National Electrical Manufacturers Association

The association of electrical equipment
and medical imaging manufacturers
www.nema.org

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Taylor Jantz-Sell
ENERGY STAR Lighting Program Manager
U.S. Environmental Protection Agency
Washington, DC 20460

Dear Taylor,

Happy new year to you and the entire ENERGY STAR team. As you likely have read before, NEMA represents nearly 325 electrical equipment and medical-imaging manufacturers that make safe, reliable, and efficient products and systems. Member companies support more than 370,000 American manufacturing jobs in 6,100 locations across all 50 states. NEMA companies play a key role in transportation systems, building systems, lighting, utilities, and medical-imaging technologies.

Members of NEMA's Lighting Systems Division are proud of our collective decades-long accomplishments with bringing energy-efficient, high quality and long-lasting lighting products to the market in partnership with EPA's ENERGY STAR program team, electric utilities, energy efficiency programs, retailers, and consumers. Our partnership continues as we reach an important milestone, the Agency's 14 November 2022 proposal to sunset the ENERGY STAR lighting certification programs for lamps, luminaires, and ceiling fan light kits. Herein please find our comments, questions, suggestions, and requests.

Timing

NEMA comments regarding timing are specific to each product category.

Regarding lamps, NEMA member lamp manufacturers support the Agency's proposal to stop accepting new certifications of lamp products at the close of 2023, and to sunset the labeling of lamps effective at the end of 2024. We note that EPA's proposal coincides with the Department of Energy's forthcoming general service lamp rulemaking. Should there be delays in the DOE's processes, we would request that EPA delay its sunsetting process accordingly.

Regarding luminaires, NEMA member luminaire manufacturers support sunsetting the luminaires program on a longer timeline with a novel approach that we believe will support our collective GHG mitigation goals while benefitting consumers, ENERGY STAR stakeholders, and lighting market actors. Our proposal is borne out of concern for anticipated impacts to quality and efficiency in one important luminaire market segment.

A Proposal for Luminaires

Reviewing product certifications at energystar.gov as of 12 December 2022, we note that nearly 57% of ENERGY STAR certified luminaire models are categorized as *recessed lighting*, including *recessed downlight* luminaires and LED *downlight retrofit kits*. As you know, both optically and thermally recessed applications are among the most technically challenging in general illumination. Incandescent lamps that

we seek to displace are the exception to the rule: light source performance and longevity degrades in high temperature environments. This is especially true in recessed cans, even more so among the airtight and insulated varieties. With more than 15,600 model numbers, the breadth of ENERGY STAR certified recessed lighting offerings is the result of the lighting market embracing *proven* performance in this difficult application.

NEMA luminaire manufacturers are concerned that removing the ENERGY STAR from recessed lighting on the proposed timeline will encourage market introduction of substantially lower efficacy and lower quality recessed lighting products that will fail to meet application needs, resulting in early replacements and the associated waste stream, and lost energy savings opportunities. Many of these new product introductions, we believe, would be value engineered versions of currently certified products. Importantly, the Department of Energy's December 19th prepublication Federal Register NOPR reinforces that they do not intend to regulate these products, thus discontinuation of ENERGY STAR labeling will create a new market with no performance floor and many eager global competitors. Unlike LED lamps which will be subject to DOE general service lamp rules, in the absence of an ENERGY STAR label for the recessed lighting market segment, NEMA members fear there will be a race to the bottom with both energy efficiency and quality.

The luminous efficacy of ENERGY STAR certified recessed lighting – which now averages more than 73 lumens per watt *at luminaire level* – provides a wide margin of energy savings potential over less energy efficient solutions which may be lower cost and more readily adopted without the encouragement of the ENERGY STAR. We believe there are substantial energy savings available in the years to come for recessed lighting, and that electric utility incentives remain a worthwhile investment for this lighting market segment. NEMA members propose the following for EPA's and the energy efficiency community's consideration:

1. Revise the ENERGY STAR Luminaires specification to v2.3.
    - Descope all non-directional and directional luminaire types with the exception of recessed lighting.
    - Work with NEMA members and other stakeholders to **specify higher luminous efficacy requirements for recessed downlights and LED downlight retrofit kits to earn the ENERGY STAR**. The current requirements are 55 and 60 lm/W respectively and have not been updated since June 2016.
    - Update referenced industry standards relevant to recessed lighting to include their most current versions.
    - Leave all other specification requirements unchanged.
2. Implement a v2.3 effective date as soon as January 1, 2024.
    - Delist all descoped luminaire models.
    - Delist recessed lighting not meeting v2.3 efficacy requirements.
3. If necessary, continue verification testing of recessed lighting products.
4. Assist ENERGY STAR partners and stakeholders with marketing the remaining savings opportunities in the recessed lighting segment.
5. Revisit program achievements annually with ENERGY STAR partners and stakeholders to determine the effectiveness of this approach to capturing the remaining energy savings opportunity in the luminaires market.

We believe the market transformation will be complete after unlocking the remaining energy savings potential of recessed lighting alone.

Sunsetting Process

For lamps and luminaires except recessed lighting, NEMA members expect the sunsetting process will include the following steps:

1. Verification testing will end as EPA has stated.
2. EPA will stop accepting new product certifications.
3. Certified products manufactured after the sunset date will no longer be labeled ENERGY STAR, but preexisting labeling will remain on product packaging and spec sheets for products certified prior to that date.
4. EPA will communicate to all ENERGY STAR partners the need to remove certification marks and promotional marks from online web pages and digital media.
5. Energy efficiency program sponsors will stop providing incentive funds.
6. EPA will remove delisted models from the energystar.gov product finder tools. We expect that EPA will publicly maintain certified product data in an archive to avoid miscommunications about formerly certified products.
7. EPA will remove the certified product disqualification list from energystar.gov.
8. EPA will modify the ENERGY STAR website to educate consumers about changes to the program and energy savings opportunities in recessed lighting for retrofit and new construction.

We would value the opportunity to discuss the sunsetting process in greater detail to ensure manufacturer planning is well aligned with the Agency's intent.

Administrative Questions

NEMA members have other questions about the sunsetting process.

- For more than a decade, EPA-recognized certification bodies (CBs) have collected lighting product performance data for tens of thousands of products. NEMA members would not support allowing the CBs to use these data in any way following sunsetting of the lighting programs without the express written consent of the manufacturers themselves. How do EPA's existing directives to, and signed agreements with the CBs ensure that the data will remain privately held, and not redistributed, shared, bought, sold after sunsetting?
- What are EPA's intentions regarding international implementation of ENERGY STAR lighting specifications? Will Natural Resources Canada be required to sunset their lighting activities on the same timeline as EPA?
- How will EPA identify partnership violations serious enough to warrant reinstating verification testing?

As always, we appreciate our ENERGY STAR partnership and the Program team's efforts to maximize the public benefit resulting from it. We look forward to working with EPA and ENERGY STAR stakeholders to streamline this program in a way that unlocks remaining energy savings opportunities. NEMA members would like to request a January meeting with EPA to ensure mutual understanding and effective planning for the coming years.

Sincerely,

Alex Baker
Director, Regulatory Affairs
National Electrical Manufacturers Association