

Project Description – R86: Residential Lighting Net-to-Gross Study

November 7, 2013

Objective and Priority Outcomes:

The goal of this study is to estimate net-to-gross (NTG) ratios for key product types incented in the Connecticut Residential Lighting Program and to assess the associated strategic implications for the CT Program Administrators (PAs). The study seeks to develop several estimates for NTG for this upstream program using different methods, including an integrative approach that takes the results from the methods into account and a discussion of the implications for the future of residential lighting programs in CT.

Work Summary:

There are several options offered in the work plan with which to estimate net-to-gross ratios. The SERA Team will work with the evaluation contractor to determine the recommended approaches, which will likely not include all the methods described here. The study will also be conducted in close coordination with a similar study being conducted in Massachusetts at the same time, also by NMR.

Method 1: Supplier Self-reporting: administer interviews with participating lighting manufacturers and lighting buyers for large chain retailers as well CATI surveys with local store managers. Use the percentage change in sales of various bulb types they attribute to the program. A NTG ratio estimate for each channel will be calculated.

Method 2: Demand Elasticity Modeling: Quantify relationship of price and promotion on quantity sold (elasticity). Determine the likely level of sales without the program's intervention (baseline sales), estimate free ridership by comparing modeled baseline sales with actual sales.

Method 3a: Point-of Sale Data Analysis Option 1: Purchase IRI (formerly Symphony IRI) data and compare point-of-sale data (grocery, drug, mass merchandise, dollar stores) in Massachusetts to similar data in several other states (New York, California, and other areas with varying levels of support). Investigate the impact of program support on purchasing behavior.

Method 3b: Point-of Sale Data Analysis Option 2: The "big data" alternative point-of-sale approach to estimating NTG. This approach would model the effect of the Massachusetts program on CFL sales by using IRI data described in Task 3b Option 1 above for 2011 to 2013 from all 50 states.

Method 4: Saturation and Market-level Sales Analysis: Compare saturation and market-level sales estimates in Connecticut and other states. This effort provides background information and indicators of NTG.

Method 5: Delphi Panel: A Delphi panel may be convened to integrate the results of the other NTG estimation methods and develop one or more final recommended NTG estimates. The panel will consist of approximately 20 lighting experts from across the United States and Canada.

Schedule:

The start date is early-January as authorization and data acquisition begins (with preparation work in December). Then modeling and analytics will take place over the next several months with the Draft Report going out for review in second half of July 2014. The Delphi panel task would push the final completion date to early 2015 to close the study.

Budget (Time and materials pricing):

The budget for this evaluation is \$300,000, but actual spending will depend on which options are selected. Coordinating with MA on the evaluation will lead to significant economies of scale