE 2011 Energy Efficiency Scorecard.

I make the following observations from Schedule JAR-2:

- The states with the highest energy prices have high scores on the ACEEE 2011 Energy Efficiency Scorecard and nearly all have very strong overall state level energy policy for EERS, Targets and/or EERS-RES, and for energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives;
- For the states with the lower energy prices, there is not a strong correlation with scoring on ACEEE 2011 Energy Efficiency Scorecard; or with the overall state level energy policy for EERS, Targets and/or EERS-RES; or with energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives; and
- Missouri's average energy price is one of the lowest in the country.

I make the following observations from Schedule JAR-3:

- For the states with higher scores for *utility and public benefits fund efficiency programs and policies* on the ACEEE 2011 Energy Efficiency Scorecard nearly all have very strong overall state level energy policy for EERS, Targets and/or EERS-RES, and for energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives;
- For the states with lower scores for *utility and public benefits fund efficiency programs and policies* on the ACEEE 2011 Energy Efficiency Scorecard nearly all have weak or no overall state level energy policy for EERS, Targets and/or EERS-RES, and for energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives; and

- Missouri's score for *utility and public benefits fund efficiency programs and policies* is one of the lower scores in the country.

I make the following observations from Schedule JAR-4:

- There tends to be a correlation between higher scores for *transportation, building energy code, combined heat and power, state government initiatives, and appliance efficiency standards* on the ACEEE 2011 Energy Efficiency Scorecard and overall state level energy policy for EERS, Targets and/or EERS-RES; or with energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives;
- States with low scores for *transportation, building energy code, combined heat and power, state government initiatives, and appliance efficiency standards* on the ACEEE 2011 Energy Efficiency Scorecard tend to have weak or no overall state level energy policy for EERS, Targets and/or EERS-RES but some have energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives; and
- Missouri's score for *transportation, building energy code, combined heat and power, state government initiatives, and appliance efficiency standards* is one of the lowest in the country.

I make the following observations from Schedule JAR-5:

- Half the states have energy policy for Targets, EERS or EERS-RES;
- Most states with energy policy for Targets, EERS or EERS-RES have energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives;

- There are many states with no energy policy for Targets, EERS or EERS-RES which still have energy regulatory policy for fixed cost recovery (decoupling or lost revenue recovery) and utility performance incentives; and
- Missouri is one of 25 states with no energy policy for Targets, EERS or EERS-RES.

Q. What do you conclude from your last answer?

A. There is a fairly strong correlation between high energy prices, high scores on the ACEEE 2011 Energy Efficiency Scorecard, strong energy policy for EERS, EERS-RES and Targets and strong energy regulatory structure for energy efficiency. In other words, high energy prices seem to lead states to enact strong energy policy for EERS, EERS-RES or Targets which leads states to approve strong energy regulatory structures that include decoupling, or lost revenue recovery and performance incentive.

Q. What do you conclude from your last answer with respect to the state of Missouri?

A. Missouri has low energy prices. Missouri has thus far lived up to its name as the "show-me state" when it comes to energy policy and energy regulation related to energy efficiency. The MEEIA is Missouri's first attempt to legislatively advance a policy for energy efficiency at the state level.

Q. As a result of your discussion of the "framework" for the energy policy and energy utility regulation, how do you respond to OPC witness Mr. Kind's recommendation that GMO should receive only 10% of program costs as a performance incentive award for 100% achievement of its energy and demand savings targets?

A. GMO should be allowed to receive a larger performance incentive award because:

- Missouri has no energy policy for EERS, Targets or EERS-RES;
- The MEEIA does not represent a mandate for Missouri's utilities to engage energy efficiency; and
- Nearly all of the states that Mr. Kind uses as surrogates for the proposed performance incentive mechanism for GMO have decoupling, as shown state-by-state in Schedule JAR-8.

Q. What is decoupling?

A. Decoupling weakens or eliminates the relationship between sales and revenue (or more narrowly, the revenue collected to cover fixed costs) by allowing a utility to adjust rates to recover authorized revenues independent of its levels of sales.[47]

Q. Why is it appropriate for a utility that has decoupling to receive a lower performance incentive award?

A. Decoupling virtually guarantees that a utility will recover the level of fixed costs that it was approved to recover in rates in its last rate case, regardless of the levels of its volumetric sales of electricity. This alone is of significant value to the utility, and is the reason states with decoupling do not have to, and do not, provide more significant performance incentive awards to utilities that have decoupling.

Q. Do you have some quantitative examples of the relationship between lost recovery mechanisms and decoupling?

[47] *Aligning Utility Incentives with Investment in Energy Efficiency*, A Resource of the National Action Plan for Energy Efficiency, November 2007, p. 2-6.

A. Yes, I do. Schedule JAR-6 provides examples of lost revenue recovery mechanisms and decoupling for different levels of sales growth and different levels of energy savings from DSM programs. This schedule provides quantitative examples of the lost revenue that a utility would recover under GMO's proposed lost revenue recovery mechanism, a lost revenue recovery mechanism as defined in 4 CSR 240-20.093(2)(G), and by decoupling.

Schedule JAR-7 provides examples of lost revenue recovery mechanisms and decoupling for different levels of sales growth and different levels of energy savings from DSM programs. This schedule provides quantitative examples of the lost revenue that a utility would recover under GMO's proposed lost revenue recovery mechanism, a lost revenue recovery mechanism as defined in 4 CSR 240-20.093(2)(G), and by decoupling. The base energy growth rate of 1.6%, the low energy growth rate of 1.2% and the high energy growth rate of 2.0% for the period 2011 – 2015 all come from GMO's Chapter 22 compliance filing in File No. EO-2012-0324.[48]

Q. What do you observe from Schedules JAR-6 and JAR-7?

A. Under its proposed performance incentive mechanism, GMO will recover lost revenues resulting from energy savings due to its DSM programs regardless of its actual energy sales. However, GMO is not afforded the "assurance" it will recover the level of fixed cost that the Commission approved for it to recover in its last rate case. Specifically, if energy sales are declining (negative growth) for any reason (e.g., weather, poor economy, large energy savings due to state energy policy related to building codes, combined heat and power ("CHP") state government initiatives, or appliance efficiency standards) GMO will not

[48] File No. EO-2012-0324, filing made on April 9, 2012, Volume 1, page 10.

recover the level of fixed cost that the Commission approved for it to recover in its last rate case.

Q. Please discuss the issue of the weighting of annual energy and demand savings achievement towards the Commission-approved annual energy and demand savings targets.

A. Mr. Mosenthal identifies and discusses this issue in his rebuttal testimony as follows:

> GMO has proposed an equal (50/50) weighting of the achievements toward kWh goals and peak kW goals. I recommend a different weighting that puts more emphasis on kWh goals. I propose this weighting be based on the average ratio of economic benefits expected to accrue from energy versus peak savings for the total portfolio of efficiency programs only. This will more closely reflect the real economic benefits to ratepayers than GMO's proposal. I calculate that ratio from the Exhibit ADD-12 (HC) to be ** ____ ** ($ of energy benefits)/($ of demand benefits). Using this value would result in a weighting of approximately 80% energy/20% demand.
>
> It is important to realize that while demand response programs can be cost-effective and provide value, they are much less desirable than energy efficiency programs. This is because efficiency programs provide much more durable savings, and generate energy and environmental benefits in addition to just capacity and reliability benefits, while still typically providing significant durable peak demand savings in addition. Therefore, this weighting will provide GMO incentive that are more reasonably aligned with its ratepayer[s'] interests, and avoid encouraging possible excessive focus on demand response at the expense of energy efficiency programs to meet combined goals, Because DR programs are essentially single year impacts dependent on GMO choosing to curtail loads, and they provide no actual energy savings, these resources provide far lower overall benefits to ratepayers in the long term.[49]

Q. Does Staff agree with Mr. Mosenthal's assessment?

A. Yes.

Q. Does Staff agree with his recommendation to use an 80/20 energy/demand weighting instead of the 50/50 energy/demand weighting GMO proposes - when weighting the actual performance of GMO's DSM programs annual energy and demand savings?

[49] Rebuttal testimony of Philip Mosenthal, p. 32, l. 11 through p. 33, l. 11.

A. Yes. Staff agrees with Mr. Mosenthal that 80/20 weighting will more closely reflect the real economic benefits to ratepayers than GMO's proposal and that the performance incentive should be more closely tied to the economic benefits for ratepayers.

Q. Does this change to use an 80/20 energy/demand weighting cause Staff to revise its recommendation concerning the performance incentive component of GMO's DSIM?

A. Yes. Concerning Rule 4 CSR 240-20.093(2)(C), regarding the approval of the establishment of a DSIM, Staff is revising its recommendation I presented in my rebuttal testimony (p. 9, lines 1-5) to:

4. The Commission reject GMO's performance incentive component and approve the following alternative performance incentive component for GMO as a way to more effectively incent GMO to achieve a goal of all cost-effective demand-side savings and to reward GMO for its actual achievement toward that goal.

The following performance incentive component for net energy savings:

- If GMO achieves at least 70% of the three-year cumulative energy savings target, GMO will receive $800,000 annually.
- If GMO achieves more than 70% of the three-year cumulative energy savings target, GMO will receive an additional $24,000 annually for each 1% of additional energy savings achieved between 70% and 120% of the target.
- If GMO achieves more than 120% of the three-year cumulative energy savings target, GMO will receive an additional $64,000 annually for each 1% of additional energy savings achieved between 120% and 130% of the target.

% of Cumulative 3-Year Energy Savings Target	Annual Performance Incentive
130%	$2,640,000
120%	$2,000,000
110%	$1,760,000
100%	$1,520,000
90%	$1,280,000
80%	$1,040,000
70%	$800,000

The following performance incentive component for net demand savings:

- If GMO achieves at least 70% of the three-year cumulative demand savings target, GMO will receive $200,000 annually.
- If GMO achieves more than 70% of the three-year cumulative demand savings target, GMO will receive an additional $6,000 annually for each 1% of additional demand savings achieved between 70% and 120% of the target.
- If GMO achieves more than 120% of the three-year cumulative demand savings target, GMO will receive an additional $16,000 annually for each 1% of additional demand savings achieved between 120% and 130% of the target.

% of Cumulative 3-Year Demand Savings Target	Annual Performance Incentive
130%	$660,000
120%	$500,000
110%	$440,000
100%	$380,000
90%	$320,000
80%	$260,000
70%	$200,000

The above recommendation replaces the recommendation in the *rebuttal testimony of John A. Rogers* at page 9, lines 1 – 5.

Q. Did the Office of the Public Counsel raise an issue similar to that Mr. Mosenthal raised about weighting the actual performance of GMO's DSM programs annual energy and demand savings?

A. Yes. Mr. Kind provides a similar discussion:

> GMO has vastly overstated the monetary value that customers will receive from reductions in demand over the first half of the fifteen year period over which benefits are calculated. Public Counsel believes that the programs should be more balanced in terms of the energy and demand reductions that result from the proposed DSM plan because customers will receive very little value from the demand reductions in the near term. On the other hand, energy reductions will have an immediate positive impact in terms of (1) reduced fuel cost, (2) potential for increased off system sales and (3) increased flexibility in the planning and timing of retrofit investments for environmental compliance.[50]

Q. Do you know what it is that Mr. Kind is basing his statement regarding GMO overstating the monetary value that customers will receive?

A. Yes. It appears in the rebuttal testimony of Mr. Kind that follows:

> Q. Does Public Counsel agree with the monetary value of capacity reductions that have been incorporated into both of GMO's performance incentive proposals?
>
> A. No. Mr. Rush explains at line 16 of his testimony that "the capacity benefits were developed based on levelized costs of a new combustion turbine (CT) for capacity and transmission and distribution costs attributable to reduced kW peak demand for each of the programs in the portfolio." The GMO proposal to value capacity reductions that are achieved (or projected to be achieved) based on levelized costs of a new combustion turbine will drastically over-value the benefits that customers will receive from the demand reductions from its proposed DSM programs. This over-valuing will occur because of the current large amounts of excess capacity that exists in the regional electric wholesale markets where GMO buys and sells capacity. The current market price for capacity is only a small fraction of the levelized cost of installing a new CT.[51]

[50] *Rebuttal testimony of Ryan Kind*, p. 16, lines 22 – 30.
[51] *Rebuttal testimony of Ryan Kind*, p. 17, lines 1 – 12.

Q. Does Staff agree with Mr. Kind that GMO has overstated the monetary value of capacity reductions for the reasons he states?

A. Yes. However, for this case, Staff recognizes that GMO has complied with the MEEIA rule concerning avoided cost or avoided utility cost,[52] since GMO used the same methodology used in its most recently-adopted preferred resource plan to calculate its avoided costs. Therefore, Staff will not propose any change to the avoided capacity cost estimates proposed by GMO.

Q. Do you have any further surrebuttal testimony?

A. No.

[52] 4 CSR 240-3.163(1)(A) Avoided cost or avoided utility cost means the cost savings obtained by substituting demand-side programs for existing and new supply-side resources. Avoided costs include avoided utility costs resulting from demand-side programs' energy savings and demand savings associated with generation, transmission, and distribution facilities including avoided probable environmental compliance costs. The utility shall use the same methodology used in its most recently-adopted preferred resource plan to calculate its avoided costs.

Summary of State Average Energy Prices, ACEEE Energy Efficiency Scorecard and Energy Efficiency Investment Policy

Rank Ordered By Overall Score on ACEEE Energy Efficiency Scorecard

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)
15.45	**Massachusetts**	93%	90%	EERS	Decoupling	Yes
13.24	**California**	88%	88%	EERS	Decoupling	Yes
15.52	**New York**	75%	77%	EERS	Decoupling	-
7.48	**Oregon**	68%	80%	Targets	Decoupling	-
12.75	**Vermont**	95%	50%	Targets	Decoupling	Yes
6.60	**Washington**	68%	68%	EERS	-	-
14.23	**Rhode Island**	93%	52%	EERS	Decoupling*	Yes
8.14	**Minnesota**	90%	50%	EERS	Decoupling*	Yes
18.06	**Connecticut**	60%	70%	-	Decoupling	Yes
13.08	**Maryland**	48%	70%	EERS	Decoupling	-
7.37	**Iowa**	70%	43%	Targets	-	-
8.14	**Maine**	53%	53%	Targets	-	-
21.21	**Hawaii**	60%	48%	EERS-RES	Decoupling	Yes
8.31	**Colorado**	55%	52%	Targets	Lost Rev.	Yes
14.52	**New Jersey**	43%	57%	-	Decoupling*	Yes
9.38	**Wisconsin**	58%	45%	EERS	Decoupling	Yes
6.77	**Utah**	60%	42%	-	Decoupling*	Yes*
9.08	**Illinois**	45%	52%	EERS	-	-
9.40	**Michigan**	50%	48%	EERS	Decoupling	Yes
9.56	**Arizona**	58%	43%	EERS	Decoupling*	Yes
15.13	**New Hampshire**	53%	45%	-	Decoupling*	Yes
10.36	**Nevada**	58%	37%	EERS-RES	Decoupling	-
9.01	**Ohio**	43%	45%	EERS	Lost Rev.	VPP
9.60	**Pennsylvania**	20%	57%	EERS	-	-
6.51	**Idaho**	45%	37%	-	Decoupling	Yes*
11.49	**Florida**	18%	52%	Targets	-	Yes*
8.48	**North carolina**	23%	48%	EERS-RES	Lost Rev.	Yes
8.09	**New Mexico**	25%	47%	EERS	Decoupling*	Yes
8.69	**Tennessee**	10%	55%	-	-	-
12.14	**Delaware**	13%	50%	-	Decoupling*	-
7.62	**Indiana**	33%	35%	EERS	Lost Rev.	Yes
9.86	**Texas**	15%	42%	EERS	-	Yes
8.93	**Virginia**	10%	40%	-	-	-
7.35	**Montana**	23%	30%	-	Decoupling*	Yes*
8.81	**Georgia**	8%	38%	-	-	Yes
6.52	**Kentucky**	18%	28%	-	Lost Rev.	Yes
8.83	**Alaska**	0%	37%	-	-	-
7.21	**Nebraska**	8%	28%	-	-	-
7.06	**Louisiana**	13%	25%	-	-	-
7.39	**South Dakota**	23%	17%	-	-	Yes
8.83	**Alabama**	13%	22%	-	-	-
7.35	**Missouri**	13%	20%	-	Lost Rev.	Yes
6.65	**West Virginia**	0%	28%	-	-	-
8.42	**South Carolina**	8%	22%	-	Lost Rev.	Yes
6.94	**Oklahoma**	13%	13%	-	Lost Rev.	Yes
7.98	**Kansas**	5%	15%	-	-	Yes*
8.85	**Mississippi**	3%	12%	-	-	-
6.08	**Wyoming**	0%	5%	-	-	-
6.63	**North Dakota**	0%	8%	-	-	-

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price
Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score
Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score
Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable energy std. (RES)
Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011
Note 6: An asterics "*" indicates policies which are "pending"

Schedule JAR-1

Summary of State Average Energy Prices, ACEEE Energy Efficiency Scorecard and Energy Efficiency Investment Policy

Rank Ordered By Total Average Energy Price (Cents per kWh)

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)
21.21	**Hawaii**	60%	48%	EERS-RES	Decoupling	Yes
18.06	**Connecticut**	60%	70%	-	Decoupling	Yes
15.52	**New York**	75%	77%	EERS	Decoupling	-
15.45	**Massachusetts**	93%	90%	EERS	Decoupling	Yes
15.13	**New Hampshire**	53%	45%	-	Decoupling*	Yes
14.52	**New Jersey**	43%	57%	-	Decoupling*	Yes
14.23	**Rhode Island**	93%	52%	EERS	Decoupling*	Yes
13.24	**California**	88%	88%	EERS	Decoupling	Yes
13.08	**Maryland**	48%	70%	EERS	Decoupling	-
12.75	**Vermont**	95%	50%	Targets	Decoupling	Yes
12.14	**Delaware**	13%	50%	-	Decoupling*	-
11.49	**Florida**	18%	52%	Targets	-	Yes*
10.36	**Nevada**	58%	37%	EERS-RES	Decoupling	-
9.86	**Texas**	15%	42%	EERS	-	Yes
9.60	**Pennsylvania**	20%	57%	EERS	-	-
9.56	**Arizona**	58%	43%	EERS	Decoupling*	Yes
9.40	**Michigan**	50%	48%	EERS	Decoupling	Yes
9.38	**Wisconsin**	58%	45%	EERS	Decoupling	Yes
9.08	**Illinois**	45%	52%	EERS	-	-
9.01	**Ohio**	43%	45%	EERS	Lost Rev.	VPP
8.93	**Virginia**	10%	40%	-	-	-
8.85	**Mississippi**	3%	12%	-	-	-
8.83	**Alaska**	0%	37%	-	-	-
8.83	**Alabama**	13%	22%	-	-	-
8.81	**Georgia**	8%	38%	-	-	Yes
8.69	**Tennessee**	10%	55%	-	-	-
8.48	**North carolina**	23%	48%	EERS-RES	Lost Rev.	Yes
8.42	**South Carolina**	8%	22%	-	Lost Rev.	Yes
8.31	**Colorado**	55%	52%	Targets	Lost Rev.	Yes
8.14	**Minnesota**	90%	50%	EERS	Decoupling*	Yes
8.14	**Maine**	53%	53%	Targets	-	-
8.09	**New Mexico**	25%	47%	EERS	Decoupling*	Yes
7.98	**Kansas**	5%	15%	-	-	Yes*
7.62	**Indiana**	33%	35%	EERS	Lost Rev.	Yes
7.48	**Oregon**	68%	80%	Targets	Decoupling	-
7.39	**South Dakota**	23%	17%	-	-	Yes
7.37	**Iowa**	70%	43%	Targets	-	-
7.35	**Montana**	23%	30%	-	Decoupling*	Yes*
7.35	**Missouri**	13%	20%	-	Lost Rev.	Yes
7.21	**Nebraska**	8%	28%	-	-	-
7.06	**Louisiana**	13%	25%	-	-	-
6.94	**Oklahoma**	13%	13%	-	Lost Rev.	Yes
6.77	**Utah**	60%	42%	-	Decoupling*	Yes*
6.65	**West Virginia**	0%	28%	-	-	-
6.63	**North Dakota**	0%	8%	-	-	-
6.60	**Washington**	68%	68%	EERS	-	-
6.52	**Kentucky**	18%	28%	-	Lost Rev.	Yes
6.51	**Idaho**	45%	37%	-	Decoupling	Yes*
6.08	**Wyoming**	0%	5%	-	-	-

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price
Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score
Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score
Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable energy std. (RES)
Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011
Note 6: An asterics "*" indicates policies which are "pending"

Schedule JAR-2

Summary of State Average Energy Prices, ACEEE Energy Efficiency Scorecard and Energy Efficiency Investment Policy

Rank Ordered By ACEEE Utility and Public Benefits Fund Efficiency Programs and Policies Score (2)

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)
12.75	Vermont	95%	50%	Targets	Decoupling	Yes
15.45	Massachusetts	93%	90%	EERS	Decoupling	Yes
14.23	Rhode Island	93%	52%	EERS	Decoupling*	Yes
8.14	Minnesota	90%	50%	EERS	Decoupling*	Yes
13.24	California	88%	88%	EERS	Decoupling	Yes
15.52	New York	75%	77%	EERS	Decoupling	-
7.37	Iowa	70%	43%	Targets	-	-
7.48	Oregon	68%	80%	Targets	Decoupling	-
6.60	Washington	68%	68%	EERS	-	-
21.21	Hawaii	60%	48%	EERS-RES	Decoupling	Yes
18.06	Connecticut	60%	70%	-	Decoupling	Yes
6.77	Utah	60%	42%	-	Decoupling*	Yes*
10.36	Nevada	58%	37%	EERS-RES	Decoupling	-
9.56	Arizona	58%	43%	EERS	Decoupling*	Yes
9.38	Wisconsin	58%	45%	EERS	Decoupling	Yes
8.31	Colorado	55%	52%	Targets	Lost Rev.	Yes
15.13	New Hampshire	53%	45%	-	Decoupling*	Yes
8.14	Maine	53%	53%	Targets	-	-
9.40	Michigan	50%	48%	EERS	Decoupling	Yes
13.08	Maryland	48%	70%	EERS	Decoupling	-
9.08	Illinois	45%	52%	EERS	-	-
6.51	Idaho	45%	37%	-	Decoupling	Yes*
14.52	New Jersey	43%	57%	-	Decoupling*	Yes
9.01	Ohio	43%	45%	EERS	Lost Rev.	VPP
7.62	Indiana	33%	35%	EERS	Lost Rev.	Yes
8.09	New Mexico	25%	47%	EERS	Decoupling*	Yes
8.48	North carolina	23%	48%	EERS-RES	Lost Rev.	Yes
7.39	South Dakota	23%	17%	-	-	Yes
7.35	Montana	23%	30%	-	Decoupling*	Yes*
9.60	Pennsylvania	20%	57%	EERS	-	-
11.49	Florida	18%	52%	Targets	-	Yes*
6.52	Kentucky	18%	28%	-	Lost Rev.	Yes
9.86	Texas	15%	42%	EERS	-	Yes
12.14	Delaware	13%	50%	-	Decoupling*	-
8.83	Alabama	13%	22%	-	-	-
7.35	Missouri	13%	20%	-	Lost Rev.	Yes
7.06	Louisiana	13%	25%	-	-	-
6.94	Oklahoma	13%	13%	-	Lost Rev.	Yes
8.93	Virginia	10%	40%	-	-	-
8.69	Tennessee	10%	55%	-	-	-
8.81	Georgia	8%	38%	-	-	Yes
8.42	South Carolina	8%	22%	-	Lost Rev.	Yes
7.21	Nebraska	8%	28%	-	-	-
7.98	Kansas	5%	15%	-	-	Yes*
8.85	Mississippi	3%	12%	-	-	-
8.83	Alaska	0%	37%	-	-	-
6.65	West Virginia	0%	28%	-	-	-
6.63	North Dakota	0%	8%	-	-	-
6.08	Wyoming	0%	5%	-	-	-

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price
Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score
Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score
Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable energy std. (RES)
Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011
Note 6: An asterics "*" indicates policies which are "pending"

Schedule JAR-3

Summary of State Average Energy Prices, ACEEE Energy Efficiency Scorecard and Energy Efficiency Investment Policy

Rank Ordered By ACEEE Average Scores for Transportation, Building Energy Codes, CHP, State Gov. Initiative, and Appliance Efficiency Standards (3)

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)
15.45	Massachusetts	93%	90%	EERS	Decoupling	Yes
13.24	California	88%	88%	EERS	Decoupling	Yes
7.48	Oregon	68%	80%	Targets	Decoupling	-
15.52	New York	75%	77%	EERS	Decoupling	-
18.06	Connecticut	60%	70%	-	Decoupling	Yes
13.08	Maryland	48%	70%	EERS	Decoupling	-
6.60	Washington	68%	68%	EERS	-	-
14.52	New Jersey	43%	57%	-	Decoupling*	Yes
9.60	Pennsylvania	20%	57%	EERS	-	-
8.69	Tennessee	10%	55%	-	-	-
8.14	Maine	53%	53%	Targets	-	-
14.23	Rhode Island	93%	52%	EERS	Decoupling*	Yes
8.31	Colorado	55%	52%	Targets	Lost Rev.	Yes
9.08	Illinois	45%	52%	EERS	-	-
11.49	Florida	18%	52%	Targets	-	Yes*
12.75	Vermont	95%	50%	Targets	Decoupling	Yes
8.14	Minnesota	90%	50%	EERS	Decoupling*	Yes
12.14	Delaware	13%	50%	-	Decoupling*	-
21.21	Hawaii	60%	48%	EERS-RES	Decoupling	Yes
9.40	Michigan	50%	48%	EERS	Decoupling	Yes
8.48	North carolina	23%	48%	EERS-RES	Lost Rev.	Yes
8.09	New Mexico	25%	47%	EERS	Decoupling*	Yes
9.38	Wisconsin	58%	45%	EERS	Decoupling	Yes
15.13	New Hampshire	53%	45%	-	Decoupling*	Yes
9.01	Ohio	43%	45%	EERS	Lost Rev.	VPP
7.37	Iowa	70%	43%	Targets	-	-
9.56	Arizona	58%	43%	EERS	Decoupling*	Yes
6.77	Utah	60%	42%	-	Decoupling*	Yes*
9.86	Texas	15%	42%	EERS	-	Yes
8.93	Virginia	10%	40%	-	-	-
8.81	Georgia	8%	38%	-	-	Yes
10.36	Nevada	58%	37%	EERS-RES	Decoupling	-
6.51	Idaho	45%	37%	-	Decoupling	Yes*
8.83	Alaska	0%	37%	-	-	-
7.62	Indiana	33%	35%	EERS	Lost Rev.	Yes
7.35	Montana	23%	30%	-	Decoupling*	Yes*
6.52	Kentucky	18%	28%	-	Lost Rev.	Yes
7.21	Nebraska	8%	28%	-	-	-
6.65	West Virginia	0%	28%	-	-	-
7.06	Louisiana	13%	25%	-	-	-
8.83	Alabama	13%	22%	-	-	-
8.42	South Carolina	8%	22%	-	Lost Rev.	Yes
7.35	Missouri	13%	20%	-	Lost Rev.	Yes
7.39	South Dakota	23%	17%	-	-	Yes
7.98	Kansas	5%	15%	-	-	Yes*
6.94	Oklahoma	13%	13%	-	Lost Rev.	Yes
8.85	Mississippi	3%	12%	-	-	-
6.63	North Dakota	0%	8%	-	-	-
6.08	Wyoming	0%	5%	-	-	-

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price
Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score
Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score
Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable energy std. (RES)
Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011
Note 6: An asterics "*" indicates policies which are "pending"

Schedule JAR-4

Summary of State Average Energy Prices, ACEEE Energy Efficiency Scorecard and Energy Efficiency Investment Policy

Grouped by whether the states has Targets, EERS-RES, RES or no energy efficiency resource standard (4)

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)
7.48	**Oregon**	68%	80%	Targets	Decoupling	-
8.14	**Maine**	53%	53%	Targets	-	-
8.31	**Colorado**	55%	52%	Targets	Lost Rev.	Yes
11.49	**Florida**	18%	52%	Targets	-	Yes*
12.75	**Vermont**	95%	50%	Targets	Decoupling	Yes
7.37	**Iowa**	70%	43%	Targets	-	-
21.21	**Hawaii**	60%	48%	EERS-RES	Decoupling	Yes
8.48	**North carolina**	23%	48%	EERS-RES	Lost Rev.	Yes
10.36	**Nevada**	58%	37%	EERS-RES	Decoupling	-
15.45	**Massachusetts**	93%	90%	EERS	Decoupling	Yes
13.24	**California**	88%	88%	EERS	Decoupling	Yes
15.52	**New York**	75%	77%	EERS	Decoupling	-
13.08	**Maryland**	48%	70%	EERS	Decoupling	-
6.60	**Washington**	68%	68%	EERS	-	-
9.60	**Pennsylvania**	20%	57%	EERS	-	-
14.23	**Rhode Island**	93%	52%	EERS	Decoupling*	Yes
9.08	**Illinois**	45%	52%	EERS	-	-
8.14	**Minnesota**	90%	50%	EERS	Decoupling*	Yes
9.40	**Michigan**	50%	48%	EERS	Decoupling	Yes
8.09	**New Mexico**	25%	47%	EERS	Decoupling*	Yes
9.38	**Wisconsin**	58%	45%	EERS	Decoupling	Yes
9.01	**Ohio**	43%	45%	EERS	Lost Rev.	VPP
9.56	**Arizona**	58%	43%	EERS	Decoupling*	Yes
9.86	**Texas**	15%	42%	EERS	-	Yes
7.62	**Indiana**	33%	35%	EERS	Lost Rev.	Yes
18.06	**Connecticut**	60%	70%	-	Decoupling	Yes
14.52	**New Jersey**	43%	57%	-	Decoupling*	Yes
8.69	**Tennessee**	10%	55%	-	-	-
12.14	**Delaware**	13%	50%	-	Decoupling*	-
15.13	**New Hampshire**	53%	45%	-	Decoupling*	Yes
6.77	**Utah**	60%	42%	-	Decoupling*	Yes*
8.93	**Virginia**	10%	40%	-	-	-
8.81	**Georgia**	8%	38%	-	-	Yes
6.51	**Idaho**	45%	37%	-	Decoupling	Yes*
8.83	**Alaska**	0%	37%	-	-	-
7.35	**Montana**	23%	30%	-	Decoupling*	Yes*
6.52	**Kentucky**	18%	28%	-	Lost Rev.	Yes
7.21	**Nebraska**	8%	28%	-	-	-
6.65	**West Virginia**	0%	28%	-	-	-
7.06	**Louisiana**	13%	25%	-	-	-
8.83	**Alabama**	13%	22%	-	-	-
8.42	**South Carolina**	8%	22%	-	Lost Rev.	Yes
7.35	**Missouri**	13%	20%	-	Lost Rev.	Yes
7.39	**South Dakota**	23%	17%	-	-	Yes
7.98	**Kansas**	5%	15%	-	-	Yes*
6.94	**Oklahoma**	13%	13%	-	Lost Rev.	Yes
8.85	**Mississippi**	3%	12%	-	-	-
6.63	**North Dakota**	0%	8%	-	-	-
6.08	**Wyoming**	0%	5%	-	-	-

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price

Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score

Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score

Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable energy std. (RES)

Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011

Note 6: An asterics "*" indicates policies which are "pending"

Schedule JAR-5

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

0.2% Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Sales Growth Positive and Greater Than Energy Savings	Sales Growth Positive and Less Than Energy Savings	No Sales Growth Without DSM	Sales Growth Negative and Less Than Energy Savings	Sales Growth Negative and Less Than Energy Savings
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	168,000	84,000	0	(84,000)	(168,000)
c	Energy Savings from DSM Programs	16,800	16,800	16,800	16,800	16,800
d = b - c	Sales Growth With DSM	151,200	67,200	(16,800)	(100,800)	(184,800)
e = c	Company Proposed Shard Net Benefits	16,800	16,800	16,800	16,800	16,800
f	Rule 4 CSR 240-20.093(2)(F)	0	0	16,800	16,800	16,800
g = c - b	Decoupling	(151,200)	(67,200)	16,800	100,800	184,800
h	Sales Growth Rate Without DSM (%)	2.00%	1.00%	0.00%	-1.00%	-2.00%
i	DSM Programs Energy Savings (%)	0.20%	0.20%	0.20%	0.20%	0.20%

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

0.5% Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Sales Growth Positive and Greater Than Energy Savings	Sales Growth Positive and Less Than Energy Savings	No Sales Growth Without DSM	Sales Growth Negative and Less Than Energy Savings	Sales Growth Negative and Less Than Energy Savings
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	168,000	84,000	0	(84,000)	(168,000)
c	Energy Savings from DSM Programs	42,000	42,000	42,000	42,000	42,000
d = b - c	Sales Growth With DSM	126,000	42,000	(42,000)	(126,000)	(210,000)
e = c	Company Proposed Shard Net Benefits	42,000	42,000	42,000	42,000	42,000
f	Rule 4 CSR 240-20.093(2)(F)	0	0	42,000	250,000	250,000
g = c - b	Decoupling	(126,000)	(42,000)	42,000	126,000	210,000
h	Sales Growth Rate Without DSM (%)	2.00%	1.00%	0.00%	-1.00%	-2.00%
i	DSM Programs Energy Savings (%)	0.50%	0.50%	0.50%	0.50%	0.50%

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

1.2% Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Sales Growth Positive and Greater Than Energy Savings	Sales Growth Positive and Less Than Energy Savings	No Sales Growth Without DSM	Sales Growth Negative and Less Than Energy Savings	Sales Growth Negative and Less Than Energy Savings
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	168,000	84,000	0	(84,000)	(168,000)
c	Energy Savings from DSM Programs	100,800	100,800	100,800	100,800	100,800
d = b - c	Sales Growth With DSM	67,200	(16,800)	(100,800)	(184,800)	(268,800)
e = c	Company Proposed Shard Net Benefits	100,800	100,800	100,800	100,800	100,800
f	Rule 4 CSR 240-20.093(2)(F)	0	16,800	100,800	100,800	100,800
g = c - b	Decoupling	(67,200)	16,800	100,800	184,800	268,800
h	Sales Growth Rate Without DSM (%)	2.00%	1.00%	0.00%	-1.00%	-2.00%

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

0.5% Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Very High Growth Forecast	High Growth Forecast	Base Growth Forecast	Low Growth Forecast	Zero Growth Forecast
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	210,000	168,000	134,400	100,800	0
c	Energy Savings from DSM Programs	42,000	42,000	42,000	42,000	42,000
d = b - c	Sales Growth With DSM	168,000	126,000	92,400	58,800	(42,000)
e = c	Company Proposed Shard Net Benefits	42,000	42,000	42,000	42,000	42,000
f	Rule 4 CSR 240-20.093(2)(F)	0	0	0	(58,800)	42,000
g = c - b	Decoupling	(168,000)	(126,000)	(92,400)	(58,800)	42,000
h	Sales Growth Rate Without DSM (%)	2.50%	2.00%	1.60%	1.20%	0.00%
i	DSM Programs Energy Savings (%)	0.50%	0.50%	0.50%	0.50%	0.50%

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

1.0 % Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Very High Growth Forecast	High Growth Forecast	Base Growth Forecast	Low Growth Forecast	Zero Growth Forecast
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	210,000	168,000	134,400	100,800	0
c	Energy Savings from DSM Programs	84,000	84,000	84,000	84,000	84,000
d = b - c	Sales Growth With DSM	126,000	84,000	50,400	16,800	(84,000)
e = c	Company Proposed Shard Net Benefits	84,000	84,000	84,000	84,000	84,000
f	Rule 4 CSR 240-20.093(2)(F)	0	0	(50,400)	(16,800)	84,000
g = c - b	Decoupling	(126,000)	(84,000)	(50,400)	(16,800)	84,000
h	Sales Growth Rate Without DSM (%)	2.50%	2.00%	1.60%	1.20%	0.00%
i	DSM Programs Energy Savings (%)	1.00%	1.00%	1.00%	1.00%	1.00%

Examples of Lost Revenue Recovery Mechanisms and Decoupling Mechanism

1.5% Annual Energy Savings from DSM Programs (MWh)

		Case 1	Case 2	Case 3	Case 4	Case 5
		Very High Growth Forecast	High Growth Forecast	Base Growth Forecast	Low Growth Forecast	Zero Growth Forecast
a	Sales Used To Set Electricity Rates	8,400,000	8,400,000	8,400,000	8,400,000	8,400,000
b	Sales Growth Without DSM	210,000	168,000	134,400	100,800	0
c	Energy Savings from DSM Programs	126,000	126,000	126,000	126,000	126,000
d = b - c	Sales Growth With DSM	84,000	42,000	8,400	(25,200)	(126,000)
e = c	Company Proposed Shard Net Benefits	126,000	126,000	126,000	126,000	126,000
f	Rule 4 CSR 240-20.093(2)(F)	0	(42,000)	(8,400)	25,200	126,000
g = c - b	Decoupling	(84,000)	(42,000)	(8,400)	25,200	126,000
h	Sales Growth Rate Without DSM (%)	2.50%	2.00%	1.60%	1.20%	0.00%
i	DSM Programs Energy Savings (%)	1.50%	1.50%	1.50%	1.50%	1.50%

Summary of State Average Energy Prices, ACEEE Energy Efficiency and Energy Efficiency Investment Policy

Grouped by whether the states has Decoupling, Lost Rev. or no fixed cost recovery mechanism (5)

Average Cents/kWh (1)		Utility EE Index (2)	Non-Utility Index (3)	EERS EERS-RES (4)	Fixed Cost Recovery (5)	Performance Incentive (5)	Cap (7)
7.48	**Oregon**	68%	80%	Targets	Decoupling	-	
12.75	**Vermont**	95%	50%	Targets	Decoupling	Yes	
21.21	**Hawaii**	60%	48%	EERS-RES	Decoupling	Yes	5% of net benefits, $4 m
10.36	**Nevada**	58%	37%	EERS-RES	Decoupling	-	5% of savings goal
14.23	**Rhode Island**	93%	52%	EERS	Decoupling*	Yes	125% of savings metric
8.14	**Minnesota**	90%	50%	EERS	Decoupling	Yes	150% of savings goal/30% of budget
8.09	**New Mexico**	25%	47%	EERS	Decoupling*	Yes	
9.56	**Arizona**	58%	43%	EERS	Decoupling*	Yes	10% of program costs
15.45	**Massachusetts**	93%	90%	EERS	Decoupling	Yes	5.5% of program costs
13.24	**California**	88%	88%	EERS	Decoupling	Yes	$150 million/yr. award or penalty
15.52	**New York**	75%	77%	EERS	Decoupling	-	
13.08	**Maryland**	48%	70%	EERS	Decoupling	-	
9.40	**Michigan**	50%	48%	EERS	Decoupling	Yes	
9.38	**Wisconsin**	58%	45%	EERS	Decoupling	Yes	None
14.52	**New Jersey**	43%	57%	-	Decoupling*	Yes	
12.14	**Delaware**	13%	50%	-	Decoupling*	-	
15.13	**New Hampshire**	53%	45%	-	Decoupling*	Yes	12% of program costs
6.77	**Utah**	60%	42%	-	Decoupling*	Yes*	
7.35	**Montana**	23%	30%	-	Decoupling*	Yes*	
18.06	**Connecticut**	60%	70%	-	Decoupling	Yes	8% of program costs
6.51	**Idaho**	45%	37%	-	Decoupling	Yes*	10% of program benefits
8.31	**Colorado**	55%	52%	Targets	Lost Rev.	Yes	20% of program costs
8.48	**North carolina**	23%	48%	EERS-RES	Lost Rev.	Yes	
9.01	**Ohio**	43%	45%	EERS	Lost Rev.	VPP	15%of program costs
7.62	**Indiana**	33%	35%	EERS	Lost Rev.	Yes	
6.52	**Kentucky**	18%	28%	-	Lost Rev.	Yes	10% of program costs
8.42	**South Carolina**	8%	22%	-	Lost Rev.	Yes	
7.35	**Missouri**	13%	20%	-	Lost Rev.	Yes	
6.94	**Oklahoma**	13%	13%	-	Lost Rev.	Yes	Fixed, $2.7 million
8.14	**Maine**	53%	53%	Targets	-	-	
11.49	**Florida**	18%	52%	Targets	-	Yes*	
7.37	**Iowa**	70%	43%	Targets	-	-	
6.60	**Washington**	68%	68%	EERS	-	-	150% of savings goal
9.60	**Pennsylvania**	20%	57%	EERS	-	-	
9.08	**Illinois**	45%	52%	EERS	-	-	
9.86	**Texas**	15%	42%	EERS	-	Yes	20% of program costs
8.69	**Tennessee**	10%	55%	-	-	-	
8.93	**Virginia**	10%	40%	-	-	-	
8.81	**Georgia**	8%	38%	-	-	Yes	None
8.83	**Alaska**	0%	37%	-	-	-	
7.21	**Nebraska**	8%	28%	-	-	-	
6.65	**West Virginia**	0%	28%	-	-	-	
7.06	**Louisiana**	13%	25%	-	-	-	
8.83	**Alabama**	13%	22%	-	-	-	
7.39	**South Dakota**	23%	17%	-	-	Yes	
7.98	**Kansas**	5%	15%	-	-	Yes*	
8.85	**Mississippi**	3%	12%	-	-	-	
6.63	**North Dakota**	0%	8%	-	-	-	
6.08	**Wyoming**	0%	5%	-	-	-	

Note 1: United States Energy Information Administration (EIA) 2009 Total Electricity Industry Average Price

Note 2: ACEEE No. E115 Percentage of total possible score for Utility and Public Benefits Fund Efficiency Programs and Policies Score

Note 3: ACEEE No. E115 Percentage of total possible score for Transportation, Building EE Code, CHP, State Gov. Initiatives and Appliance Stds. Score

Note 4: ACEEE No. U112 for energy efficiency resource standard (EERS), tailored utility targets (Targets), combination EERS-renewable

Note 5: The Edison Foundation - Institute for Energy Efficiency, State Electric Efficiency Regulatory Frameworks, June 2011

Note 6: An asterics "*" indicates policies which are "pending"

Note 7: Cap information from *Rebuttal testimony of Ryan Kind*, Table 1, p. 12.

Schedule JAR-8

Schedule JAR-9

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