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# Energy Efficiency Program Proposal

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## ThermWise<sup>®</sup> Energy Comparison Report

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# Program Description

## Background

The ThermWise Energy Comparison Report (ECR) is a customized report that includes a series of four graphical illustrations that show how a customer’s usage compares (confidentially) to customers with similar housing and other characteristics. The goals of the ECR are to help influence customers’ behavior, lifestyle, appliance purchases, shell measures, and to encourage customers to be more energy efficient, while boosting participation in other rebate programs including the ThermWise Home Energy Plan.

The ECR is available to customers via opt-in and opt-out programs. Customers participate in these programs by visiting the Company’s website, [DominionEnergy.com](http://DominionEnergy.com) or by being selected to receive the ECR at regular intervals throughout the year. The program’s cost effectiveness is measured based on an analysis of savings achieved for the program.

## ThermWise Energy Comparison Report History

In 2010, Dominion Energy began researching utility behavior-driven programs operating throughout the United States and reporting usage-analysis to residential customers. In 2011, the Company launched the first ECR. Since development, the ECR has been an integrated component of the Market Transformation Budget. In Dominion Energy’s 2015 Budget Filing the Company launched the ECR as a stand-alone program and claim natural gas savings as part of the program. In 2018 the Company intends to maintain this program as a stand-alone program.

The following table describes the current distribution of the ECR. The column labeled “Control” are those customers who have not received the ECR in order to compare statistically against the recipients for the purpose of evaluating the program’s effectiveness.

### ThermWise Energy Comparison Report Distribution

Description	Recipients	Control	Planned Group Discontinuance
Group A (Initial Pilot – Nov 2011 Launch)	8,000		December 2015
Group B (High Usage – December 2012)	25,000	25,000	December 2016
Group B (High Usage – December 2012)	25,000	25,000	Group Relaunch December 2017 to December 2018
Monthly Opt-In (Opt-In as of August 2017)	4,052		Ongoing
Group C (Roll – Out – September 2013)	100,000	10,000	December 2017 Group Relaunch 2018
Group D (Roll – Out – November 2014)	100,000	10,000	December 2018
Group E (Roll – Out – October 2016)	55,000	10,000	October 2020
Group F (Roll – Out – (2017))	50,000	5,000	October 2021
Group G (Roll – Out – 2018)	50,000	5,000	October 2022

## Elements of Comparison

Customers are compared to one-hundred premises that share the same dwelling type, are located in the same weather zone, have similar square footage, and built within the same time period. Additionally, the Company employs a comparison of homes based on a “similarity index” of base load, peak to base usage, and weather sensitivity. This similarity index is designed to account indirectly for things such as the efficiency of gas equipment, number of appliances, customer’s behaviors, and a home’s occupancy without actually having that specific information. When combined with dwelling type, weather zone, square footage, and year built, comparison groups are formed to create a benchmark by which a customer may understand how their natural gas usage ranks relative to other similarly categorized customers.

## 2017 Changes

In 2017, the Company modified the comparison methodology to include the similarity index on the 10,000 closest homes rather than encompass the entire weather zone. The Company believes that this change will provide a better comparison for customers.

## ThermWise Energy Comparison Report Savings

At the end of a full year’s distribution of the report and for each reporting group, the Company performs studies to verify the Energy Comparison Report’s effectiveness. To date, the Company has found that reports distributed by postal mail are the most effective at saving energy. Actual savings are calculated annually using savings from each eligible group to determine a weighted actual Savings. The Company computes a weighted annual realized savings of 0.65 decatherms for all program recipients. The following table illustrates the weighted savings calculation across all programs.

Description	Recipients	Annual Savings
Group B (High Usage – December 2012)	14,652*	1.61
Group C (Roll – Out – September 2013)	70,903*	0.75
Group D (Roll – Out September 2014)	80,864*	0.68
Actual Weighted Savings		0.79

\*recipients are based on the most recent size of the group. This is lower than the original group due to customer attrition and program opt out.

The Company also discounts participant attrition with the savings.

In addition to the weighted actual savings, the Company calculates a level of persistence savings beyond one year. The savings are calculated using third party persistence savings analysis. The Company calculates persistence savings to be 0.43 decatherms for a total savings of 1.22 for all program participants.

Consistent with standard testing procedures, the Company will run an annual savings tests using known and measurable statistical techniques following the yearly completion of each of the distribution pilots. Customers that view the report online or alternatively opt-in to receive the report do not undergo statistical savings testing.

## ThermWise Energy Comparison Report Future

The Company plans to expand the report's reach to an additional 50,000 customers during 2018. The Company will continue to monitor program efficacy. For the report push strategy, the Company intends to maintain the frequency of five times per year. The Company will continue to monitor additional opportunities to extend the program's reach.

As the Company encourages more energy savings through better appliance and shell measures in homes and businesses, Dominion Energy believes that behavioral energy savings will become even more important in reducing natural gas energy consumption. The ECR stands ready to aid in this transition. Dominion Energy looks forward to continue to reach more customers in this program, and examine additional ways to engage customers and achieve behavioral savings.

The Company will continue to review the ECR process to examine ways to increase customer participation and improve the customer's energy efficiency. Any changes would not alter the general framework of the program as outlined above but merely expand on and enhance the elements already in place.