➢ Cooling Efficiency – Summary of 60-Day Notice

Public Service Company of Colorado ("Public Service" or "The Company") is providing 60-Day Notice for a change to the Cooling Efficiency product offered to commercial customers in calendar year 2013. The Company will change the Direct-Evaporative Pre-cooling for Air-Cooled Condensers (DEPACC) measure.

The Company will correct the evaporative effectiveness for the DEPACC measure to be 75% in the forecast calculations. The result is a lower average kWh/ton and generator peak kW/ton to calculate the energy savings. This change is being proposed to correct an error in the original posted calculations where the effectiveness of the evaporative media was omitted, and will therefore be applied to all projects completed during calendar year 2013. The Company also corrected the Deemed Savings Sheet to state 75% evaporative effectiveness in lieu of 85% value originally cited. The Company will also begin offering the DEPACC prescriptive rebate for air-cooled chillers, whereas previously only roof-top units had been eligible. These changes will not affect the budget, expenditures, or goals that were filed and approved within the 2012/13 Biennial DSM Plan (Docket No. 11A-631EG). However, the Company anticipates lower energy savings achievement for DEPACC measure in 2013 at a level of 1,893 net generator kW of demand savings (vs. 3,809 net generator kW that was filed) and 1,655,139kWh of electric savings (vs. 3,108,272 kWh that was filed).

Following this summary is a red-lined copy of the Cooling Efficiency Product description from the 2012/13 Biennial DSM Plan, reflecting the necessary changes. Additionally, the Company has included an updated deemed savings sheet for the DEPACC measure which can be found on the Company's Colorado DSM Website at the following link:

http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM

➢ Cooling Efficiency Product

A. Description

The Cooling Efficiency Product encourages Public Service business customers to choose the most efficient air conditioning equipment that best meets their needs. The product offers rebates in two tiers, new construction and retrofit, while focusing on the most common air conditioning equipment available, and encouraging customers to make the most appropriate equipment choice.

This product has broad applicability within the Business segment, as most businesses in Public Service's Colorado service area air condition their facilities, and cooling is typically the second or third largest user of electricity in a facility.

While every attempt is made to create prescriptive rebates for high efficiency options, some energy saving solutions require individual evaluations to determine cost-effectiveness. These projects are evaluated under the Custom Efficiency process and require preapproval following all of the guidelines of the Custom Efficiency Product.

Product participants receive rebates to help buy down the initial capital cost and shorten the payback period. The new equipment also provides better reliability and lower maintenance costs, as well as lower utility bills from energy savings. Public Service reviewed and adopted best practices for DSM product development and product structure from across the country. The Company also used the guidelines of the IECC International Energy Conservation Code 2009 for equipment definitions, standard formulas, and minimum recommended efficiencies. These sources along with Public Service's historical experience allowed the Company to develop influential prescriptive rebates that encourage the most efficient choice of equipment in the majority of equipment categories. For instance a 10 ton rooftop air-conditioner at 11.0 EER and a 10 ton rooftop air conditioner at 11.8 EER both qualify for rebates. The 11.0 EER unit is eligible for $650 while the 11.8 EER receives $1050.

One of the program's prescriptive measures, Direct-Evaporative Pre-cooling for Air-Cooled Condensers (DEPACC), is administered and delivered by a third party. This process is transparent to the customer.

The net-to-gross (NTG) was increased for 2012/2013 from .75 to .80. This was based on the recommendations from a 2010 Process and Impact Evaluation that expected an upward effect on the NTG after the removal of VAV boxes and Cooling towers from the 2010 prescriptive products. Both measures experienced high free-ridership during the 2007-2009 program years.

B. Goals, Participants & Budgets

Goals and Participants

Cooling Efficiency goals are based on the achievements of past years, estimates of market penetration and a review of potential cooling technology improvements in the area of efficiency.

Participation was derived from the prior year's (2011) goal which saw an increase in all rebate levels and the introduction of two new prescriptive rebates. Additional factors included feedback from trade partners, 2010 and 2011 product trends, average project size, and historical participation.

Budgets

Once goals were established, the budget process is generally the same for Cooling Efficiency as with the other DSM products. Historical cost and participation information is tracked and analyzed to project budgets in advance. Furthermore, external resources and discussion with local stakeholders are used to ascertain expenditures and market equipment cost. Comparative spending analysis of past year activity is generally conducted but is not the determining annual factor, since other external variables like promotions, materials, and staffing exist.

For the Cooling Efficiency Product, rebates, labor, promotions and consulting drive most of the budget. The following was used to identify these specific drivers.

- Rebates: Developed using the average project rebate cost from the detailed technical assumptions and multiplying by anticipated participation.
- Labor Charges: determined by estimating the number of full-time employees needed to manage the product and execute the marketing strategy and rebate process.
- Promotions: The estimated promotional budget anticipates several customer and trade communications during the year and a contribution to the general conservation advertising campaign.
- Consulting: The Company also receives consulting and professional services from the University of Wisconsin's Heating, Ventilating, Air Conditioning and Refrigeration Consortium and analytical services from outside consultants for Custom cooling projects

C. Application Process

Applications for the product are available both on Xcel Energy's website and from trade allies. The application process for the prescriptive product is similar to our other prescriptive products. Customers may apply for rebates by completing the application and providing a detailed invoice for the newly installed equipment. The customers may submit for a rebate after the equipment has been purchased and installed. The equipment must be new and meet all the qualifications detailed on the application. After the customer has installed the equipment, the application and invoice must be submitted to

Public Service within twelve months of the invoice date. Once the paperwork is completed and submitted, rebate checks will be mailed to the customer as indicated on the application within six to eight weeks. Participants in the product may submit their application to their account manager or the Business Solutions Center.

Customers with projects that save cooling energy but do not have a corresponding prescriptive rebate can participate in the Custom component of the product. The Direct-Evaporative Pre-cooling for Air-Cooled Condensers (DEPACC) measure is not available as a prescriptive rebate for dedicated data center facilities. They must go through the Custom program offering due to the customized nature of this measure's use in this type of facility. Custom cooling is governed by all of the requirements of the Custom Efficiency Product including pre-approval.

The sales cycle for cooling projects is typically influenced by the size and complexity of equipment. It may take two years to study, purchase and install a new, large system, while smaller rooftop units can take only two weeks to replace. For this reason, the Cooling Efficiency Product makes every effort to remind customers to evaluate high efficiency options when they are faced with a purchasing decision.

D. Marketing Objectives, Goals, & Strategy

The Cooling Efficiency Product creates a base level of knowledge in the marketplace through newsletters and direct mail to customers and trade allies. These tactics make customers aware of the key benefits of energy efficiency and its applicability to cooling systems, and gives the trade a platform from which to educate customers on high efficiency solutions for their particular applications. The product provides literature and tools for the customers and trade to evaluate rebates and incorporate them into purchase decisions. In addition, customers are served by Public Service's Account Managers and Business Solutions Center representatives who educate them on energy efficiency, evaluating rebate potential, and the rebate application process. The trade can find similar assistance through the Trade Relations Manager. The Cooling Efficiency Product also benefits from opportunities identified for participants in the Energy Analysis and Recommissioning Products.

Marketing communications will revolve around the benefits of energy efficiency through paybacks, lifecycle costs, and environmental benefits. Newer cooling equipment is typically more efficient, more reliable and may have more effective controls than an older system providing both energy and non energy benefits to the end user. Public Service uses generally accepted information from sources such as ENERGY STAR®, the American Society of Heating, Refrigeration and Air-conditioning Engineers, the Federal Energy Management Product, and others to educate customers on no and low cost ways to save energy, such as performing regularly scheduled maintenance and simple tune up tips to ensure systems are operating optimally.

To reach its energy savings goal, Cooling Efficiency needs to continue to penetrate the centrifugal chiller market. These systems provide the largest per project savings for the

lowest transactional costs, making them the most cost-effective opportunities. The product has been successful in penetrating this market through strong relationships between Public Service account managers and customers and increasingly strong relationships with the trade. Custom cooling strategies, such as cooling controls and energy recovery ventilators, have also been identified as an area of growth. Rooftop units, condensing units, and split systems round out the portfolio with high participation and moderate savings. Future strategies will involve more online tools to help customers evaluate the benefits of high efficiency equipment. Rebate and payback calculators, as well as lifecycle costing tools, have recently been developed for vendors and customers to improve their decision making process when purchasing equipment. Online submission of rebate applications will also be a priority. The product also intends to continue to develop prescriptive rebates to add to the portfolio including energy recovery.

Specifically to the new DEPACC measure, a third-party consultant, will oversee all product management activities and execute upon the same marketing strategy/process described in Public Service's 2012/2013 DSM Plan utilizing many of the same key messages and tactics. The third-party consultant plans to work with manufacturers, trade allies, end-use equipment vendors, energy services companies and account managers to expand the reach and efficacy of the marketing plan and its implementation. The third-party consultant also plans to employ social media and other forms of innovative electronic marketing to create awareness, interest and desire to move business customers to act.

The market for the DEPACC measure consists of all non-residential markets and is likely to target certain segments, including but not limited to commercial, institutional, healthcare, industrial and education customers located in Public Service electric service territory in Colorado. The third-party administrator plans to focus on the Front Range of Colorado and I-70 and I-25 business corridors.

E. Product-Specific Policies

The Cooling Efficiency Product does not rebate back up equipment since assumed energy savings will not be realized.

F. Stakeholder Involvement

Because cooling systems can be very complex, trade support is imperative to achieving our goals. We have engaged trade allies in product design and improvement through the creation of the Cooling Council. This group meets about once per quarter to discuss new technologies, product issues, and general market topics. The Cooling Council members are representatives from all levels of the cooling equipment distribution chain. Members include manufacturer's representatives, mechanical engineering firms, and equipment contractors. Public Service has been hosting these meetings for the last two years and has found great success in improving communication and identifying new ways to evaluate cooling equipment in the current market. We look forward to continuing future meetings and improving the delivery of the cooling efficiency product.

G. Rebate Levels

Most of the components of the product provide prescriptive rebates based on the size of the unit in tons combined with an efficiency bonus to encourage customers to exceed minimum qualifying efficiencies. The rebate structure by component is listed below:

EQUIPMENT		MINIMUM TO QUALIFY	REBATE
PTACs		11.0 EER	$65/ton + $5/ton for every 0.1 EER above min
Water-Source Heat Pumps		14.0 EER	$65/ton + $5/ton for every 0.1 EER above min
Rooftop AC Units	< 65,000 BTUH (<5.4 tons)	15.0 SEER	$65/ton + $5/ton for every 0.1 SEER above min
	65,000 - 135,000 (5.5 - 11.3 tons)	11.5 EER	$65/ton + $5/ton for every 0.1 EER above min
	135,000 - 240,000 (11.4 - 19.9 tons)	11.5 EER	
	240,000 - 760,000 (20 - 63.3 tons)	10.6 EER	
	> 760,000 (> 63.3 tons)	9.9 EER	
Direct Evaporative Pre-cooling for Air-Cooled Condensers (DEPACC)	≥120,000 BTUH (≥10 tons)	see rebate rules and requirements	$100/ton of installed cooling
Condensing Units	>65,000 BTUH (>5.4 tons)	11.5 EER	$65/ton + $5/ton for every 0.1 EER above min
Split Systems	< 65,000 BTUH and < 5.4 tons	17.0 SEER	$65/ton + $5/ton for every 0.1 EER above min
Air Cooled Chillers		11.0 EER 12.9 SEER	$8/ton + $2.00/ton per FLV + $1.50/ton per IPLV for every 0.1 EER above min
Chillers - Scroll or Rotary Screw	< 150 Tons	.759 FLV kW/ton .599 IPLV kW/ton	$15/ton + $2/ton per FLV + $1.5/ton per IPLV for every 0.01 kW/ton below max
	>/=150 tons and < 300 tons	.632 FLV kW/ton .532 IPLV kW/ton	$15/ton + $2/ton per FLV + $1.5/ton per IPLV for every 0.01 kW/ton below max
Chillers - Centrifugal	All sizes	Must improve upon IECC 2009 baseline by .016 kW/ton	$15/ton + $2/ton per FLV + $1.5/ton per IPLV for every 0.01 kW/ton below max

Advanced Evaporative Cooling (Indirect or Hybrid) - (replacing or installing in lieu of DX Roof Top Unit)	All sizes	Must have a minimum of 85% media saturation	$750 per 1,600 CFM
Plate and Frame Heat Exchangers	All sizes	Only for water-cooled chiller and cooling tower systems without air side economizers installed	up to $300/ton, based on wet bulb onset temperature
VSD's on Chillers	All sizes	Determined by existing chiller performance specifications and Manufacturers VSD performance specifications	$1.50/ton per IPLV for every 0.01 kW/ton below max

Generally, Public Service has set the minimum qualifying efficiency at a point that nominally exceeds the IECC minimum efficiency requirements to encourage customers to purchase the most efficient equipment, while ensuring the manufacturers have equipment that meets the criteria of the product.

The proposed rebate levels average 50% of the incremental cost. This level balances the cost-effectiveness of the product with the incentive needed to motivate the customer to purchase high efficiency equipment, achieving a payback of less than five years in most cases. Rebates are designed to buy down the incremental cost of purchasing high efficient equipment, which is increasing with the stricter code requirements in the market.