

# Memorandum

**To:** Lisa Skumatz and Ralph Prah, Connecticut Energy Efficiency Board Evaluation Consultants

**CC:** Craig Diamond, CT EEB Executive Secretary

**From:** Glenn Reed, CT EEB Residential Technical Consultant

**Date:** May 24, 2017

**Re:** Residential Technical Consultant comments on the 04/16/17 LED Net-To-Gross Draft Report (R1615)

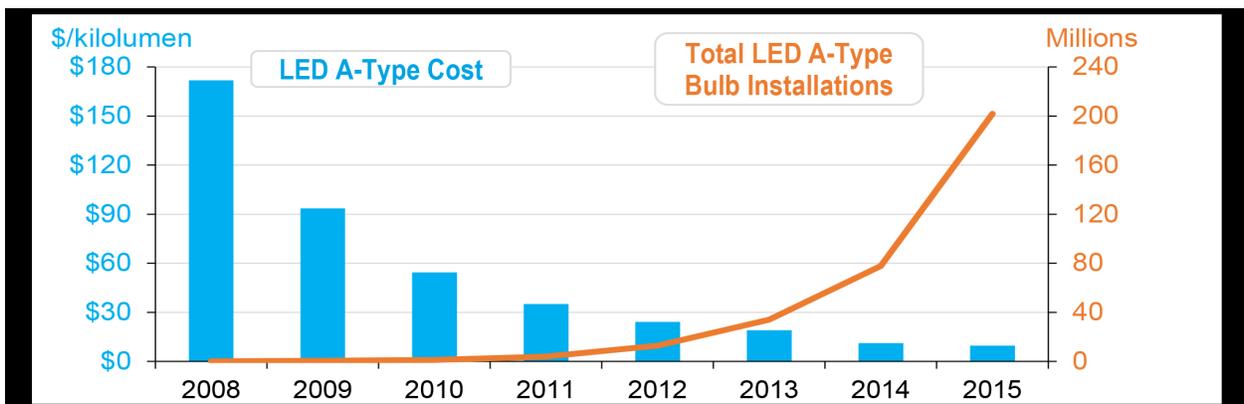
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Provided below are summary and highlight comments on the April 16 review draft of LED Net-To-Gross Draft Report. These comments supplement those contained in the marked-up draft report that was also submitted. Most of the comments below are included in the marked-up draft and are provided here as a high level summary and for emphasis.

1. Considerable time and effort went into developing retrospective NTG estimates for 2015 and 2016. The rationale to do so needs to be better explained given that CT does not apply NTG ratios retrospectively. One thing that should be highlighted is the comparison of the current 2015 NTG estimates to prior ones. Further, there may possibly be a larger take-away: Most subsequent LED NTG studies yield lower values for a given year than prior ones, or at least that seems to be my understanding from a somewhat limited perspective.
2. The prospective LED NTG estimates are put forward as “placeholder” values combined with a recommendation to re-evaluate them in in 2017 or 2018, but no later than 2019.
  - a. Is there a plan to revisit these values prior to the filing of the utilities’ 2018 Plan Update? If not, then this needs to be addressed explicitly in the report and the use of the qualifier “placeholder” needs to be removed or discussed in more detail relative to the 2018 Plan Update.
  - b. Re-evaluating the prospective LED NTG estimates in late 2018, let alone in 2019, is too late to inform the next Three-Year Plan. The utilities, the Board, and DEEP will need the best available information on the residential lighting market to inform the next Plan. It is the Board’s Residential Consultant’s position that the

need for continued support of the residential lighting market at retail will cease at some point during the next Plan period.

3. Please clarify that the report's NTG values only apply to the utilities' Retail Products Program and not to direct install efforts in HES and HES-IE.
4. Please include the most recent (currently 2016 Q3) NEMA lamp shipment data in the report and compare and contrast these data to the supplier interview responses and to other values and market trends/characterizations presented in the report as appropriate.
5. Please more fully describe the make-up and expertise of the consensus panel.
6. The assignment of a 20-percentage point higher NTG for HTR LEDs seems somewhat arbitrary. While the utilities do not currently claim different/higher savings for HTR lamps, they may do so in 2018. It's possible that more thought and effort needs to be given to this 20% "adder" in any subsequent LED NTG studies. Also, one might expect this 20% adder to decline over time as the cost of LEDs continues to fall and LED availability increases.
7. In the Market Trends discussion, please more fully discuss and better document the dramatic declines in LED pricing. For example, DOE estimated a 94% drop in LED A-lamp prices from 2008 to 2015:



8. Considerable discussion is provided on the uncertainty introduced by the recent Presidential election. While this discussion is appropriate – though somewhat overblown - there is possibly insufficient discussion as to the larger direction of the global LED market or, as one supplier referred to it, the “juggernaut”. For example, there is no discussion of California’s earlier effective date of the 2020 EISA standards nor of the EU lighting standards.