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Witness:	Adam Bickford
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REBUTTAL TESTIMONY

OF

ADAM BICKFORD

MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENERGY

March 20, 2012

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

KANSAS CITY POWER AND LIGHT GREATER MISSOURI OPERATIONS

COMPANY (GMO)

MEEIA Application

FILE NO. ER-2012-0009

PUBLIC VERSION

Q. Please state your name and business address.

A. My name is Adam Bickford. My business address is Missouri Department of Natural Resources, Division of Energy, 1011 Riverside Drive, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Q. Please describe your educational background and employment experience.

A. I began work with the Missouri Department of Natural Resources Energy Center in August, 2009. In my current position I am a Research Analyst. Prior to working with Missouri Department of Natural Resources I was employed as a program evaluator by Optimal Solutions Group, LLC in Hyattsville, Maryland; the University of Missouri Extension Office of Social and Economic Data Analysis in Columbia, Missouri; and the Smithsonian Institution in Washington D.C. In these positions my responsibilities included the design and execution of evaluation projects in the K-12 education and arts domains.

I received my B.A. degree in Sociology from the University of California, Berkeley. I hold a Masters of Arts degree and a Doctor of Philosophy degree in Sociology from the University of Chicago.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Missouri Department of Natural Resources ("MDNR"), an intervenor in these proceedings. As a representative of MDNR I have also participated in the review of Kansas City Power and Light Greater

Missouri Operations Company's ("GMO") 2009 IRP (EE-2009-0237) and the stakeholder review process leading up to GMO's revised IRP filing on December 17, 2010, the Missouri Energy Efficiency Investment Act rulemaking (EX-2010-0368), and as a member of GMO's Consumer Energy Programs collaborative.

Q. Have you previously testified before the Commission on behalf of the Missouri Department of Natural Resources?

A. Yes, I have. I testified on behalf of MDNR in the following cases before the Commission:

- Union Electric Company, d/b/a AmerenUE rate case, ER-2010-0036;
- Kansas City Power and Light rate case, ER-2010-0355;
- KCP&L-Greater Missouri Operations rate case, ER-2010-0356, and
- Empire District Electric rate case, ER-2011-0004.

Additionally, I have participated in the following Integrated Resource Planning (IRP) cases:

- KCP&L-Greater Missouri Operations 2009 IRP, EE-2009-0237,
- Empire District Electric 2010 IRP, EO-2011-0066, and
- Union Electric Company, d/b/a Ameren Missouri 2011, IRP, EO-2011-0271

Q. What is the purpose of your direct testimony in these proceedings?

A. The purpose of my testimony is to address GMO's December 22, 2011 application filed under the Missouri Energy Efficiency Investment Act ("MEEIA")[1] and the MEEIA rules approved in File No. EX-2010-0368. MDNR encourages the Commission to focus on the state policy perspectives of MEEIA, the reasons that a statute addressing "energy efficiency investment" was needed in Missouri, the difficulty of implementing MEEIA's policies in the face of the historic utility business paradigm of "build plants-sell kilowatts-collect return on investment", and the stalling and reversal of progress in energy efficiency investment in Missouri in recent months.

Q. Please summarize your testimony.

A. My testimony will focus on two aspects GMO's MEEIA application:

1. The scope and content of its DSM program plan, and
2. The structure of its proposed Demand Side Investment Mechanism (DSIM), including the calculation of net shared benefits, its proposed performance incentive structure, and plan to recover lost sales margins. In this section I will propose an alternative incentive structure that combines recovery of lost sales margins with a bonus to support high levels of program performance. My proposed performance incentive will reward sustained levels of high performance towards GMO's overall savings targets.

[1] Section 393.1124, RSMo

Q. Please describe your involvement with the MEEIA rulemaking and GMO's MEEIA Application.

A. I participated in the MEEIA rulemaking workshops conducted in 2010 (EX-2010-0368), which established the current MEEIA rules, and have attended informational sessions and technical workshops sponsored by GMO in EO-2012-0009. MDNR has followed this process closely, and is eager to see a positive conclusion to these proceedings. MDNR maintains that utility DSM programs offer multiple benefits, including reduced energy usage costs for customers by reducing GMO's PVRR, reduced environmental impacts from electricity generation, and improved operation of GMO's transmission and distribution system. We encourage GMO, the Commission Staff, and other parties to find the common points in their positions and allow a version of GMO's application to be implemented.

This first round of MEEIA applications presents the utility and all parties with multiple challenges. A successful MEEIA application should balance company financial interests, ratepayer benefits, the diverse interests of intervening parties to meet the state's policy goal of "achieving all cost-effective demand side savings."[2] MDNR maintains that the efforts of all parties involved with this case should be directed towards finding a satisfactory solution to the issues raised in this case, and not hold out for the "perfect" solution. It is in that spirit, that I am offering this testimony.

[2] Section 393.1124.3 RSMo

I. GMO's DSM Program Plan

Q. Please describe GMO's program plan.

A. As described by GMO witness Allan Dennis[3], GMO is proposing to implement fifteen demand-side programs. Ten of these programs have been previously implemented in the Kansas City Power and Light (KCP&L) and GMO territories, and five are new programs. Mr. Dennis groups these programs into four categories: Demand Response Programs, Energy Efficiency Programs, Affordability Programs, and Educational Programs, GMO's entire DSM program portfolio is summarized in Table 1 below.

Table 1: GMO Demand-Side Management Program Portfolio

PROGRAM TYPE	CLASS OF CUSTOMER SERVED	
	Residential	C&I
Demand Response	1) Energy Optimizer	2) Energy Optimizer
		3) MPower
Energy Efficiency	4) ENERGY STAR® New Homes	5) C&I Rebate Program
	6) Cool Homes	**Prescriptive Energy Efficiency Measures**
	7) Residential Lighting and Appliances	Custom Energy Efficiency Measures
	8) Appliance Turn-in	**9) Multi-family Rebate**
	10) Residential Energy Reports	
	11) Home Performance with ENERGY STAR®	
Affordability	12) Low Income Weatherization	
Educational	13) Home Energy Analyzer	14) Business Energy Analyzer
		15) Building Operator Certification
New programs in Bold		

Direct Testimony of Allen D. Dennis, EO-2012-0009, p. 19

[3] *Direct Testimony of Allen D, Dennis*, EO-2012-0009, p. 5-12.

The majority of these programs have been implemented and evaluated by GMO during its previous DSM cycles. Allen Dennis' testimony provided extensive program summaries of the five new programs in Schedule ADD-2.

Q. How would you characterize the scope of GMO's portfolio?

A. GMO's proposed portfolio is comprehensive. It provides energy efficiency, affordability, demand response and educational programs for both the residential and commercial/industrial (C&I) classes. It builds on an existing program base to include an appliance rebate program, a market transformation program for Energy Star appliances, a multi-family building retrofit program, a prescriptive program for C&I customers and an innovative behavioral modification program.

Q. Are GMO's programs cost effective?

A. The cost-effectiveness of GMO's existing programs has been established though the last round of GMO program evaluations. Allen Dennis has provided cost-effectiveness tests for GMO's evaluations of existing programs in *Schedule ADD-3 thru 10* and estimates of cost-effectiveness for GMO's five new programs in *Schedule ADD-2*. Both schedules were attached to Mr. Dennis' direct testimony. The total resource cost values for each program is summarized in Table 2 below.

Table 2. TRC test values for GMO's DSM programs

	TRC Value: Market Based Results	Page Location
Residential Programs		
Energy Optimizer	3.16	ADD-3 thru ADD-10: 1
ENERGY STAR® New Homes	1.32	ADD-3 thru ADD-10: 53
Cool Homes	1.76	ADD-3 thru ADD-10: 119
Residential Lighting and Appliances	2.30	ADD-2: 48
Appliance Turn-in	2.66	ADD-2: 12
Residential Energy Reports	1.10	ADD-2: 4
Home Performance with ENERGY STAR®	0.58	ADD-3 thru ADD-10: 242
Low Income Weatherization	0.22	ADD-3 thru ADD-10: 289
Home Energy Analyzer	*	
Commercial and Industrial Programs		
MPower	1.53	ADD-3 thru ADD-10: 371
C&I Rebate Program	1.64	ADD-3 thru ADD-10: 413
Prescriptive Energy Efficiency Measures	3.36	ADD-2: 30
Multi-family Rebate	3.24	ADD-2: 39
Business Energy Analyzer	*	
Building Operator Certification	*	
New programs in Bold		

* GMO is not claiming savings from its educational programs.

All but two of GMO's existing programs passed the TRC test. The Home Performance with ENERGY STAR program had a TRC of 0.58, while the Low Income Weatherization program had a TRC of 0.22. All of GMO's new programs have TRC values between 1.10 and 3.36. The average value of the twelve programs with TRC values in Table 2 is 1.68, which indicates that the benefits to customers are more than one and a half times the cost.

We note that the Home Performance with ENERGY STAR program (HPwES) encountered issues with participating installation contractors at the

time of its evaluation, which contributed to its low cost-effectiveness score.[4] These issues have been resolved and the cost-effectiveness of this program has improved. The HPwES program is a nationally sponsored initiative by the U.S. EPA and U.S. DOE and offers a comprehensive whole-house approach to improving energy efficiency and comfort along with helping to protect the environment. We also note that this program is one of the few examples of a successful electric and gas utility partnership. GMO and Missouri Gas Energy (MGE) have developed a successful working relationship to deliver this program. MRND supports the continuation of the HPwES program in GMO's portfolio.

Because the Low Income Weatherization program is a low-income program, it is not required by the IRP rules to pass the TRC threshold of 1.0. This TRC value is consistent with other Weatherization program values across the state. MDNR also supports continuation of this program in providing service to low-income households. Utility-supported Low Income Weatherization programs are essential as American Recovery and Reinvestment Act (ARRA) funds for Low Income Weatherization are ending.

Q. Do GMO's new programs offer any notable features?

A. Yes. The new programs have positive features that will work together to support robust energy savings. Below I highlight a few of the more innovative features of the new residential programs, followed by a description of the multi-family program, which is a commercial and industrial program that impacts residential buildings.

[4] *Direct Testimony of Allen D. Dennis*, EO-2012-0009. Schedule ADD-5.

The highlight of the new residential programs is the "Residential Energy Reports" program. This is a behavioral modification program designed to provide customers information about their monthly energy use and serve as a communication portal for GMO's other program efforts. GMO residential customers will be mailed monthly energy usage summaries that compare the current month's energy usage to both the customer's monthly usage in the previous year and to a set of comparable houses. GMO plans to supplement this report by providing information on GMO's residential programs and partner retailers "to offer coded and measurable discounts and coupons that offer a call to action on energy reduction."[5] Consistent with successful program models, GMO plans on operating this as an "opt-out" program, which implies that all eligible residential customers will receive at least one energy report.

Evaluations of behavioral energy efficiency programs similar to GMO's have shown electricity savings as high as 2.98% for "high consumption" households receiving monthly reports.[6] In MDNR's review of behavioral energy program evaluations, we find that it is not clear whether the energy savings achieved by behavioral modification programs are due to conservation activities by customers or are due to installation of energy efficiency measures. GMO has the opportunity, through this program and its evaluation, to determine how many households receiving Residential Energy Reports participate in GMO's other energy efficiency programs and partner retailer

[5] *Ibid.* Schedule ADD-2, p 2.
[6] Cooney, K. 2011. "Evaluation Report: OPOWER SMUD Pilot Year2". Chicago: Navigant Consulting. Retrieved February 24, 2012 from http://opower.com/uploads/library/file/6/opower_smud_yr2_eval_report_-_final-1.pdf

offers. Besides providing GMO information about the effectiveness of its cross-promotion activities, the evaluation of this program will help to fill a significant gap in the literature about behavioral energy efficiency programs.

With respect to energy use by household appliances and other "plug loads", the combination of GMO's Residential Lighting and Appliance and Appliance Turn-in programs have the potential to remove many older, inefficient window air conditioners, refrigerators and freezers form the GMO territory. The Residential Lighting and Appliance program provides rebates for the purchase of Energy Star appliances, including window air conditioners and primary refrigerators and freezers.[7] The Appliance Turn-in program offers incentives to recycle secondary window air conditioners, refrigerators, freezers and dehumidifiers.[8] Together, these two programs have the potential to change the mix of household appliances in the GMO territory.

The Residential Lighting and Appliance program also is offering smart power strips, which have the potential to impact the energy used by smaller plug in appliances. Smart power strips reduce energy use from secondary appliances (such as computers and computer monitors) by automatically shutting off the power to the secondary appliance when the primary appliance is turned off. This approach is an efficient way to control for linked electricity use, and because it controls energy use at the power strip, GMO does not need to provide incentives customers to purchase efficient versions of a wide range of smaller electric appliances.

[7] *Ibid*. Schedule ADD-2, p 43.
[8] *Ibid*., p.7

With respect to the Multi-Family Rebate program, GMO has chosen to address a difficult market segment in its commercial class. The program offers rebates for a wide range of common area and dwelling unit measures, including building shell measures, that will help reduce energy consumption in buildings outside of the conventional domains of single family residences and commercial buildings. This program is a direct result of KCP&L and GMO's 2010 Multifamily Study, a specialized potential study designed to assess this market segment.[9]

Q. Besides offering five new programs, what changes to its DSM portfolio does GMO anticipate?

A. GMO is anticipating discontinuing one program, its Low-income Affordable New Homes program for lack of participation.[10] Additionally, GMO is changing the program offerings for its ENERGY STAR® New Homes program, Building Operator Certification program, the MPower program, the Energy Optimizer program and Energy Audit, and Energy Saving Measures Rebate programs[11]. GMO is not counting the savings from its educational programs (the Home Energy Analyzer, the Business Energy Analyzer, and the Building Operator Certification programs).

Q. Do these program changes concern MDNR?

A. No they do not. Given the balance of GMO's proposed DSM portfolio, these program changes do not concern MDNR. With the exception of the New

[9] *Direct Testimony of Allen D. Dennis*, EO-2012-0009. Schedule ADD-11, p 496-573.
[10] *Ibid.* p.13-15. GMO has claimed that the lack of participation is due to the recent recession's impact on the housing market. MDNR would expect GMO to reconsider offering their program in future DSM plans.
[11] *Ibid*. p 15-16

Homes program, these changes are minor modifications in program offerings. The discontinuation of the New Homes program is more than offset by GMO's continuing programs addressing the existing housing stock.

II. DSM Program Savings

Q. What are the savings targets GMO expects to achieve from its current DSM plan?

A. GMO's expected levels of savings, GMO's "savings targets", are 0.5 percent of energy sales and 1.0 percent of demand savings for each year in its three-year DSM plan.[12] The cumulative savings of this plan, a 1.5 percent reduction in energy sales and a 3.0% reduction of demand sales, meet the cumulative savings goals established in 4 CSR 240-20.094(2)(B) of the MEEIA rules. GMO's energy savings levels do not conform to the schedule of incremental savings goals specified in 4 CSR 240-20.094(2)(A, which sets incremental savings goals that ramp-up from 0.3 percent of energy sales in 2012, 0.05 percent of energy savings in 2013, and 0.7 percent of energy sales in 2014. However, GMO's expected incremental energy savings, the constant 0.5 percent of energy sales for three years, does not represent a

[12] *Direct Testimony of Tim M. Rush*, EO-2012-0009, p. 19.

significant deviation from the rules, it will produce the cumulative 1.5 percent of energy savings the rules call for. GMO's DSM plan meets the cumulative savings goals for both energy and demand.

Q. What levels of MWh and MW savings will GMO's DSM plan produce?

A. It is difficult to assess the expected level of MWh and MW savings from GMO's DSM plan. In the technical conference held on March 8, 2012, GMO presented energy and demand values from its base case forecast to be filed in its April, 2012 Integrated Resource Plan.

MDNR has attempted to compare GMO's plan savings using this forecast to the aggregate portfolio-level savings from TMR-7 HC, filed in this case. The calculations are presented below in Schedule AB-1 (HC). When calculated against GMO's stated energy savings targets (0.5 percent of energy sales), we estimate that GMO will save approximately ** [redacted] ** MWh over the three years of the DSM plan. Schedule AB-1 (HC) compares these estimated savings to the MWh saving reported in Schedule TMR-7 HC. This schedule shows cumulative savings of approximately ** [redacted] ** MWh over the three years of the DSM plan. When calculated as a percentage of sales, this cumulative savings value translates to 1.65 percent of energy sales, a figure higher than its stated target of saving 1.50 percent of energy sales in the first three years of its DSM plan.

The calculation of demand savings shows that the cumulative savings in GMO's work papers are approximately 6.29 percent of annual peak demand. This level of achievement is mostly due to changes in GMO's updated forecast.

With respect to section 4 CSR 240-20.094(2) (B) of the MEEIA rules, the cumulative energy savings of 1.65 percent of sales is between the cumulative savings goals for 2014 and 2015. For demand savings, the cumulative 6.29 percent is equivalent to the 2017 savings goal. These are laudable levels of savings, and given that GMO's entire DSIM proposal is based on achieving this level of energy and demand savings, MDNR requests that the Commission set GMO's savings targets equal to the levels specified in GMO's schedules, and shown in Schedule AB-1 (HC).

Q. What is your overall assessment of GMO's DSM plan?

A. GMO's DSM plan includes energy efficiency, affordability, demand response and educational programs for each class of customer. In the residential class GMO is offering programs featuring appliance rebates, incentives for appliance recycling, and rebates for home heating and cooling tune-ups, building shell improvements, and plug load energy uses. GMO is also proposing an innovative behavioral program that it will use to support cross-promotion of its other residential programs and offers from its trade allies. In the commercial and industrial class, GMO is adding a prescriptive rebate program and is supporting a proven demand response program.

GMO's DSM plan will provide substantial savings to its customers. MDNR fully supports GMO's DSM plan and looks forward to working with GMO to see this plan, and its benefits to customers, come to fruition.

III. GMO's DSIM Proposal

Q. Please describe GMO's DSIM proposal.

A. GMO has proposed a demand-side investment mechanism (DSIM) to recover the program costs for its DSM plan, to provide an incentive to support these programs, and to recover any potential lost revenues that may occur due to the DSM programs. Some of GMO's DSIM components are consistent with the MEEIA rules; others are not. The provision to recover program costs is consistent with the rule, especially 4 CSR 240-20.093(1) (M), as is the potential recovery of lost revenues. The incentive structure merits further review and possibly some modification.

Q. Please describe GMO's proposed incentive structure.

A. GMO is proposing a two-pronged "incentive structure" featuring a fixed recovery of 12 percent of "shared benefits", collected prospectively, i.e., before savings, program performance, and benefits are verified by evaluation (EM&V), and a fixed "performance bonus" award to be collected retrospectively, i.e. after program savings and performance are verified by EM&V. MDNR supports the concept that the MEEIA act's goals support the balancing of utility financial interests with energy efficiency goals and that a utility has wide latitude in defining DSIMs that meet its financial and corporate goals. However, MDNR has concerns that parts of GMO's DSIM incentive vary from the MEEIA rules. MDNR's concerns apply to three parts of GMO's proposed incentive structure: 1) its definition of "shared benefits", 2) the prospective collection of these benefits, and 3) the structure of the fixed benefits recovery and the performance bonus. MDNR recognizes that many of these points are the

subject of variance requests made by GMO or addressed by pleadings in this case (for example, the pleadings by Staff and MDNR[13]), and that the Commission has authority to grant variances to any portion of the rule if it finds good cause. Finally, I will conclude this portion of my testimony by offering an alternative incentive structure for consideration that combines GMO's lost margin request with an increasing award designed to provide an incentive for high and sustained performance towards GMO's sales targets.

Q. Please describe your concerns regarding GMO's definition of "shared benefits."

A. As stated in MDNR pleading[14], our primary objection to GMO's use of "shared benefits" is that GMO includes program costs in its definition of "shared benefits" while the rule explicitly excludes program costs in its definition of "net shared benefits." The term, "shared benefits," is introduced by GMO without a definition.

In reviewing GMO's DSIM filing, it is clear that "shared benefits" are of "gross benefits." The problem is that the gross benefits include program costs, costs that are recovered under the cost recovery provisions of the rule. This means that GMO could recover a portion of its program costs twice.

[13] Missouri Public Service Commission Staff, *Motion for Variance Determinations and Motion for Expedited Treatment*, File No. EO-2012-0009 (Staff Motion) and Missouri Department of Natural Resources*, Missouri Department of Natural Resources' Response to Staff's Motion for Commission Determinations on Variances* File No. EO-2012-0009 (MDNR Response).

[14] See MDNR Response. p 5-6

"Net shared benefits" as defined by the rule does not include program costs (see 4 CSR 240-20.093 (1) (C), 4 CSR 240-20.094 (1) (C) and 4 CSR 240-20.163 (1) (A)). GMO's calculations of benefits, as presented in its testimony, schedules and work papers do not indicate that the benefits at the base of this "shared benefits" are net of program costs.

In its March 15, 2012 technical conference, GMO produced [15] calculations, presented in Schedule AB-2 HC, showing that the difference between "shared benefits" and "net shared benefits" is an net present value (NPV) over 15 years of more than ** [redacted] **

When calculated in this manner, net of program costs, GMO requires 16 percent of "net shared benefits", as opposed to 12 percent of "shared benefits" it originally requested. MDNR does not oppose GMO's request to recover a portion program benefits, provided these benefits are calculated according to the MEEIA rules. We refer parties to the materials presented in GMO's March 15, 2012 Technical Conference for the determination of the percentage of net shared benefits GMO should be authorized to recover.

[15] See "GMO MEEIA Summary Benefits Prog Detail-new and existing.xlsx" (HC), submitted by GMO 3/15/2012.

Q. What is MDNR's position on GMO's request for recovery a fixed percentage of program benefits?

A. MDNR's concern lies with the losses this fixed percentage of benefits is intended to recover. In the GMO technical meetings, the Company indicated that recovery of a fixed percentage of benefits was intended to recover the lost margins the Company expects to incur in each program year. The recovery of lost margins is outside of the scope of the MEEIA rules. The MEEIA rules allow for the recovery of *lost revenues* due to DSM programs, not lost margins. Lost revenues are defined in 4 CSR 240-03.163(1)(U), 4 CSR 240-03.164(1)(M), 4 CSR 240-20.093(1)(Y),and 4 CSR 240-20.094(1)(U) as:

> Lost revenue means the net reduction in utility retail revenue, taking into account all changes in costs and all changes in any revenues relevant to the Missouri jurisdictional revenue requirement, that occurs when *utility demand-side programs approved by the commission in accordance with 4 CSR 240-20.094 cause a drop in net system retail kWh delivered to jurisdictional customers below the level used to set the electricity rates.* Lost revenues are only those net revenues lost due to energy and demand savings from utility demand-side programs approved by the commission in accordance with 4 CSR 240-20.094 Demand-Side Programs and measured and verified through EM&V. (Emphasis added)

GMO is requesting a fixed level of recovery designed to collect its expected losses in total sales once it begins its DSM program implementation. MDNR understands that the fixed portion of GMO's "incentive" is designed to recover the throughput disincentive. Despite MDNR's concerns with this part of GMO's proposal, we note that the Company should have the opportunity to recover the losses in sales that result from its energy efficiency efforts. Additionally, the

MEEIA rules state that a Company can propose a DSIM that meets its needs.[16] Although MDNR would prefer to see another solution to addressing the throughput disincentive, ideally through a performance incentive that provides an increasing percentage of net shared benefits as program performance improves, we are prepared to support GMO's proposal.

The third issue MDNR wishes to comment on is GMO's proposal to recover a proportion of shared benefits prospectively. MDNR is concerned about GMO implementing effective DSM programs, and with seeing GMO's customers receive the benefits of these programs, than with when that benefit is recovered. With regard to the timing of the recovery of benefits, it appears that the controlling event is the completion of the evaluation and the measurement and validation of benefits.

MDNR notes that most of the programs in GMO's portfolio have been implemented and have been evaluated. Given this, and given the unique nature of this first DSIM application, it may be appropriate to divide the benefits by program vintage. In other words, benefits from the existing programs with verified program savings could be recovered prospectively in the years of the initial DSIM, and benefits from the new programs could be recovered after those programs have been implemented and evaluated. Based on materials provided by GMO in its March 15, 2012 technical conference, approximately 73 percent of GMO's "shared benefits" and 69 percent of GMO's "net shared

[16] See 4 CSR 240-3.163(1)(F).

benefits" are from its existing programs.[17] If this compromise position were adopted, the majority of the net shared benefits from GMO's portfolio could be recovered prospectively.

Q. Do you have any comments on the "performance bonus" portion of GMO's incentive?

A. GMO is proposing a performance bonus constructed as "tiers," designed to provide a fixed dollar award based on GMO's performance over three years. Table 3, copied from Tim Rush's direct testimony,[18] shows these tiers and recovery amounts.

Table 3. GMO's proposed performance bonus

	Low Threshold	High Threshold	Performance Incentive
Tier 1	>150%		$4M
Tier 2	101%	150%	$3M
Tier 3	51%	100%	$2M
Tier 4		<50%	$0
Source: Direct Testimony of Tim M. Rush, EO-2012-0009, p. 20, Lines 1-5.			

Q. What is the issue with GMO's performance bonus?

A. MDNR recognizes that the GMO is permitted to propose an incentive structure that meets its needs. The Commission also has the ability to grant GMO any variance it chooses, upon a finding of good cause. However, the MEEIA rule's requirements for the incentive portion of the DSIM in 4 CSR 240-20.094 (1) are:

> (M) DSIM utility incentive revenue requirement means the revenue requirement approved by the commission to provide the utility with *a portion*

[17] See "GMO MEEIA Summary Benefits Prog Detail-new and existing.xlsx" (HC), submitted by GMO 3/15/2012.
[18] *Direct Testimony of Tim M. Rush*, EO-2012-0009, p. 20, Lines 1-5.

of annual net shared benefits based on the approved utility incentive component of a DSIM;

(Z) Utility incentive component of a DSIM means the methodology approved by the commission in a utility's demand-side program approval proceeding to allow the utility to receive a *portion of annual net shared benefits achieved and documented through EM&V reports*. (Emphasis added)

The performance proposed by GMO is not a "portion of annual net shared benefits." Rather, it is a fixed dollar award that varies across multiple tiers of performance. These award amounts have no relationship to the benefits created by GMO's programs. Further, the tiers begin to award GMO for meeting only fifty percent of its stated goal. According to Company testimony, GMO is basing its performance metric on the average of its stated energy and demand goals.[19] Based on this calculation, at 100 percent of goal, GMO would have an average savings goal of 0.75 percent. Under GMO's "performance bonus", it would receive an award of 2 million dollars when it achieved 0.38 percent of its average goal.

The purpose of a performance incentive is to provide an incentive for high and sustained levels of program performance.[20] Providing a performance award when a company meets half of its stated goal does not achieve this purpose.

Q. Does MDNR have a recommendation for a preferred incentive structure?

A. Yes. MDNR offers for consideration an incentive structure based on program performance relative to GMO's overall savings goals. I note that these goals

[19] *Direct Testimony of Tim M. Rush*, EO-2012-0009, p. 19.
[20] See National Action Plan for Energy Efficiency (2007). *Aligning Utility Incentives with Investment in Energy Efficiency*. Prepared by Val R. Jensen, ICF International. www.epa.gov/eeactionplan. p 3-1 -3-5

were established by GMO, based on its analysis, and represent a level of savings that the Company believes is achievable. It is reasonable for a utility to receive an incentive in terms of a percentage of net shared benefits when it approaches its savings goal. MDNR recommends granting GMO the 16 percent of net shared benefits it claims it needs to address the throughput disincentive, but not awarding any additional incentive until it reaches 70 percent of its savings goal.

The recommendation for the 70 percent of goal minimum performance to receive a performance bonus is based on a review of state incentive mechanisms listed in Schedule AB-3. In this list, the minimum performance threshold for receiving a performance bonus ranges from 60% to 75% of established program goals. The performance level required to receive the maximum performance incentive ranges from 125% to 130%.

Schedule AB-4 shows MDNR's proposed floor of 70 percent of GMO's savings target and a ceiling at 150 percent of its target. For performance between 0 and 70 percent of its savings target, GMO would receive 16 percent of net shared benefits, the amount GMO maintains it requires to address the throughput disincentive. For performance at and above 150 percent of its savings target, GMO would continue to receive 25 percent of net shared benefits. GMO would receive a bonus of 1.13 percent of net shared benefits for each percentage point achieved between 70 and 150 percent of its savings target.

This incentive structure recovers GMO's throughput disincentive and provides GMO with a performance bonus of approximately $1.2 million when it meets the savings goals it has proposed in its DSIM application. I believe that this structure is clearer than the structure proposed by the Company and will allow the Company to maintain its financial position while providing a balanced and appropriate level of benefits in exchange for implementing its DSM Plan.

Q. Do you have any final comments about GMO's DSM plan and DSIM application?

A. GMO has proposed a robust and comprehensive DSM plan. MDNR is pleased to support this plan. GMO's DSM plan offers a wide range of energy efficiency measures, educational programs, and behavioral modification programs that will spur GMO to work toward meeting the state energy policy goal embodied by MEEIA, to achieve "all cost-effective demand-side savings."

MDNR has some concerns about the structure of GMO's DSIM and offers alternative formulations for both the calculation of benefits and the performance incentive. MDNR has proposed changes in both of these areas in order to move the MEEIA process forward. We look forward to the positive conclusion of this case, and the beginning of a new era of energy efficiency in Missouri. MDNR wishes to commend GMO for its transparency in discussing its MEEIA application with parties. GMO's willingness to discuss different aspects of its application has helped to clarify the issues. GMO has been responsive to parties' questions and has provided updated information and additional analysis promptly. MDNR maintains there are grounds for parties to

reach an agreement on many of the issues raised by GMO's MEEIA application, and this process will be the beginning of a long period of GMO's customers seeing benefits from energy efficiency.

Finally, MDNR maintains that it is well past time for Missouri's utilities and stakeholders to implement the MEEIA rules and begin delivering benefits of energy efficiency to its citizens. GMO's MEEIA application is a positive step forward in meeting the statewide goal of valuing "…demand-side investments equal to traditional investments in supply and delivery infrastructure and allow recovery of all reasonable and prudent costs of delivering cost-effective demand-side programs."[21] We look forward to the resolution of the issues in this case and to supporting GMO in the implementation of its DSM plan.

Q. Does this complete your testimony?

A. Yes. Thank you.

[21] Section 393.1124.3 RSMo

Schedule AB-1 HC
Highly Confidential in its entirety

Schedule AB-2 HC
Highly Confidential in its entirety

Schedule AB-3: Examples of Incentive Ranges

		Minimum		Maximum		
State	Utility	Threshold	Performance Level Required	Threshold	Performance Level Required	Cap/Limitations
California	Pacific Gas & Electric, Southern California Edison, San Diego Gas & Electric	0% of net benefits	65%-85% of savings goal	12% of net benefits	>100% of net benefits	Caps established for each utility
Connecticut		1% of program costs	70% of savings goal	8% of program costs	130% of savings goal	
Georgia	Georgia Power	3% of NPV of net benefits	less than 50% of projected kWh savings	10% of NPV of net benefits	more than 50% of projected kWh savings	If incentive sum exceeds program costs, portion of total that exceeds program costs is limited to 5% of actual net
Indiana	Duke Energy Indiana	5% return on program costs	<60% of targeted program costs	15% return on program costs	90% - 100% of targeted avoided costs	Limited to targeted plan savings and a 3% maximum rate increase for residential customers over a 4 year term
	Indianapolis Power & Light	-4% of program costs	<40% of targeted demand and energy savings	15% of program costs	>= 100% of targeted demand and energy savings	
	Southern Indiana Gas and Electric Company	-4% of program costs	0-49% of targeted demand and energy savings	12% of program costs	100-120% of targeted demand and energy savings	
	Indiana Michigan Power	0% of net benefits	<50% of annual targeted benefits	15% of net benefits	>= 50% of annual targeted benefits	Shared benefits incentive will be capped at 15% of the total program costs

		Minimum		Maximum		
State	Utility	Threshold	Performance Level Required	Threshold	Performance Level Required	Cap/Limitations
Michigan	Detroit Edison, Consumers Energy	0% of program spending	100% of target energy savings	15% of program spending	115% of target energy and overall and an overall Utility System Reference Cost Test (USRCT) of 1.25	15% of the total program cost
New Hampshire		8% of total program budgets	based on meeting cost-effectiveness and energy savings goals	12% of total program budgets		
Ohio	Duke Energy	Flat rate	50% of the NPV of the avoided costs for energy conservation and conservation and 75% of the NPV of the avoided costs for demand response	Flat rate	50% of the NPV of the avoided costs for energy conservation and conservation and 75% of the NPV of the avoided costs for demand response	
South Dakota	Xcel Energy, Otter Tail Power	30% of program costs (Flat Rate)		30% of program costs (Flat Rate)	A single flat rate is applied to cover performance and lost revenues	

Source: Compiled by GDS Associates for MDNR, January, 2012

Schedule AB-4		
	Total	3-year Average
Net Shared Benefits	$104,032,550	$34,677,516.65

Percent of Savings Target Achieved	Average Percentage of Energy and Demand Savings	Percent of Net Shared Benefits Retained	Dollar Award
70.0%	0.525%	16.00%	$5,548,402.66
80.0%	0.600%	17.13%	$5,938,524.73
90.0%	0.675%	18.25%	$6,328,646.79
100.0%	0.750%	19.38%	$6,718,768.85
110.0%	0.825%	20.50%	$7,108,890.91
120.0%	0.900%	21.63%	$7,499,012.98
130.0%	0.975%	22.75%	$7,889,135.04
140.0%	1.050%	23.88%	$8,279,257.10
150.0%	1.125%	25.00%	$8,669,379.16