



May 15, 2017

Lisa A. Skumatz, Ph.D Principal  
Skumatz Economic Research Associates (SERA)  
762 Eldorado Drive, Superior, CO 80027

**Re: Light Emitting Diode Net-to-Gross Evaluation (R1615) Draft Report – UI Comments**

Dear Ms. Skumatz:

The United Illuminating Company (“UI”) hereby submits the following comments on the “**Light Emitting Diode Net-to-Gross Evaluation (“R1615”)**” Draft Report prepared by NMR Group, Inc., (“NMR”) dated April 16, 2017. The draft was submitted to UI on May 1, 2017, with a request for comments to be provided by May 15, 2017.

The purpose of the study was to estimate net-to-gross (“NTG”) ratios for light emitting diodes (“LEDs”) in 2015 and predict prospective ratios through 2018 and beyond for the Retail Products Program.

The following is UI’s comments on R1615’s conclusions and recommendations:

***Conclusion 1: Retrospective and Prospective Net-to-Gross:*** *The consensus panel first estimated NTG values based on R1615 primary and secondary-research tasks and their knowledge of the industry and later came to consensus on recommendations. Panelists predicted that the future LED market will grow independent of program support and estimated steady NTG declines from 2015 to 2020. After careful consideration, they determined that the level of uncertainty and quickly moving variables necessitated reevaluating the prospective estimates in the near future. Panelists explained that HTR channels are more price sensitive, and therefore demonstrate higher NTG ratios.*

***Recommendation 1:*** *The study recommends using the NTG ratios resulting from the consensus panel: for non-HTR LEDs overall (inclusive of standard [A-line], reflector, and other specialty bulbs): 63% for 2015, 57% for 2016, 47% for 2017, 40% for 2018, 36% for 2019, and 33% for 2020. Prospective estimates should be reevaluated next year or by 2019 at the latest. The consensus panel suggests measuring the HTR channel by adding 20 percentage points annually to attribute to the HTR channel: 83% for 2015, 77% for 2016, and 67% for 2017, 60% for 2018, 56% for 2019, and 53% for 2020.*

**UI Comments:** The Company appreciates that R1615 recognizes that there is a level of uncertainty and there are quickly moving variables in determining the NTG values proposed. The values must be verifiably accurate and include all aspects of an Energy Savings NTG ratio as defined by Connecticut Program Savings Document (“PSD”) in order to incorporate them into the PSD. The PSD is updated annually in the fall, prior to the prospective Program year. The Company takes great issue with the prospective NTG values, and will not incorporate the recommended values into the next iteration of the PSD until outstanding issues are addressed.

The Company questions the relevance of this NTG ratio study given the recent change in administration in the United States Executive branch. The study observes similar trend lines in market share predictions, and it quotes suppliers who give credence to both Massachusetts and Connecticut efficiency programs as market transforming. It then, under supplier guidance, awards program influence unequally at a ratio of nearly 2-to-1, respectively, and blames the abnormality on a difference in timing in a fast-changing lighting market. A case could also be made that R1615 is outdated due to the political climate, which has rapidly changed in recent months.

The Company questions the accuracy of the R1615 calculated NTG ratio given the potential bias involved in interviewer responses and an anonymous consensus panel. The calculated NTG Ratios rely heavily on in-depth supplier responses, responses that the study admits are subject to a range of bias. It is understood that mathematical modeling is not perfect either; however, details on some of the information the suppliers used to determine whether or not the bulb purchase was influenced by the program incentive or not, while keeping interviewee anonymity, could help reassure the Company of their assumptions. Also the Company questions the expertise and background of the consensus panel. Providing more information on the individuals in the panel could help reassure the Company of their expertise and credibility.

The Company questions how accurately the study's NTG ratios reflect the spillover effects of the Connecticut program's advertising and promotions. By R1615's own admission, weighting demand elastic modeling and supplier interviews heavily led to large discrepancies with benchmarking studies by understating the spillover effects. The Company believes these effects should be included in the calculation of the LED NTG ratio and look to other evaluations in order to accurately capture its effects.

**Conclusion 2: Retail Channel:** *Big box stores, including home improvement (HI), mass market, and club stores, composed over 90% of program sales so the relatively high freeridership estimated by suppliers drove suppliers' relatively low NTG estimates. The consensus panel results aligned with supplier interview results that higher NTG ratios should be associated with the HTR channels, yet HTR channels composed a small share of program sales.*

**Recommendation 2:** *Further targeting the HTR channel has the potential to increase the program's cost effectiveness. The program should continue incentivizing lower-priced ENERGY STAR-qualified LEDs at HTR retailers. It may also wish to test the cost effectiveness of including higher-priced LEDs with specialty features such as those with dimmability and high color-rendering index in the HTR channel.*

**UI Comments:** The Company agrees that its program should further target the HTR market and is working to do so with higher, cost-effective incentives. It should be noted that the additional savings of higher priced LED is not necessarily proportional with the additional bulb expense. The Company will have to ensure that the incentive that it would take to influence more customers to purchase these bulb types are cost-effective.

**Conclusion 3: Program Implementation:** *The demand elasticity data relied on data detailing in-store promotional events and merchandising displays. Field staff collected these data when visiting stores to ensure compliance with retailer contractual agreements: 1) verifying prices and shelf signs that indicated products were included as part of the program and 2) tracking off-shelf merchandising displays of program bulbs (e.g., clip strips, end caps, pallet displays).*

**Recommendation 3:** *Improving the level of detail in the tracking of in-store merchandising displays (ideally product model number or brand and bulb type) would increase the likelihood of identifying the impact this program component has on program sales.*

**UI Comments:**

The Company tracks lift on sales during cooperative promotions when possible. Generally off shelf placements and other promotional events have a very positive lift on sales. We are currently tracking off shelf promotion details in big box stores. Most of the HTR promotions details are off-shelf.

Thank you for the opportunity to provide these comments.

Sincerely,  
Patrick McDonnell  
Senior Director of Conservation & Load Management