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 DOCKET NO. 13A-0686EG** 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.

VERIFIED APPLICATION

In accordance with Commission Decision No. C11-0442, dated April 26, 2011 and Decision No. C12-0442, dated April 30, 2012, Public Service Company of Colorado ("Applicant" or "Public Service"), by and through its undersigned counsel, hereby respectfully requests that the Commission issue an order approving certain proposals

embodied in this Demand Side Management ("DSM") Strategic Issues application and provide guidance on certain other issues. We also use this Strategic Issues filing to offer our comments on issues upon which the Commission has asked us to provide comment. In support, Public Service states as follows:

I. BACKGROUND

- 1. Demand-Side Management ("DSM") is the modification of consumer demand for energy through various methods such as financial incentives and education. Usually, the goal of demand side management is to encourage the consumer to use less energy in total but especially during peak hours, or to move the time of energy use to off-peak times such as nights and weekends. Peak demand management does not necessarily decrease total energy consumption, but could be expected to reduce the need for investments in distribution and transmission networks and/or generation assets. DSM includes:
 - A. Energy Efficiency: Using less energy to perform the same tasks.
 - B. Demand Response ("DR"): Any reactive or preventative method to reduce, flatten or shift peak demand. Demand Response includes all intentional modifications to consumption patterns of electricity of end use customers that are intended to alter the timing or level of instantaneous demand. Demand Response can be dispatchable or non-dispatchable as described below.
 - i. Dispatchable Control of resources during specific critical intervals
 - ii. Non-dispatchable Control of resources during recurring intervals, often referred to as pricing strategies.
- 2. A DSM Plan sets forth the goals and budgets for the individual energy efficiency and demand response programs and products that will be offered during a specific time period. The DSM plan presents estimated measurements of the cost-effectiveness of each product proposed to be offered, as well as the means by which

the savings attributable to these programs will be evaluated, measured and verified. Public Service submits combined gas and electric DSM Plans on a biennial basis unless requested otherwise for special circumstances.

- 4. House Bill 07-1037 encouraged investor-owned utilities to offer greater levels of demand-side management. In addition to expanding electric energy efficiency and demand response goals, the law also allowed gas DSM programs for the first time other than the Public Service Low-Income Energy Savings Partners Program.
- 5. In response to the 2007 legislation, in October of 2007 the Company filed its Application for Authorization to Implement an Enhanced Electric Demand Side Management (DSM) Program and to Revise its Demand Side Management Cost Adjustment Mechanism to Include Current Cost Recovery and Incentives ("Enhanced DSM Application"), Docket No. 07A-420E. As relevant to this Application, as part of Decision No. C08-0560 issued in that docket, the Commission approved the Company's request to file combined natural gas and electric DSM plans every two years and waived the gas DSM rule requiring it to file its Gas DSM plans every three years.
- 6. Since the Commission first approved the Company's Enhanced DSM Application in 2008, the Company has, with one exception, filed combined gas and electric biennial DSM plans consistent with Decision No. C08-0560. In 2010, in Docket No. 10A-554EG, the Commission revisited a number of the strategic issues first decided in Docket No. 07A-420E, including the Company's energy savings goals and incentives, expanding further the Company's electric energy savings goals in particular. This application is the second application in which the Company asks the Commission to reexamine a number of the larger strategic issues associated with its demand side management activities, including the appropriate energy savings and demand reduction

goals and incentives.

- 7. There is a need for these periodic Strategic Issues proceedings because matters can change so rapidly in DSM that there is a need to regularly revisit key assumptions and seek guidance and approval from the Commission as to how to shape our biennial plans. Similar to Docket No. 10A-554EG, this filing is designed to seek Commission re-examination and approval of the overall objectives and structure of our DSM initiatives to guide us in the specific design of future biennial DSM plans.
- 8. This DSM Strategic Issues filing is timely because we are confronting many issues and challenges with respect to our energy efficiency and demand response portfolio. The environment in Colorado and nationally for these products, especially energy efficiency, has changed since the Commission last examined the Company's goals and incentives in 2010.
- 9. Indeed, the KEMA Potential Study update that was recently completed for Public Service confirms the erosion of savings from traditional equipment-based energy efficiency programs and shows a general decline in energy savings potential from such programs between 2015 and 2020.
- 10. For example, increases to energy efficiency standards and building codes are significantly increasing our customers' energy savings, but not as a result of the Company's DSM initiatives. Importantly, however, the increasing standards greatly reduce the future energy savings potential for the Company's DSM. There has also been a flattening of electricity sales due to the sagging economy and the Company has experienced declines in its avoided energy and capacity costs. All of these factors reduce the impact that utility-sponsored DSM programs can have on energy usage and demand and make it more difficult for the Company to meet aggressive DSM goals,

such as those that were established by the Commission in Docket No. 10A-554EG. In addition, upward rate pressure continues to be a concern as the cost of pursuing aggressive energy savings goals increases.

II. ISSUES ADDRESSED AND AUTHORIZATIONS SOUGHT

- 11. Consistent with our practice of using these Strategic Issues filings to seek Commission guidance and confirmation of certain matters, in this Strategic Issues filing we seek:
 - A. Approval of the Company's proposed modifications to our electric Energy Efficiency and associated DR goals for 2015 through 2020.
 - B. Approval of certain demand reduction levels from load management and demand response programs for each of the years 2015 through 2020;
 - C. Approval of certain non-traditional Energy Efficiency programs including Behavioral Change programs, Distribution Voltage Optimization ("DVO") and a Light Emitting Diode ("LED") Street Light Replacement program;
 - D. Approval of a proposed plan for the recovery of capital and operations and maintenance ("O&M") expenses associated with the DVO product; portfolio beginning in 2015
 - E. Approval of a new incentive mechanism for specific DVO;
 - F. Approval of a modified DSM incentive mechanism as it relates to the Company's Energy Efficiency portfolio.
 - G. Approval to continue to be permitted to exercise our discretion regarding whether to solicit bids for aspects of our energy efficiency and demand reduction portfolios within the context of our approved DSM plans and not as part of our resource plans;
 - H. Approval of certain methods for the accounting of and measuring of savings, persistence for Behavioral programs, and how such savings and net benefits should be used in an incentive mechanism; and,

- I. Guidance on the Company's proposal to budget approximately \$12 million dollars per year on gas DSM starting with the 2014 DSM Plan to be filed July 1, 2013, and spend similar levels in the 2015-16 DSM Plan as well.
- 12. This filing also complies with two other directives contained in prior Commission decisions:
 - A. A requirement that we file an application to address the market potential for demand reductions from load management, demand response, and interruptible services. At page 28 of Decision No. C11-0442, the Commission directed the Company to file an application so it could establish appropriate demand reduction goals for the Company through 2020. In Decision No. C12-0442 the Commission granted our motion to defer the filing of the application to the filing of this DSM Strategic Issues application. Thus this application is, in part, in compliance with this directive. We seek Commission approval of demand goals for demand response programs for the period from 2015 through 2020;
 - B. A requirement that we address the following as to electric vehicles pursuant to page 13 of the settlement agreement approved in Docket No. 11A-631EG:
 - i. electric vehicles as a possible future source of demand;
 - ii. possible demand savings or reduction options related to electric vehicles; and,
 - iii. how the Electric Vehicle Charging Station Pilot is expected to contribute to the Company's understanding of demand impacts related to electric vehicle charging.
- 13. In addition, we address a few matters where we do not seek Commission guidance or approval but which we nonetheless feel are important to an overall robust discussion of our DSM plans. These matters are:
 - A. Our decision not to propose any specific demand or energy reduction goals attributable to new pricing options at this time.
 - B. Our decision not to include Codes & Standards program in our projected goals at this time.
 - 14 For the reasons explain earlier, the energy savings goals associated with

traditional energy efficiency are significantly reduced from what was approved in 10A-554EG. To offset such reductions the Company is proposing to add DVO, LED street lighting and behavioral products to its energy efficiency activities, which, in combination, allow us to propose total electric energy savings goals that are closer to the level of energy savings goals that are currently in effect. The following tables are taken directly from Ms. Debra L. Sundin's direct testimony, which is being filed contemporaneously with this application. The tables identify the electric energy savings goals the Company is requesting in this proceeding broken out by specific product category. In addition, the tables separately identified the demand savings associated with its energy efficiency portfolio and DVO and demand reduction from controllable load.

Table DS-2: Energy Efficiency – Energy Savings Goals

Energy (GWh) Goal	2015	2016	2017	2018	2019	2020	Total
Traditional Energy Efficiency	309	280	282	276	250	242	1,639
Unidentified Emerging							
Technologies	-	-	-	-	25	34	59
Behavioral	28	28	28	-	-	-	85
LED Street Lighting	12	12	12	12	12	-	60
TOTAL	349	321	322	288	288	276	1,842

Table DS-3: Energy Efficiency – Demand Savings Goals

Demand (MW) Goal	2015	2016	2017	2018	2019	2020	Total	
Traditional Energy Efficiency	66	62	60	58	54	52	361	
Unidentified Emerging Technologies	-	-	ı	ı	4	6	10	
Behavioral	7	7	7	-	•	-	21	
LED Street Lighting	-	-	ı	ı	ı	ı	0	
TOTAL	73	69	67	58	58	58	382	

Table DS-4: DVO - Collective Energy & Demand Goals

2015-2020	Energy	Demand
Goal	(GWh)	(MW)
DVO	506	56

Table DS-5: Demand Response – Demand Savings Goals

MW	2015	2016	2017	2018	2019	2020
Total System Controllable						
Load per year (DR)	528	537	555	575	598	623

- 15. The electric energy savings goals the Company is proposing for 2015 and 2016 are near the same level as were approved in Docket No. 10A-554EG but decline starting in 2017 due to lower DSM potential projections. The updated DSM Potential Study, Mr. Petersen discusses shows that the opportunity for energy savings is declining due to several factors such as increased energy savings standards for residential and commercial lighting. The Company is proposing new, non-traditional products such as DVO and LED Street Lighting to offset the reductions in energy savings targets from traditional energy efficiency through 2020.
- 16. A copy of our proposed revised DSMCA tariff to implement our recommendations is attached as Exhibit 1. The attached form of tariff reflects the changes to the electric incentive mechanisms applicable to the Company's energy efficiency and new DVO program as discussed above. The Company seeks an order from the Commission in this proceeding authorizing it to file a compliance DSMCA tariff reflecting any changes to the incentive mechanism that are approved as a result of this proceeding. A copy of the form of tariff for which the Company seeks approval is also attached as Exhibit No. SBB-5 to the Direct Testimony and Exhibits of Scott B. Brockett.

III. DIRECT TESTIMONY AND EXHIBITS

- 17. With this Application, Public Service is submitting the direct testimony and exhibits of four witnesses. As previously mentioned, we are filing the testimony Debra L. Sundin, Director, DSM and Renewable Strategy and Planning. In her testimony Ms. Sundin: (1) presents and requests approval of the Company's proposed DSM (Energy Efficiency and Demand Response) Goals for 2015 through 2020. She explains the history, background and context in which the Company developed these goals; (2) seeks Commission guidance and approval on some non-traditional portions of the energy efficiency goals, which are DVO, LED Street Lighting, and Behavioral products; (3) provides an overview of Demand Response and presents and explains the proposed goals for DR; (4) discusses for informational purposes the potential for demand reduction from electric vehicles; (5) explains, in response to comments from the Commission in the Company's most recent electric resource plan filing, the Company's request that it continue to be permitted to exercise its discretion regarding whether to solicit bids for aspects of its energy efficiency and demand reduction portfolios within the context of our approved DSM plans and not as part of our resource plans; and, (6) discusses and requests guidance on future spending levels and other policy issues concerning the Company's gas DSM portfolio. In particular, she seeks Commission guidance on our proposal to budget approximately \$12 million dollars per year on gas DSM starting with the 2014 DSM Plan to be filed July 1, 2013, and spend similar levels in the 2015-16 DSM Plan as well.
- 19. Mr. Jeremy Petersen, Principal Technical Consultant, DSM and Renewable Strategy and Planning, addresses the future potential of Energy Efficiency and DR programs identified through third-party potential studies and the description and

application of associated cost effectiveness metrics to this future potential to determine proposed energy efficiency and demand response goals.

- 20. Ms. Kelly Bloch, Manager Distribution System Planning and Strategy South, describes a new energy efficiency product called DVO. Ms. Bloch describes how the technology works, how the technology helps customers save energy and how the Company proposes to measure and verify the energy savings.
- 21. Finally, Mr. Scott B. Brockett, Director, Regulatory Administration and Compliance, addresses proposed revisions to the electric DSM incentive mechanism applicable to the Company's energy efficiency programs and sponsors revisions to the electric DSMCA tariff that follow from the relief requested by this application. His testimony also summarizes how the modifications to the existing mechanism align with financial impacts due to these programs and rate case treatment. Mr. Brockett also addresses cost recovery and a new incentive mechanism the Company is proposing specifically for DVO within energy efficiency. Finally, Mr. Brockett discusses the current environment for pricing programs.

IV. <u>INFORMATION REQUIRED BY RULE 3002(b) AND (c)</u>

Also in support of this Application, Public Service states as follows:

22. Name and Address of Applicant (Rule 3002(b)(I)):

Public Service Company of Colorado 1800 Larimer Street, Suite 1100 Denver, CO 80202

23. Name under which Applicant provides service in (Rule 3002(b)(II)):

The Company conducts its operations in Colorado under the trade name of Xcel Energy.

24. Representatives to whom inquiries concerning the Application should be made (Rule 3002(b)(III)): Please send copies of all inquiries, notices, pleadings, correspondence, and other documents regarding this filing to:

Robin L. Kittel
Director, Regulatory Administration and Compliance
Xcel Energy Services Inc.
1800 Larimer Street, Suite 1400
Denver, CO 80202
Phone: (303) 294-2242

Email: robin.kittel@xcelenergy.com

Ann E. Hopfenbeck, #15460 Ann Hopfenbeck LLC c/o Xcel Energy Services Inc. 1800 Larimer Street, 11th Floor Denver, Colorado 80202-5533 Telephone: 303-294-2059

Cell: 303-847-5815 Fax: 303-294-2988

Email: ann.e.hopfenbeck@xcelenergy.com

ahopfenbeck@gmail.com

David W. McGann, #34521 Assistant General Counsel Xcel Energy Services Inc. 1800 Larimer Street, Suite 1100 Denver, Colorado 80202 Telephone: (303) 294-2035

Fax: (303) 294-2988

Email: david.w.mcgann@xcelenergy.com

- 25. Agreement to comply with Rule 3002(b)(IV)-(VI) (Rule 3002(b)(VII)): Public Service has read and agrees to abide by the provisions of subparagraphs (b)(IV) through (VI) of Commission Rule 3002(b).
- 26. <u>Description of existing operations and general Colorado service area</u>

 (Rule 3002(b)(VIII)): Public Service provides electric and gas public utility service in numerous areas throughout the State of Colorado. The Company also provides steam

utility service within the downtown area of Denver. A full listing of Public Service's existing operations and service area is set forth in Public Service's tariffs on file with the Commission.

- 27. <u>Financial information (Rule 3002(b)(IX))</u>: A copy of Public Service's most recent audited balance sheet, income statement, and statement of retained earnings was last filed on April 11, 2013 in Docket No. 06M-525EG.
- 28. <u>Location of hearing (Rule 3002(b)(X))</u>: If the Commission sets this application for hearing, Public Service requests that the hearing be held at the Commission's offices in Denver, Colorado.
- 29. Acknowledgement required by Rule 3002(XI)(D): Public Service acknowledges that the Company has read and agrees to abide by the provisions of Rule 3002(b)(XI) (A) through (C).
- 30. <u>Statement under oath (Rule 3002(b)(XII))</u>: Debra L. Sundin states under penalty of perjury that the contents of the application are true, accurate, and correct to the best of her knowledge. Her attestation is attached to this application.
- 31. <u>Information required by Rule 3002(c)</u>: Pursuant to Rule 3002(c) of the Commission's Electric Rules, Public Service hereby incorporates by reference the following information, which is on file with the Commission in Docket No. 06M-525EG:
 - a. A copy of Public Service's Amended Articles of Incorporation, which was last filed on October 3, 2006;
 - b. The name business address and title of each of Public Service's officers and directors, which was last filed on September 23, 2011;
 - c. The names and addresses of affiliated companies that conduct business with Public Service, which was last filed on March 23, 2011.
 - d. The name and address of Public Service's agent for service of process,

which was last filed on October 3, 2006.

e. A copy of Public Service's most recent audited balance sheet, income statement, statement of retained earnings, and statements of cash flows was last filed on April 11, 2013.

V. NOTICE OF APPLICATION

32. As noted above, the Company's Application is accompanied by pre-filed direct testimony and exhibits. Contemporaneously with the filing of this Application the Company is filing an Application for Alternative Form of Notice to obtain permission to publish notice of the Application and the proposed tariffs in a newspaper of general circulation such as The Denver Post and to provide electronic service of the Application and supporting testimony and exhibits to all persons who intervened in Docket No. 10A-554EG and 11A-631EG, the Company's most recent proceedings involving DSM. A copy of the notice is attached as Exhibit 2.

VI. <u>CONCLUSION</u>

WHEREFORE, based on the foregoing, Public Service Company of Colorado respectfully requests that the Public Utilities Commission of the State of Colorado issue an order approving:

- (1) our proposed electric Energy Efficiency and associated demand reduction goals from energy efficiency products for the period 2015 through 2020;
- (2) demand reduction levels from load management and demand response programs for each of the years 2015 through 2020;
- (3) certain non-traditional Energy Efficiency programs including Behavioral programs, Distribution Voltage Optimization ("DVO") and a light emitting diode ("LED") Street Light Replacement program;

(4) a proposed plan for the recovery of capital and operations and maintenance

("O&M") expenses associated with the DVO product;

(5) a new incentive mechanism specifically for DVO;

(6) changes to the DSM financial incentive mechanism to include DVO;

(7) changes to the DSMCA as it relates to its Energy Efficiency portfolio;

(8) our ability to continue to exercise our discretion regarding whether to solicit

bids for aspects of our energy efficiency and demand reduction portfolios within the

context of our approved DSM plans and not as part of our resource plans;

(9) certain methods for the accounting of and measuring of savings, persistence

for Behavioral programs, and how such savings and net benefits should be used in an

incentive mechanism; and,

(10) specific guidance on our proposal to budget approximately \$12 million per

year on gas DSM starting with the 2014 DSM Plan to be filed July 1, 2013, and spend

similar levels in the 2015-16 DSM Plan as well.

DATED this 17th day of June, 2013.

Respectfully submitted,

By: <u>/s/David W</u>. McGann

David W. McGann, #34521
Assistant General Counsel
Xcel Energy Services Inc.

1800 Larimer Street, Suite 1100

Denver, Colorado 80202 Telephone: (303) 294-2035

Fax: (303) 294-2988

Email: david.w.mcgann@xcelenergy.com

Ann E. Hopfenbeck, #15460 Ann Hopfenbeck LLC c/o Xcel Energy Services Inc. 1800 Larimer Street, Suite 1100 Denver, CO 80202-5533

Phone: 303.294.2059 Facsimile: 303.294.2988

ATTORNEYS FOR PUBLIC SERVICE COMPANY OF COLORADO