BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION
OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF A NUMBER OF STRATEGIC ISSUES RELATING TO ITS DSM PLAN, INCLUDING MODIFIED ELECTRIC ENERGY SAVINGS AND DEMAND REDUCTION GOALS, AND REVISED INCENTIVES FOR THE PERIOD 2015 THROUGH TO 2020; FOR APPROVAL OF A DISTRIBUTION VOLTAGE OPTIMIZATION PROGRAM TOGETHER WITH COST RECOVERY AND INCENTIVES, AN LED STREET LIGHTING PRODUCT AND APPROVAL TO INCLUDE BEHAVIORAL CHANGE PRODUCTS IN THE COMPANY’S DSM PORTFOLIO AND OF THE METHODOLOGY TO BE USED TO MEASURE SAVINGS FROM SUCH PRODUCTS; AND FOR COMMISSION GUIDANCE REGARDING THE FACTORS TO BE CONSIDERED AND APPROPRIATE LEVEL OF THE COMPANY’S GAS DSM PROGRAM IN THE FUTURE.

DIRECT TESTIMONY AND EXHIBITS OF SCOTT B. BROCKETT ON BEHALF OF PUBLIC SERVICE COMPANY OF COLORADO

June 17, 2013
Corrected on April 11, 2014
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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DIRECT TESTIMONY AND EXHIBITS OF SCOTT B. BROCKETT

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DIRECT TESTIMONY AND EXHIBITS OF SCOTT B. BROCKETT

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Scott Brocket. My business address is 1800 Larimer Street, Suite 1400, Denver, Colorado 80202.
Q. **BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by Xcel Energy Services, Inc., the service company subsidiary of Xcel Energy Inc. (“Xcel Energy”), the registered public utility holding company parent of Public Service Company of Colorado (“Public Service” or the “Company”). My title is Director, Regulatory Administration and Compliance.

Q. **ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

A. I am testifying on behalf of Public Service.

Q. **HAVE YOU PREPARED A DESCRIPTION OF YOUR EXPERIENCE AND QUALIFICATIONS?**

A. Yes, that statement is included as Attachment A.

II. **PURPOSE OF TESTIMONY**

Q. **WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?**

A. The primary purpose of my Direct Testimony is to sponsor and explain the financial incentive mechanism that the Company proposes to apply on an ongoing basis to its electric energy-efficiency and Savers’ Switch programs, beginning with the 2015 Demand Side Management (“DSM”) plan year. I will also sponsor the Company’s proposed cost recovery mechanism for the Distribution Voltage Optimization (“DVO”) project.

Finally, I will offer some background on issues the Commission should consider when evaluating the potential of pricing programs to reduce the Company’s electric resource needs.
III. POLICY OBJECTIVES FOR REVISED INCENTIVE MECHANISM

Q. WHAT BASIC OBJECTIVE IS THE COMPANY SEEKING TO ACHIEVE THROUGH ITS REVISED INCENTIVE MECHANISM?

A. Colorado statutes provide that "[t]he Commission shall allow an opportunity for a utility’s investments in cost-effective DSM programs to be more profitable than any other utility investment that is not subject to special incentives." Consistent with this directive, Public Service is proposing an incentive mechanism that would allow it to profit from the successful implementation of electric DSM programs. Moreover, the extent to which we profited would be directly tied to the level of net economic benefits (as defined by the statute) attributable to our programs. At the same time, under our proposal the Company would suffer a financial loss if we performed poorly.

   The Company believes this result is consistent with the statute; we would have an opportunity, but no guarantee, to profit from our energy-efficiency initiatives.

Q. DO YOU BELIEVE THAT THE NEED FOR A WELL-DESIGNED DSM FINANCIAL INCENTIVE IS JUST AS VITAL OR MORE VITAL NOW THAN IT WAS WHEN THE COMMISSION APPROVED THE CURRENT INCENTIVE?

A. Yes. The Company stresses that two fundamental components of the overall DSM regulatory policy – the approved savings goals and financial incentive – are closely linked. As Ms. Sundin explains in her Direct
Testimony, the Company faces significant challenges in meeting our energy savings goals. For example, the Company historically was able to achieve significant savings from residential and commercial lighting programs. This potential is now much less due to the higher lighting efficiency standards. The Company is proposing its challenging goals only in conjunction with a financial incentive that will truly afford us a fair opportunity to financially benefit from the efficient and aggressive provision of energy-efficiency programs. We believe that the approval of our proposed goals without such an incentive would fail to meet the statutory objective cited earlier and unfairly allocate risks and rewards between customers and shareholders.

IV. SUMMARY OF CURRENT ELECTRIC ENERGY-EFFICIENCY INCENTIVE MECHANISM

Q. PLEASE SUMMARIZE THE COMPANY’S CURRENT FINANCIAL INCENTIVE FOR ELECTRIC ENERGY-EFFICIENCY PROGRAMS.

A. The current incentive mechanism consists of two components: an annual lump-sum Disincentive Offset and a Performance Incentive.

The Company is entitled to a Disincentive Offset of $3.2 million (before tax) each year that we implement an approved DSM plan and achieve at least 80 percent, but less than 100 percent, of our annual savings goal for the relevant year. If the Company achieves at least 100 percent of its energy savings goals for the relevant year, then the Disincentive Offset increases to $5.0 million (before tax).
The Performance Incentive is tied to the net economic benefits the Company projects for a given vintage of DSM program, using the Modified Total Resource Cost Test ("Modified TRC Test") as defined in C.R.S. 40-1-102(5). The net economic benefits under the Modified TRC Test are the projected gross benefits of an initiative over its projected life minus the costs of the initiative to both the participant and the utility. Mr. Petersen in his Direct Testimony explains the Company’s approach to estimating net economic benefits under the Modified TRC Test in more detail.

After a program year is finished, the Company updates the estimate of net economic benefits attributable to that program vintage -- based on the actual number and type of DSM initiatives we implemented during that year. Once these net economic benefits are calculated for a given vintage, the Company is allowed to retain a portion of these benefits. The percentage of benefits the Company is entitled to retain is based on a sliding percentage scale tied to performance. Specifically, the percentage of net economic benefits the Company is entitled to retain increases with the ratio of the estimated annual energy savings of the initiatives actually implemented during the year to the Commission's approved savings goals for that same year. The sharing percentage starts at 1.0 percent of net economic benefits (if the Company achieves 80 percent of the Commission's approved savings goal), and gradually increases to 15.0 percent (if the Company achieves 150 percent of the approved savings goal).
Each year on April 1 the Company files for approval to collect 100 percent of the incentive earned on the previous year’s DSM program through the Demand Side Management Cost Adjustment (“DSMCA”). The Company ultimately collects 100 percent of the incentive award actually approved by the Commission over the 12 months beginning July 1.

V. ASSESSMENT OF CURRENT INCENTIVE MECHANISM

Q. DO YOU BELIEVE THE CURRENT INCENTIVE MECHANISM MEETS THE STATUTORY OBJECTIVE YOU CITED EARLIER?

A. The current incentive mechanism has several good features that the Company recommends retaining. For example, basing at least part of the Company’s financial incentive on the net benefits under the Modified TRC Test is a laudatory feature; the statute cites those same net benefits, and the Commission uses the Modified TRC Test as its primary screening tool for DSM projects. Likewise, linking the percentage of retained benefits to program performance is also sound, as the utility then has a direct financial incentive to meet and exceed the Commission’s energy-savings goals.

Nonetheless, the Company believes the current incentive mechanism also has two primary shortcomings.

Q. PLEASE SPECIFY THESE SHORTCOMINGS.

A. The first deficiency is the lack of any direct recognition of the financial impacts of successful energy-efficiency measures on the Company’s revenue stream. The second deficiency is that the percentage of net
economic benefits that the Company can earn at different performance
levels would not adequately compensate the Company for its energy-
efficiency efforts beginning in 2015.

Q. WHY IS THE LACK OF A DIRECT RECOGNITION OF THE FINANCIAL
DISINCENTIVE ATTRIBUTABLE TO ENERGY-EFFICIENCY
MEASURES A SHORTCOMING?

A. The best way to answer this question is to identify first the impact of
energy-efficiency programs – as a separate line of business -- on the
Company’s earnings. The primary difference between energy-efficiency
initiatives and other traditional initiatives that the Company undertakes is
that energy-efficiency initiatives directly reduce the Company’s revenue.
Specifically, by directly helping customers to reduce their electric usage
and peak loads, the Company also reduces its revenue generated through
usage and demand charges. This lost revenue, net of the short-term
avoided costs associate with the reduction in sales, constitutes a financial
loss to the Company.

The sole offset to these lost revenues is any gross financial
incentives the Company is awarded for implementing energy-efficiency
initiatives.

The resulting algorithm is straightforward: The financial impact on
the Company of providing energy-efficiency initiatives is its gross financial
incentive minus the financial disincentive. If the financial disincentive is
not directly accounted for, it becomes difficult to tailor a positive financial
incentive that provides a reasonable assurance that the utility will profit
from energy-efficiency initiatives if it does a good job of implementing
them.

Q. DOESN’T THE CURRENT DISINCENTIVE OFFSET RECOGNIZE THE
UTILITY’S FINANCIAL DISINCENTIVE TO IMPLEMENT ENERGY-
EFFICIENCY PROGRAMS?

A. The Disincentive Offset certainly increases the gross incentive. In that
respect it does provide some offset to the financial disincentive, just as the
incentive based on net economic benefits does. Nonetheless, there is no
conceptual relationship between the current Disincentive Offset and the
true financial disincentive that the utility actually experiences. In fact, as
utility performance improves and the financial disincentive increases, the
gap between the financial disincentive and the Disincentive Offset
increases. (The current stepped increase from $3.2 million to $5.0 million
at the 100 percent performance level does little to address this increasing
gap.) This result seems contrary to what a well-designed Disincentive
Offset should achieve. Regardless, in practice the financial disincentive
has exceeded (and will almost certainly continue to exceed) the current
Disincentive Offset. For example, the annualized financial disincentives
from the 2011 and 2012 energy-efficiency programs were about $13.6
million and $17.6 million, respectively.
Q. WHY CAN’T AN INCENTIVE BASED ON NET ECONOMIC BENEFITS
BE TAILORED TO COMPLETELY OFFSET THE FINANCIAL
DISINCENTIVE, ASSUMING SOME THRESHOLD OF GOOD
PERFORMANCE?

A. It is possible to attempt to achieve this objective using a variety of
projections of relevant avoided costs, base rates and achievement levels.
But in practice the projected and actual results can diverge significantly.

Q. PLEASE EXPLAIN WHY THIS DIVERGENCE OCCURS.

A. This divergence can occur for many reasons.

First, it is impossible to predict accurately the adoption rates for
energy-efficiency programs that reflect a wide range of benefit-cost ratios.
If the adoption rates for programs that have TRC benefit-cost ratios
relatively close to 1.0 exceed projections, while the adoption rates for
programs with greater TRC ratios falls short of projections, then the
Company’s financial disincentive can be the same or greater than
projected at the same time that the achieved net economic benefits are
less than projected.

Second, the extent to which the incentive is compensatory is very
sensitive to the duration of the financial disincentive. The derivation of the
per-unit loss attributable to a reduction in a given billing determinant
(usage or billing demand) is relatively straightforward. But as the
Company pointed out in Docket Nos. 07A-420E and 10A-554EG, the
financial disincentive attributable to a given vintage of DSM program is a
function of its duration. In other words, the financial disincentive from a vintage of DSM program continues until such time that the reduced billing determinants are captured in base rates. This lag is, in turn, a function of both the frequency with which the Company files rate cases and the type of test year that the Commission authorizes, e.g., a historical test year (“HTY”), a forecasted test year (“FTY”), a hybrid test year, or a multi-year plan (“MYP”) providing for stepped increases over multiple years. If the lag is one year or less, the financial disincentive is relatively small. If the lag is five years, the loss increases significantly. A financial incentive that is compensatory assuming a short lag is insufficient assuming a long lag. The converse is also true.

Third, the financial impact of any given reduction to billing determinants will increase over time as base rates increase. For example, if a base usage charge increases from 5 cents per kWh to 6 cents per kWh, then the margin reduction from a kWh reduction in sales also increases by about 1 cent per kWh.

Fourth, the same percentage incentive tied to net economic benefits may yield a reasonable result in one year, but an unreasonable result in future years if avoided costs change. Even if avoided costs are locked in for purposes of determining the utility’s incentive over the term of each multi-year DSM plan, any sharing of net economic benefits based on a sliding percentage scale that is compensatory for a year or two (in terms of compensating for financial disincentives) might be either too restrictive
or too generous in later years if the anticipated benefit-cost ratios vary significantly among vintages. For example, changes in fuel prices or avoided investment costs can change benefit-cost ratios significantly.

Fifth, our current financial incentive is directly linked to our achieved energy savings as a percentage of the Commission-approved goals. Consequently, the extent to which an incentive is compensatory depends on our achieved levels of savings. But as I mentioned previously, this uncertainty is less troubling because it ties the utility’s incentive to performance. In other words, the extent to which a utility financially benefits from energy-efficiency initiatives should vary directly with its performance.

Q. ARE ANY OF THESE POTENTIAL REASONS FOR DIVERGENCE LINKED TO THE UTILITY’S PERFORMANCE IN OFFERING EFFECTIVE ENERGY-EFFICIENCY PROGRAMS?

A. There is little nexus between the changes to net economic benefits or financial attrition from year to year as explained above and the quality of the utility’s efforts. That is the fundamental reason why such changes are important to consider when designing an incentive mechanism. The purpose of awarding the utility a percentage of net economic benefits is to encourage the effective and aggressive provision of energy-efficiency service and/or compensate the utility for the impacts of successful DSM programs on net income. Changes to net economic benefits beyond the utility’s control require a recalibration of any incentive mechanism based
Q. DO YOU BELIEVE ANY OF THESE POTENTIAL REASONS FOR RECALIBRATING THE PERFORMANCE INCENTIVE APPLY IN THIS PROCEEDING?

A. Yes. In fact, I believe all of these factors are relevant.

The first, second and fifth reasons are risks that Company will always bear under the current incentive structure.

The third reason is also relevant, as the Company's base rates will increase between January 2012 and January 2015 under the terms of the currently effective MYP. The result is a greater financial disincentive for the same reduction to billing determinants.

The fourth reason is also relevant. Gas prices have recently declined to relatively low levels by historical standards. At the same time, the avoided capacity costs applied to energy-efficiency programs have been flat or declining over the past few years. The result is, all else equal, a decline in per-unit avoided costs and the concomitant financial incentive based on these avoided costs. Moreover, as the Company’s energy-efficiency efforts mature, the per-unit net economic benefits of incremental initiatives tend to be lower than those of the legacy initiatives. This decline reduces the benefit-cost ratio of the energy-efficiency portfolio as a whole and, by extension, reduces the unity’s incentive at any given level of energy savings.
Q. WHAT IS YOUR CONCLUSION FROM THIS ANALYSIS?

A. The current incentive mechanism should be recalibrated to better meet the intended goals of a financial incentive mechanism applied to energy-efficiency programs.

VI. PROPOSED FINANCIAL INCENTIVE MECHANISM FOR ENERGY-EFFICIENCY MEASURES OTHER THAN DVO

Q. PLEASE SUMMARIZE THE COMPANY’S PROPOSED REVISIONS TO THE CURRENT FINANCIAL INCENTIVE MECHANISM.

A. In contrast to the Company’s proposal in Docket No. 10AL-554EG, in the instant proceeding the Company is not recommending the direct recovery of financial disincentives for the bulk of its energy-efficiency initiatives. (As I will explain later in my Direct Testimony, we are recommending the direct recognition of the financial disincentive for one new initiative -- the DVO project.) Instead, the Company proposes to maintain the current incentive structure consisting of the Disincentive Offset and the Performance Incentive.

However, to address the problems explained above the Company proposes to recalibrate the specific incentive amounts. First, we propose to increase the Disincentive Offset to $7.5 million annually. In accordance with the current incentive mechanism, the Company would earn this flat incentive annually if it achieved at least 80 percent of its energy savings goals for that year. However, the Disincentive Offset would not change with higher achievement.
Second, the Company proposes to recalibrate the percentage sharing amounts applicable to the Performance Incentive to yield more reasonable outcomes given expected conditions in 2015 and 2016. The framework of the Performance Incentive component would not change: The Company would begin earning a Performance Incentive once we achieved a minimum percentage of our approved energy-efficiency goals, and the incentive would be based on a sliding percentage scale applied to the achieved savings and net economic benefits for a given vintage of DSM program. However, the Company proposes to increase these percentages throughout the range of achievement levels.

Q. WHAT IS THE BASIS FOR THE PROPOSED LEVEL OF THE DISINCENTIVE OFFSET?

A. The Company’s financial disincentive is a function of the reduction in billing determinants attributable to energy-efficiency efforts and the base rates applied to those billing determinants. At a minimum my goal was to increase the Disincentive Offset to maintain the same relative protection afforded by the current Disincentive Offset.

Q. HOW DID YOU DETERMINE THE REVISED, MINIMUM DISINCENTIVE OFFSET?

Q. The current Disincentive Offset of $5 million at 100 percent goal achievement was approved for Company DSM efforts beginning in 2012. The approved 2012 energy savings goal was 330 GWh, and the base rates at that time included no increases under the electric MYP approved
by the Commission in Docket No. 11AL-947E. For the 2015 program year
the Company proposes an energy-savings goal (net of DVO impacts) of
350 GWh, which is an increase of about 6 percent over the 2012 goal.
The cumulative percentage base rate increase from January 2012 through
2014 under the approved MYP will be about 17 percent. To account for
potential rate increases in 2015 and 2016 I increased this percentage to
20 percent. The total percentage increase in the financial disincentive is
then 1.06 * 1.20 = 1.27. I calibrated the minimum Disincentive Offset by
multiplying the current Disincentive Offset of $5 million by 1.27, or $6.35
million.

Q. IS THE COMPANY THEN PROPOSING A DISINCENTIVE OFFSET OF
$6.35 MILLION?
A. No. That amount would simply maintain the same relative protection
against financial losses afforded by the current Disincentive Offset. The
Company proposes to increase the relative contribution of the Disincentive
Offset to our total financial incentive, given the risks inherent in the
Performance Incentive explained above. Specifically, the Company
proposes a Disincentive Offset of $7.5 million. This represents a 50
percent increase from the current level of $5 million at 100 percent goal
achievement, which is similar to the 56 percent increase to the
Disincentive Offset that the Commission approved in Docket No. 10AL-
554EG (from $3.2 million to $5.0 million). As explained below, the higher
Disincentive Offset allows for a smaller Performance Incentive.
Q. WHAT MODIFICATIONS DOES THE COMPANY PROPOSE TO THE PERFORMANCE INCENTIVE?

A. The Company proposes to maintain the same basic structure for the Performance Incentive. No Performance Incentive would be awarded for achievement levels below 75 percent of the established energy savings goal for that year. (The current Performance Incentive applies to achievement levels of 80 percent or greater.) At 75 percent goal attainment the Performance Incentive would be 1 percent of the net economic benefits. For each 5 percentage points of additional achievement, the Performance Incentive would increase by 1 percentage point. For example, the Performance Incentive would be: 1 percent of net economic benefits for achievement levels from 75 percent through 79 percent; 2 percent of net economic benefits for achievement levels from 80 percent through 84 percent; and 3 percent of net economic benefits for achievement levels from 85 percent through 89 percent. This progression would continue with higher levels of achieved savings. The Company proposes to cap the percentage of net economic benefits awarded at 14 percent, which is the percentage award granted at a goal attainment level of 140 percent.
Q. ARE YOU SPONSORING AN EXHIBIT THAT SHOWS THE SPECIFIC DISINCENTIVE OFFSET AND PERFORMANCE INCENTIVE THAT THE COMPANY PROPOSES AT EACH POTENTIAL LEVEL OF GOAL ATTAINMENT?

A. Yes. I provide this information in Exhibit No. SBB-1.

Q. IS THE COMPANY PROPOSING TO ESTABLISH A CAP ON THE PERFORMANCE INCENTIVE?

A. Yes. The Company proposes an annual cap of $50 million.

VII. PROPOSED COST RECOVERY AND FINANCIAL INCENTIVE MECHANISM FOR DVO

Q. WHAT COST RECOVERY MECHANISM DOES THE COMPANY PROPOSE FOR THE DVO PROJECT?

A. The Company proposes to recover the O&M expenses and capital costs of the DVO project on a current basis through the Demand Side Management Cost Adjustment (“DSMCA”) only until such time as those costs are collected through base rates pursuant to the Commission’s approval of DVO cost recovery in a Phase I electric proceeding. At that time, the Company would transfer DVO cost recovery from the DSMCA to base rates, similar to the approved transfer of the costs of the acquisition of the Calpine generating assets in Docket No. 11AL-947E. The DSMCA would then collect only those DVO capital and O&M costs in excess of the approved base-rate recovery. The DVO project is expected to be completed by the end of 2020. When these costs are entirely recovered
through base rates, there would be no further recovery through the DSMCA.

Q. WHY IS THE COMPANY NOT PROPOSING TO COLLECT THE COSTS RELATED TO THE DVO PROJECT THROUGH THE DSMCA ON AN ONGOING BASIS?

A. There are two reasons. First, the assets related to DVO project are on the utility side of the customer interface. In that respect, they are more similar to traditional distribution assets whose costs are collected through base rates. Second, as explained in the Direct Testimony of Company witnesses Debra L. Sundin and Kelly Bloch, the DVO project will entail considerable capital and O&M costs. Recovering these costs through the DSMCA would require significant increases to the rider. For these reasons the Company proposes to use the DSMCA only as a cost-recovery bridge until such time as base rates can be set to recover 100 percent of the projected costs of the project.

Q. WHAT INCENTIVE MECHANISM DOES THE COMPANY PROPOSE FOR THE DVO PROJECT?

A. The Company proposes to recover directly through the DSMCA a disincentive offset equal to the actual financial disincentive attributable to the project. In addition, the Company proposes a modest Performance Incentive to allow us to benefit financially to the extent the program provides net economic benefits to customers. This Performance Incentive would be a straight 2 percent of the incremental net economic benefits
Q. **WHY IS THE COMPANY PROPOSING TO RECOVER DIRECTLY THE FINANCIAL DISINCENTIVE ASSOCIATED WITH THE PROJECT?**

A. The impacts of the DVO project on customer billing determinants and base revenue are subject to considerable uncertainty. For this reason, applying the current incentive structure to this project could result in financial rewards or penalties that have little relationship to the quality of the Company’s efforts. The direct recovery of the financial disincentive based on actual results would mitigate the risk to both customers and shareholders.

Q. **HOW WOULD THE DVO DISINCENTIVE OFFSET BE CALCULATED AND RECOVERED?**

A. The Company would directly identify the actual, annualized energy and demand savings attributable to the DVO project for the residential and non-residential classes. All of the residential savings would be assigned to the Residential (“R”) tariff for purposes of deriving the financial disincentive. The non-residential reductions in billing determinants would be allocated to the Commercial (“C”), Secondary General (“SG”) and Primary General (“PG”) classes based on annual sales. (The TG class would be excluded from this derivation, since the DVO project is not expected to reduce materially the metered use or billing demands of customers receiving service at transmission voltage.) For example, the 2015 non-residential financial disincentive attributable to the DVO project

attributable to the program.
would be allocated to the C, SG and PG classes based on 2015 class usage.

The resulting reduction in billing determinants would then be multiplied by the corresponding base rates (including the General Rate Schedule Adjustment, or “GRSA”) for the Residential, Commercial, Secondary General and Primary General classes to derive gross lost revenues. The component of base rates earmarked for the recovery of a base level of DSM expenses and variable O&M expenses would then be subtracted from these gross lost revenues to derive the financial disincentive. For demand-metered customers, the base energy charge is roughly equal to the avoided O&M cost. Consequently, the financial disincentive for demand-metered customers is solely a function of reductions in billing demand adjusted for the base recovery of DSM expenses.

Q. FOR HOW LONG WOULD THE COMPANY RECOVER THE FINANCIAL DISINCENTIVE ATTRIBUTABLE TO THE DVO PROJECT?

A. The Company would be allowed to recover the financial disincentive until such time as new base rates were implemented based on a test year that accounted for such impacts. For example, if new base rates were implemented on January 1, 2017, using a 2016 test year, then the Company would derive and ultimately collect the financial disincentive attributable to the DVO program in 2015 and 2016. Likewise, the Company would derive and collect the 2017 DVO financial disincentive,
over and above the 2016 DVO impact, until such time as new base rates were established that accounted for the 2017 impacts of the DVO project on billing determinants.

The timing of the collection of the DVO financial disincentive would coincide with the timing of the current collection of financial incentives. In other words, any 2015 financial disincentive would be recovered over the 12 months beginning July 1, 2016. Similarly, any 2016 financial disincentive would be collected over the 12 months beginning July 1, 2017.

Q. CAN YOU PROVIDE AN ILLUSTRATIVE EXAMPLE OF HOW THE FINANCIAL DISINCENTIVE WOULD BE CALCULATED?

A. Yes. Exhibit No. SBB-2 provides an illustrative derivation of the financial disincentives attributable to the 2016 vintage of the DVO project in 2016, 2017 and 2018. This example assumes that new base rates capturing the annualized impacts on customer billing determinants are implemented on July 1, 2018.

The DVO project will be ramped up over five years. Consequently, the incremental financial disincentive attributable to a given vintage of DVO investment will be the additional reductions to billing determinants from the previous year’s reductions. Moreover, for purposes of deriving the financial disincentive the Company will assume that each year’s investments will be spread evenly over the year. To reflect this pattern, the Company will derive the first-year incremental impact of each vintage
by multiplying the annualized incremental impact by 0.5.

Q. WOULD THIS RECOVERY OF THE FINANCIAL DISINCENTIVE EXTEND INDEFINITELY?

A. No. As explained through the Direct Testimony of Ms. Sundin and Ms. Bloch, the Company plans to ramp up the DVO project over five years. The project will commence in 2015 and be completed by the end of 2020. Consequently, the Company proposes to recover the financial disincentive attributable to DVO impacts only through 2020. Any such recovery attributable to 2020 incremental impacts would be recovered through the DSMCA over the period from July 1, 2021, to June 30, 2022. There would be no direct recovery of financial disincentives after June 30, 2022. In other words, the Company would be at risk for any incremental financial disincentive accruing beyond 2020.

Q. PLEASE DESCRIBE THE PERFORMANCE INCENTIVE THAT THE COMPANY IS PROPOSING FOR THE DVO PROJECT?

A. In addition to eliminating the financial disincentive, the Company proposes to implement a modest positive financial incentive as a reward to provide an incentive for good performance. The incentive would be based on the percentage of lifetime net economic benefits for a given vintage of DVO investment using the Modified TRC Test. The sharing percentage would be 2.0 percent. In contrast to the Performance Incentive applied to non-DVO energy-efficiency measures, the DVO Performance Incentive would not be contingent on achieving a certain level of energy savings.
VIII. REASONABLENESS OF PROPOSED INCENTIVE MECHANISM

Q. DO YOU BELIEVE THAT THE INCENTIVE MECHANISM DESCRIBED ABOVE MEETS THE STATUTORY AND POLICY OBJECTIVES YOU SUMMARIZED EARLIER IN YOUR DIRECT TESTIMONY?

A. Yes. The Company’s net gain or loss from offering energy-efficiency programs would be tied directly to two critical measures of performance: the Company’s achieved energy savings relative to the Commission’s approved savings goal and the net economic benefits the Company generated through its program – using the Modified TRC Test described in the statute. The level of our gain or loss would reflect our performance. We would lose if we did a poor job, break even if we did an average job, and benefit at an increasing rate once we demonstrated good to superior performance (i.e., achieved over 100 percent of our goals). In addition, our proposal includes caps that limit the Performance Incentive and impose significant risks of financial losses.

Q. HAVE YOU ESTIMATED THE LIKELY FINANCIAL IMPACTS THAT SUPPORT THESE GENERAL CONCLUSIONS?

A. Yes. A summary of the Company’s expected net financial gains or losses at various achievement levels is provided as Exhibit No. SBB-3. As I explained earlier, this net financial disincentive is a function of the gross incentive earned at a given achievement level minus the financial disincentive. The gross financial incentive consists of the sum (to the extent they are earned) of the Disincentive Offset, the Performance
Incentive for both DVO and non-DVO projects, and the direct recovery of financial disincentives related to the DVO project. The Performance Incentives in this exhibit are based on linear adjustments to the expected Net Economic Benefits in 2015 and 2016 at the 100 percent achievement level. The financial disincentive is the ancillary impact on net base revenue from the successful implementation of energy-efficiency projects, and reflects expected base rates in 2014. For purposes of this exhibit the financial disincentive for a given vintage of non-DVO projects is expected to be sustained for two years. The Company has calibrated its proposed incentive mechanism based on this assumed lag.

Q. DO YOU WISH TO HIGHLIGHT ANY RESULTS FROM THIS ANALYSIS?

A. Yes. If the Company achieved less than 75 percent of our energy savings goal, then we would absorb the entire impact of the financial disincentive attributable to non-DVO impacts and receive no non-DVO Performance Incentive. Consequently, our net financial loss would equal the financial disincentive attributable to whatever level of non-DVO energy savings we did achieve minus the DVO Performance Incentive.

If the Company achieved at least 75 percent of its energy-savings goal, then we would be entitled to a modest Performance Incentive on both DVO and non-DVO projects. However, the Company would still suffer a net loss of about $14.2 million attributable to the 2015 vintage of energy-efficiency programs. This loss would decline as the Company’s
performance improved, i.e., the Company achieved energy savings above 75 percent of our proposed energy-savings goal. The Company would begin to realize a net financial gain at approximately the 100 percent achievement level.

If the Company achieved more than 100 percent of the savings goal, then we would realize increasing net financial gains. Based on the assumptions underlying Exhibit No. SBB-3, our net financial gain attributable to the 2015 vintage of energy-efficiency programs would be capped at an achievement level of 140 percent. The net savings at this achievement level would be about $27 million. This amount is about 3 cents per share, meaning we could increase earnings by enough to ensure that the provision of DSM services in Colorado could become a reasonably profitable line of business, but never generate exorbitant earnings.

Moreover, regardless of the achievement level, we would assume the risk of having financial disincentives sustained for more than two years. This risk is significant.

Taken as a whole, I believe the Company’s proposed incentive mechanism provides the correct directional incentive, forces the Company to accept financial losses from poor to average performance, and allows the Company a reasonable opportunity (but absolutely no guarantee) of profiting from the superior implementation of energy-efficiency projects.
Q. IN YOUR RESPONSE ABOVE YOU REFERRED TO THE RISK OF SUSTAINING MORE THAN TWO YEARS OF FINANCIAL DISINCENTIVES. CAN YOU ILLUSTRATE THE MAGNITUDE OF THIS RISK?

A. Yes. In Exhibit No. SBB-4 I estimate the net financial gain or loss to Public Service assuming no lag, and lags of one year, two years, three years and four years. I import the results from Exhibit No. SBB-3 for the two-year-lag scenario, and calibrate the results for the other scenarios using the same assumptions underlying Exhibit No. SBB-3. I am using the 2015 energy-efficiency program vintage to illustrate the impacts of different lags, but the same basic conclusion would hold for 2016 and other years as well; the Company’s net financial gain or loss would swing dramatically with the duration of the financial disincentive.

Q. WHAT IS THE LIKELIHOOD OF THE COMPANY’S EXPERIENCING ANY OF THESE LAGS?

A. Any of these scenarios is possible. The duration of the financial disincentive depends on the timing of rate cases and the types of test years approved. Assuming a case was filed every three years, a forward-looking MYP might result in no lag or a short lag of perhaps 0.5 years. A FTY would most likely result in a lag of 0.5 years to 2.5 years. A HTY would probably result in a lag of 2.0 years to 4.0 years.
IX. ALTERNATIVE INCENTIVE MECHANISM IF MYP APPROVED

Q. WOULD THE COMPANY PROPOSE A MODIFIED DSM INCENTIVE MECHANISM IF THE COMMISSION APPROVED ANOTHER MYP FOR THE COMPANY’S ELECTRIC DEPARTMENT?

A. Yes. As the Company has explained (at length) in this proceeding, as well as in Docket Nos. 07A-420E and 10AL-554EG, the financial disincentive attributable to DSM programs varies directly with the lag between the reduction in billing determinants and the recognition of this reduction in base rates. This lag, in turn, is a function of both the lag between rate cases and the type of test year approved. If the Commission were to approve another MYP for the electric department, then the unfortunate disconnect between the public-policy goal of promoting a more efficient use of energy and the utility’s financial incentives would be largely repaired. In that event, the Company’s proposed financial incentive mechanism could be too rich.

Q. WOULD THE COMPANY PROPOSE ANY MODIFICATIONS TO ITS PROPOSE INCENTIVE MECHANISM IF THE COMMISSION APPROVED A MYP?

A. Yes. If the Commission approved an MYP to be effective beginning in 2015, then at a minimum the Company would recommend the elimination of the Disincentive Offset for the 2015 energy-efficiency vintage and all subsequent vintages falling within the term of the MYP. The Company might also propose a lower Performance Incentive within another DSM
proceeding, depending on the specific MYP approved.

X. TARIFF REVISIONS

Q. HAS THE COMPANY PREPARED REVISIONS TO THE DSMCA TARIFF TO REFLECT THE PREFERRED INCENTIVE MECHANISM YOU DISCUSS ABOVE?

A. Yes. Attached to my testimony as Exhibit Nos. SBB-5 and SBB-6 are, respectively, clean and redlined versions of the form of DSMCA tariff that the Company will file if the Commission approves the Company’s proposals as described above.

XI. PRICING COMPONENT OF DEMAND RESPONSE POTENTIAL

Q. IS THE COMPANY PROPOSING ANY DEMAND-RESPONSE GOALS ATTRIBUTABLE TO NEW PRICING OPTIONS IN THIS PROCEEDING?

A. No. The Company is not proposing any specific demand or energy reduction goals attributable to such offerings at this time.

Q. IS THIS DECISION BASED ON THE DEMAND RESPONSE POTENTIAL STUDY THAT THE COMPANY IS SPONSORING IN THIS PROCEEDING?

A. The study certainly suggests limited potential for cost-effective pricing options. In fact, the cost-effective potential is largely limited to Critical Peak Pricing tariff options for the medium and large C&I customer segments. But there are other factors that the Company also considers when evaluating the desirability of proposing DSM goals related to more
sophisticated pricing options.

Q. PLEASE IDENTIFY AND EXPLAIN SOME OF THESE OTHER CONSIDERATIONS.

A. First, most energy-efficiency and load-control programs can be fairly characterized as DSM initiatives whose fundamental purpose, and perhaps sole purpose, is to achieve cost-effective peak demand and energy reductions. But the prices we charge retail customers must balance a variety of ratemaking goals in addition to traditional DSM goals. For example, traditional ratemaking goals include economic efficiency, revenue stability, ease of administration, transparency (i.e., the rate structure should be relatively easy for customers to understand), rate moderation, and the fair apportionment of the utility’s test-year cost of service among rate classes and among customers within the same rate class. DSM potential studies can address some of these goals to various degrees, but Phase II rate proceedings offer a better venue for fairly balancing all goals.

Second, the setting of demand-response goals attributable to new pricing options entails unique risks. I can illustrate this point by comparing a traditional energy-efficiency project with a new pricing option. Let’s suppose a utility offers a rebate to encourage industrial customers to install more efficient motors. While the impacts of these more efficient motors are subject to some uncertainty, engineering studies can generally estimate the impacts on a given customer’s energy use and peak demand.
with reasonable accuracy. Consequently, while market penetration rates may be uncertain, the impacts of a specific installation can be estimated and translated into DSM goals with a relatively high degree of accuracy.

In contrast, the impacts of new pricing options are more difficult to estimate. Not only are penetration rates subject to considerable uncertainty, but customer responses to new prices are very difficult to predict. Some customers may benefit from taking service under a new tariff even if they do not change their total use or usage pattern. Even if customers do respond to the new prices, estimating the price elasticity of demand for electricity has historically proven to be very difficult. While potential studies incorporate customer behavior to the extent possible, there is still considerable uncertainty. As a result, it is risky to rely on projected demand reductions from new pricing options for purposes of electric resource planning.

Third, the estimation of the marginal costs of implementing new pricing options is subject to more uncertainty and judgment. For example, the incremental cost of installing a more efficient motor is largely limited to the cost of replacing the old motor with a new motor; there is no need for incremental upstream infrastructure investments to support the new motor. In contrast, some pricing options are predicated on the roll-out of AMI or AMR. Unless these capabilities are already in place, there is a legitimate question of how to estimate the marginal cost of the pricing option. Should the cost be limited to the clearly separable marginal cost of
metering and tariff administration, or should the marginal cost include some assignment or allocation of the costs of the supporting infrastructure? There may not be a clear and easy answer.

Fourth, the marginal cost of some pricing options should theoretically include the loss of consumer value associated with an induced shift in use from periods when prices are higher to periods when prices are lower. Again, comparing the installation of a more efficient motor with a new pricing option may be instructive. The installation of a more efficient motor usually results in the same level of energy service for fewer energy inputs. As a result, the customer can maintain the same energy service value at a lower long-term cost. But the assumption of consistent consumer value may not hold for new pricing options. For example, a time-of-use rate structure may persuade me to wash my clothes at 9:00 p.m. instead of 2:00 p.m., but the inconvenience of washing my clothes at 9:00 p.m. is still a cost to me. This reduction in consumer surplus should theoretically be considered in any cost-effectiveness analysis as either an additional cost or a reduced benefit. But given the complexities of considering this impact, it is usually ignored.

Q. DOES THE COMPANY THEN CONTEND THAT IT IS NEVER APPROPRIATE TO INCLUDE THE PROJECTED IMPACTS OF NEW PRICING OPTIONS IN DEMAND RESPONSE GOALS?

A. No. Prices can certainly affect customer demand, and establishing forward-looking goals may be appropriate – even in light of the caveats
explained above -- when there is significant cost-effective potential, the impacts on customer usage can be assessed with reasonable confidence, and there are near-term capacity needs.

But I see little need to include such goals in this proceeding. The demand response potential study suggests limited cost-effective potential at this time. Moreover, the Company’s resource plan does not reflect a resource need until 2017, and even then the resource need is only 9 MW, rising to 256 MW in 2018. Consequently, there is little support for setting goals in this proceeding.

Q. DOES THE LACK OF SPECIFIC GOALS SUGGEST THAT THE COMPANY ENVISIONS NO ROLE FOR PRICING IN PROMOTING A MORE EFFICIENT USE OF RESOURCES AND REDUCING THE COMPANY’S FUTURE CAPACITY AND ENERGY NEEDS?

A. No. The desire for demand response goals to inform system planning is understandable. But the Company can certainly pursue pricing initiatives even in the absence of such goals.

Q. PLEASE EXPLAIN.

A. The Company’s existing tariffs already include seasonally differentiated base rates for our core customer classes, mandatory time-of-use Electric Commodity Adjustments (“ECA”) for customers served at primary and transmission voltage, optional time-of-use (“TOU”) ECAs for customers served at secondary voltage, optional TOU base rates for our large C&I classes, and an optional three-part rate structure for residential customers.
We have never projected the impacts of these rate structures on customer use and explicitly translated them into DSM goals. Nonetheless, I suspect that these rate structures have affected customer use. In fact, our preliminary analysis of residential tiered rates suggests that these rates did reduce customer use during the summer.

Even if any such impacts were not anticipated and memorialized as DSM goals, they were ultimately reflected in the historical usage data used as basis for the Company’s demand forecasts -- thereby indirectly accomplishing the goal of reducing our forecasted capacity and/or energy needs. In other words, the offering of new pricing options need not be wedded to or restricted by demand response goals.

Q. DOES THIS RECOMMENDATION IMPLY THAT THE DEMAND RESPONSE STUDY THE COMPANY IS SPONSORING IN THIS PROCEEDING HAS NO PRACTICAL VALUE?

A. No. This study has served the very useful purpose of screening various pricing options based on cost-effectiveness. For example, the study confirms that critical peak pricing tariffs are likely to offer more value than traditional TOU tariffs. The Company can use this information, the result of its Boulder pricing pilot, the estimated impacts of tiered rates, and information from other utilities to inform its future pricing strategies. In this respect the demand response study is very useful.
Q. PLEASE SUMMARIZE THE COMPANY’S PROPOSAL FOR A FINANCIAL INCENTIVE APPLIED TO ELECTRIC ENERGY-EFFICIENCY PROGRAMS?

A. In this proceeding the Company is proposing to retain the basic incentive structure for all non-DVO energy-efficiency projects. Our proposed changes can be fairly characterized as a “recalibration” to better ensure that the incentive mechanism as a whole meets the statutory goals governing the provision utility DSM services in Colorado. The Company is suggesting a modified incentive cap, applied only to the Performance Incentive, equal to $50 million. This cap would impose a reasonable limit on the Company’s gross financial incentive, while allowing sufficient headroom to reward increasingly good performance.

The Company is also proposing to eliminate the Disincentive Offset component of our financial incentive to the extent the Commission approves a MYP that captures on a current basis the reductions in billing determinants attributable to a given vintage of energy-efficiency projects.

In this proceeding the Company is proposing a new project (the DVO) project that has some unique features. Consequently, the Company is proposing different cost-recovery and incentive mechanisms for this project.

Finally, in this proceeding the Company is proposing demand-response goals that do not include demand and energy savings from new
pricing options. I believe that the Commission should carefully consider any goals that include impacts from new pricing options. The pricing component of a demand-response portfolio entails unique challenges in terms of setting goals. These challenges include the need to consider other factors when developing utility tariffs other than DSM goals, the lack of direct control over customer responses to prices and the concomitant demand and energy reductions, and the greater uncertainty regarding the cost-effectiveness of new pricing options.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.
Attachment A

Statement of Qualifications

Scott B. Brockett

I graduated from Otterbein College in 1980 with a Bachelor of Arts degree in English and Economics. I graduated from Miami University (Ohio) in 1981 with a Masters of Arts degree in Economics.

From August 1982 through February 1999 I was employed by the Minnesota Department of Public Service ("Department"), a state agency charged with developing energy policy and representing all customers in utility matters before the Minnesota Public Utilities Commission.

From August 1982 through My 1984 I was an analyst in the Computational Services Unit, where conducted economic analyses and reviewed telecommunications depreciation filings. From June 1984 through January 1991 I worked in the Energy Unit. My major areas of responsibility were buyback rates for Qualifying Facilities, rate design, embedded cost of service and marginal cost of service.

From January 1991 to August 1994 I held two, similar supervisory positions. My primary responsibility was to oversee the Department Staff's advocacy in electric utility matters including general rate proceedings, integrated resource plans, demand-side management programs, and a wide variety of other regulatory issues.

In August 1994 I was promoted to Manager of Energy Planning and Advocacy. In this capacity the responsibilities I assumed as a supervisor were
expanded to include natural gas advocacy, the development of state energy policy, and testifying on energy matters before the Minnesota Legislature. In December 1998 I was appointed Acting Assistant Commissioner of Energy. I held this position until February 1999.

From February 1999 to July 2004 I was employed by Consumers Energy ("Consumers"), an investor-owned utility providing natural-gas and electric service in Michigan, as Supervisor of Pricing and Revenue Forecasting. My primary responsibilities were developing prices for Consumers' electric and natural gas services, conducting economic analyses of various service options, evaluating the impact of Michigan's electric open-access program, estimating customer bills, and forecasting natural gas and electric revenue. I also managed Consumers' voluntary Green Power Pilot Program.

During my tenure with the Department I testified on demand-side management, rate design, embedded cost of service, marginal cost of service, and the environmental costs of electric generation. During my tenure with Consumers I testified on gas pricing issues and electric stranded costs.

I joined Xcel Energy as Manager, Gas Pricing and Planning, in July 2004. I assumed my current position in 2008. During my tenure with Xcel Energy I have testified on pricing and/or cost-recovery issues in six general rate cases (Docket Nos. 05S-264G, 06S-656G, 08S-146G, 09AL-299E, 10AL-963G and 12AL-1268G), and on policy and cost-recovery issues in other proceedings involving electric and gas riders, electric interruptible rates, and electric Demand Side Management programs.