

➤ **Summary of 60-Day Notice: Home Performance with ENERGY STAR**

Public Service Company of Colorado (PSCo) posts this 60-Day Notice to make the following changes to its Home Performance with ENERGY STAR (HPwES) Product to expand upon its current rebate offerings and update technical assumptions. These changes align savings methodologies and product offerings for HPwES with the existing individual equipment rebate products in the Residential portfolio, such as Water Heating, Insulation, and Evaporative Cooling Rebates. PSCo anticipates these changes will lead to an additional 210,486 generator kWh and 2,919 dekatherms in Home Performance net energy savings during 2013. We are also forecasting that these changes will decrease the 2013 gas spend by \$5,701 and increase the 2013 electric spend by \$41,705 over the approved budgets, which will be accommodated through budget flexibility. Therefore, we do not propose changes to the approved budgets or goals at this time.

There are three types of proposed product changes:

- those that change how measure savings are calculated,
- those that impact customer rebates, and;
- those that have no impact but provide clarification.

We propose that the changes to savings calculations apply retroactively to take effect January 1, 2013 to be consistent with the savings calculations being used for the same measures within our stand-alone programs. The savings calculations for the stand-alone programs were filed either as part of the 2012/13 DSM Plan, or provided in past 60-Day Notices, so they are already in effect and their technical merits have already been vetted. We propose that the rebate and non-impact changes take effect upon completion of the 60-Day Notice period. All changes are red-lined in the HPwES product's Deemed Savings Technical Assumption sheets.

PSCo has made the following changes to how measure savings are calculated:

1. CFL Measure – PSCo revised the CFL operating hours table (Table 3 in the Deemed Savings sheets) to base it directly on the DOE US Lighting Market Characterization Study. The change is made to correct an error that reduced operating hours twice due to the existing lamps. This change removes the assumption that there are 12 existing CFLs in the home, and instead collects data on the number of existing CFLs in the home. The revised table allows the selection of the appropriate starting point for new lamps based on the customer's captured existing lamp count. This change retains the calculation methodology, but removes the penalty of assumed existing CFLs from the savings calculation.
2. Evaporative Cooling Measure – PSCo added the mountain area climate zone to align with the Evaporative Cooling Rebates Product. This change includes new full load hours to be used when calculating the evaporative cooling savings for standard, premium, and whole house units.

3. Tankless Water Heater Measure – We changed the incremental cost from \$750 to \$297.75 to align with current marketplace costs.
4. Furnace Fan Motors Measure – The product lifetime was changed from 18 years to 15 years to align with our similar product offerings in other states.
5. Programmable Thermostat Measure – PSCo modified the programmable thermostat deemed savings to include the cooling savings being realized by customers who have existing air conditioning equipment. This measure previously only incorporated heating savings. The cooling savings from this measure are assumed to be 5.26% of the average Colorado home's annual cooling energy usage, or 71.47 kWh, based on an EnergyGauge model of the average Xcel Energy Colorado home. The percent savings is based on a weighted average set back of one degree during the cooling season. The percent reduction is conservatively calculated at the peak design temperature difference of 19°F (summer outdoor temperature – desired indoor temperature).
6. Air Sealing, Bypass Sealing and Weather-Stripping Measure – PSCo is changing the way that savings are calculated to be based on blower door tests, CFM@50, consistent with recently posted Insulation Rebates product air sealing method. The previous savings was based on the natural air change per hour (NACH) calculation at a required 0.15 NACH air leakage reduction. The blower door test data is already collected as part of the Home Energy Audit.
7. Heat Pump Water Heater Measure – PSCo is adding both the heating penalty and cooling benefit to support the calculation of the new measure for heat pump water heaters.

PSCo has made the following changes to its rebates:

1. Heat Pump Water Heater Measure – PSCo added this measure to HPwES. It already exists as a measure Water Heater Rebate product. The same savings methodology will be used and a rebate of \$550 will be given.
2. Air Sealing, Bypass Sealing and Weather-Stripping Measure – PSCo has created two air sealing tiers with individual rebates. These new rebate tiers will pay 20% of the actual incremental costs with a fixed cap within each tier. This change aligns the air sealing rebate with current market costs and with the same offering within the Insulation Rebate product. The HPwES will no longer use the 0.15 Natural Air Changes per Hour required air leakage reduction. The following tiers will be used:

25% air leakage reduction – 20% of the incremental cost, up to \$100 rebate
33% air leakage reduction – 20% of the incremental cost, up to \$160 rebate

3. Attic Insulation Measure – PSCo modified the rebate to be 20% of the actual incremental costs with a fixed cap of \$350. The new rebate level better reflects current measure costs in the marketplace.
4. Water Heater Measure – We have increased the required efficiency for water heaters rebated through the HPwES Product from 0.65 EF to 0.67 EF. The reason for this change in increased minimum efficiency is to encourage higher efficiency standards in the marketplace. This change will eliminate the lowest rebate tier from the product offering.
5. Boiler Measure – The minimum qualifying efficiency for boilers is updated to 0.85 AFUE from 0.84 AFUE. This change will eliminate the lowest rebate tier from the product offering. This update was omitted from the 2012/2013 Colorado DSM Plan and is now corrected.

PSCo has made the following changes that have no impact but provide clarification:

1. Evaporative Cooling Measure – We have corrected typographical errors in evaporative cooling algorithms for the Front Range and Western Slope in the Deemed Savings sheets. We also added EFLH values to the Deemed Savings sheets to further clarify the calculations.
2. Air Conditioning Measure – We have corrected the Coefficient of Performance from 3.413 to 3.412 to make the Deemed Savings sheets consistent with what was originally filed in the Forecast Technical Assumption sheets for air conditioning. It was a typographical error.
3. Heating System Measure – PSCo has added the federal standard efficiency for boilers of 80%, which was unintentionally omitted from the original plan. This value was used correctly in the forecast sheets and all subsequent calculations.
4. Water Heater Measure – The original Deemed Savings sheets listed different baseline efficiencies for each water heater type. This change corrects the Deemed Savings to reflect that all units are assumed to have the same baseline efficiency, 0.59 EF. The correct baseline efficiency was used in the forecast assumptions and all savings calculations.
5. Ground Source Heat Pump Measure – This measure was originally omitted from the Deemed Savings sheets. This change is to include the missing measure on the Deemed Savings sheets. This change does not affect the Forecast Assumption sheets.
6. Incremental Costs – These changes, located in Table 2 of the Deemed Savings sheets, align the standalone program incremental costs with the incremental costs of the incremental costs of those same measures in Home Performance with ENERGY

STAR. Additionally, we added a minimum efficiency to the 67% Power Vented Water Heater measure for clarification.

These proposed changes result in the following energy savings goals and spend forecast for 2013 for the HPwES Product.

Effect of 60-Day Notice on HPwES Goals and Budgets

	Electric Budget	Net Gen Savings	Electric MTRC	Gas Budget	Net Dth kWh	Gas MTRC
2012/13 Approved Goals and Budgets	\$328,344	451,624	3.9	\$326,542	11,672	1.32
2013 Savings and Spending Resulting from this 60-Day Notice	\$370,049	662,110	4.6	\$320,841	14,591	1.32
Net Change	\$41,705	210,486	0.7	-\$5,701	2,919	--
Percent Change	13%	47%	18%	-2%	25%	0%

In this Notice, we include the following red-lined documents:

- Updated Product Description;
- Updated Deemed Savings sheets; and
- Updated Electric and Gas Forecast Assumptions.