Notification Date: September 25, 2015

➤ Summary of 60-Day Notice: Computer Efficiency

Public Service Company of Colorado ("the Company") posts this 60-Day Notice to add a new measure, Upstream High Efficiency (HE) Power Supplies for Servers, to the Computer Efficiency product in the 2015/16 DSM Plan.

Since 2012, the Computer Efficiency product has offered incentives to computer manufacturers that sell and ship personal computers (PCs) with high efficiency power supplies to customers in the Company's service territory. The Company is proposing to expand this offering to include server manufacturers utilizing the 80 Plus certified tiers of power supplies (www.plugloadsolutions.com). The 80 Plus Sliver Qualified power supply will serve as the program baseline. Manufacturers will be incented \$5-\$20 for installing Gold, Platinum, and Titanium level power supplies in servers shipped to Xcel Energy commercial customers.

Xcel Energy and Ecova (the third-party implementer for the product's current upstream incentives) would work together to incent server manufacturers for installing HE Power Supplies shipped to qualified customers in the Company's service territory (as confirmed by the manufacturer). Ecova will provide manufacturer sales reports and invoices to Xcel Energy on a monthly basis.

This proposed measure addition results in the following forecasted impacts for Computer Efficiency product performance in 2015 and 2016.

Table 1: Summary of Forecasted Impacts

Computer Efficiency	HE Power Supplies for Servers Measure		Computer Efficiency Product – 2015		Computer Efficiency Product – 2016	
	2015	2016	As Filed	Revised per 60-Day	As Filed	Revised per 60-Day
Electric Savings (kWh)	1,119,288	2,238,576	9,147,862	10,267,150	8,691,702	10,930,278
Electric Demand Reduction (kW)	136	272	1,228	1,364	1,166	1,438
Budget* (\$)	\$88,000	\$176,000	\$916,554	\$1,004,554	\$886,254	\$1,062,254
MTRC Test Ratio	1.06	1.08	1.50	1.44	1.57	1.47

^{*}While the anticipated expenditure impacts are forecasted, the Company acknowledges that this Notice does not change the filed budget.

Included with this Notice, is the following document:

- Redlined Computer Efficiency Write-Up;
- Redlined Computer Efficiency Deemed Savings Technical Assumptions; and
- Electric Forecast Summary for HE Power Supplies Measures.

These documents can be found on our website at the following link: http://www.xcelenergy.com/Company/Rates_&_Regulations/Filings/Colorado_Demand-Side_Management

> Computer Efficiency Product

A. Description

The Computer Efficiency product offers upstream measures and downstream prescriptive measures—both are available to electric business customers in Xcel Energy's Colorado service territory.

Upstream measures offer incentives to manufacturers that design, install, and deliver desktop personal computers (PC) and <u>server equipment</u> with high efficient power supplies.

1) High Efficient Power Supply

Desktop personal computer (PC)s

Servers

Manufacturers that sign a participation agreement and turn in a claim form to the Company's third-party implementer can receive incentives to cover part of the incremental cost for installing high efficient power supplies. Manufactures typically use this incentive to promote <u>and</u> increase the number of products offered with high-efficiency power supplies. Units are shipped to qualified zip codes (as confirmed by the manufacturer).

The third-party administrator delivers the incentives to manufacturers and provides <u>monthly</u> sales reports and invoices to Xcel Energy for reimbursement.

The downstream measure offer incentives to business customers who implement a Virtual Desktop Infrastructure (VDI) strategy referred to in this document as Desktop PC Virtualization or install PC Power Management Software.

2) Desktop PC Virtualization

This downstream measure provides rebates to business customers who implement a Virtual Desktop Infrastructure (VDI) strategy. This strategy involves installing a VDI device (also known as "thin clients", "zero clients" or "ultra-thin clients") instead of the traditional desktop PC. The VDI device has a lower operating wattage and uses less energy than traditional desktop computers. The VDI device communicates with a server to enable access to software applications and for the user to store data on the server rather than on their local hard drive.

This measure is administered by Public Service and follows the methodology of Public Service's other prescriptive measures. Customers can apply for a prescriptive rebate of \$60 per VDI installed. Rebate amounts are based on 52% of the incremental cost to the customer for the change-over to the VDI system.

3) PC Power Management

This downstream measure provides rebates to business customers who install power management software that remotely controls a computer's power management strategy from data centers or other central locations. The software, that manages the computer's power

management settings, is locked and the computer user cannot override the power management settings.

The prescriptive rebate is only for applications on desktop PC's and excludes installations on laptops, tablets and other hardware. In addition it is limited to computers used during a typical single shift work week. The computers being controlled by the power management software must be located in PSCo's electric service territory to qualify for the rebate.

B. Targets, Participants & Budgets

Targets and Participants

The Company has developed separate energy savings and participation targets for each of the upstream and downstream components of the product:

High Efficient Power Supply: Demand kW and energy kWh impact goals were determined from equipment wattages levels based on information from the third-party implementer and ENERGY STAR®. Participant levels for the upstream manufacturer incentives were determined by product experience in the Company's Minnesota service territory and performance in the Colorado since the program's inception.

Desktop PC Virtualization: The number of participants per year was estimated based on market potential determined in conjunction with the third-party implementer.

PC Power Management: The number of participants per year was estimated based on market potential determined in conjunction with the third-party implementer.

Budgets

Rebates, program administration, labor, and promotions drive most of the budget. The third-party implementer charges an administrative fee per each unit shipped (upstream measures only). The estimated promotional budget includes contribution to a general energy efficiency advertising campaign. The estimated M&V budget anticipates costs for both third-party customer on-site visits as well as third-party customer follow up communications detailed in the M&V section of this Plan.

C. Application Process

Manufacturers learn of the upstream incentives and the benefits through marketing undertaken by the third-party implementer. Manufacturers must submit a rebate claim form to the third-party implementer within twelve months of unit delivery to receive a rebate.

End-use customers learn about the prescriptive rebates for Desktop Virtualization and PC Power Management through marketing by Public Service. Customers apply for rebates through an application process managed by the Company. Applications for the products are available on Xcel Energy's website, here:

 $http://www.xcelenergy.com/Save_Money_\&_Energy/Rebates/Computer_Efficiency_-CO.$

The application process for the prescriptive products is similar to the Company's other prescriptive products. Customers may apply for rebates by completing the application and providing a detailed invoice and specification sheet for the newly installed equipment. Customers submit a rebate application within twelve months of equipment purchase and installation to their Account Manager or to the Business Solutions Center (BSC). Rebate checks will be mailed to the customer as indicated on the application within six to eight weeks.

D. Marketing Objectives & Strategies

The primary marketing efforts for the manufacturer incentives will revolve around the third-party implementer connecting with computer <u>and server</u> manufacturers to continue increasing program participation with additional manufactures. Public Service will educate the benefits of purchasing high efficient computing products to our business customers through newsletters, Business Solution Center representatives, customer events and our websites.

Desktop Virtualization and PC Power Management product challenges include customer awareness, incremental customer costs, and educating trade partner mind-set around the technology and rebate structure. Public Service will promote the technology to the trade through: newsletters, Business Solution Center representatives trade relations managers, and our trade partner website.

E. Product-Specific Policies

For the end-use customer rebates, all equipment rebated through the measure must be new and meet all measure rules and requirements.

F. Stakeholder Involvement

Public Service consulted with equipment vendors for guidance when designing the Computer Efficiency Product for Colorado. These vendors provided insight into the types of products to rebate and the incremental and total equipment costs to be expected. Public Service will also rely on the trade to help promote the product to customers.

G. Rebates & Incentives

Rebates and incentives were developed for each product component:

High Efficient Power Supply: Incentives are paid directly to PC and server manufacturers for installing high-efficiency power supplies. The rebate levels offset the incremental cost to the manufacturers. This results in a lower purchase price for the customer and balances the cost-effectiveness of the product.

The incentive structure for PCs is listed below:

- \$5 incentive for ENERGY STAR 5.0 / 80 Plus Bronze desktop power supplies
- \$10 incentive for ENERGY STAR 5.0 / 80 Plus Silver desktop power supplies
- \$15 incentive for ENERGY STAR 5.0 / 80 Plus Gold desktop power supplies

• \$20 incentive for ENERGY STAR 5.0 / 80 Plus Platinum desktop power supplies

The incentive structure for servers is listed below:

- \$5 incentive for ENERGY STAR 5.0 / 80 Plus Gold server power supplies
- \$10 incentive for ENERGY STAR 5.0 / 80 Plus Platinum server power supplies
- \$20 incentive for ENERGY STAR 5.0 / 80 Plus Titanium server power supplies

Desktop PC Virtualization: Business customers are paid \$60 per desktop PC removed from their system and replaced with a "thin-client" or "zero-client" device. The rebate is 52% of the average incremental cost, providing a payback to the customer of less than 2 years.

PC Power Management: Business customers are paid \$5 per PC controlled remotely by power management software, and the rebate is 34% of the average incremental cost.