National Electrical Manufacturers Association

June 15, 2018

Mr. Hughes Nappert
Manager, Regulatory Standards
Engineering, Planning and Standards Branch
Department of Innovation, Science and Economic Development Canada

NEMA Comments on Draft ISED Interference-Causing Equipment Standard ICES-005 Issue 5

Enclosure 1: Industry Discussion on CISPR for Lighting Products June 2018 (Not for public display by NEMA or ISED)

Dear Mr. Nappert,

As the leading trade association representing the manufacturers of electrical and medical imaging equipment, the National Electrical Manufacturers Association (NEMA) provides these comments in response to the draft document released April 17, 2018. These comments are submitted on behalf of NEMA Lighting Systems Division Member companies.

The National Electrical Manufacturers Association (NEMA) represents nearly 350 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems. Our combined industries account for 360,000 American jobs in more than 7,000 facilities covering every State. Our industry produces $106 billion shipments of electrical equipment and medical imaging technologies per year with $36 billion exports. Please find our detailed comments attached.

Our Member companies count on your careful consideration and we look forward to an outcome that meets their expectations. If you have any questions on these comments, please contact Alex Boesenberg of NEMA at 703-841-3268 or alex.boesenberg@nema.org.

Sincerely,

Joseph Eaves
Head (Acting) NEMA Government Relations National Electrical Manufacturers Association
Rosslyn, Virginia

NEMA Response to Draft ISED Interference-Causing Equipment Standard ICES-005, Issue 5

NEMA is submitting comments on the draft Standard. We also are clarifying ISED Canada interest in working collaboratively with industry representatives to improve the accuracy and effectiveness of Standards for conducted and radiated emissions and interference for Lighting products. Overall, we support the intent of the clarifications in the draft document, but note it needs improvement, particularly with respect to two items of notable concern listed below.

1. In response to long-standing discussions between ISED Canada and the Lighting Industry about whether the CISPR family of Standards can or should be applied to lighting emissions requirements in North America, we offer a detailed investigation and our conclusions in enclosure 1.

2. Scope Section 1.1: We note that the parenthetical reference to wall dimmers has been added in the draft. While we agree that wall dimmers should be designed and tested properly, because they can be categorized as incidental radiators, we strongly disagree with specifically adding a reference to "wall dimmers" to the scope statement as this could be taken to mean they must be tested and reported.

    a. Industry has neither interpreted nor understood that previous versions of ICES-005 included all wall dimmers in the scope of the rule for verification testing purposes. Nor has ISED Canada made any statements to that effect historically in guidance or enforcement notices. Industry in North America does distinguish between wall dimmers that are "intentional radiators" (e.g., wireless wall dimmers) and those that are "incidental radiators" (e.g. regular or non-wireless wall dimmers) with a clock frequency below 9KHz. The former are tested to emission Standards such as FCC Part 15 and ICES-005; the latter are not.
    b. There are no emissions test requirements for regular wall dimmers that are *incidental radiators* with a clock frequency below 9KHz, and the lack of sufficient field reports for any interference caused by these regular wall dimmers supports the following conclusion: They are not causing problems and consequently do need to be addressed by regulation. We are aware that the FCC has been conducting testing of regular wall dimmers, but to date no findings or technical details have been released to suggest they constitute a source of interference.
    c. Setting emissions testing requirements for regular non-wireless wall dimmers in Canada would imbalance product requirements between the Canada and the U.S. This would cause Canadian consumers to pay more for a smaller selection of products, with no added benefits. Because it would require a very significant investment in both dollars and time (years) to make regular non-wireless wall dimmers compliant with CISPR for Canada, it is foreseeable that there will be shortages of regular wall dimmers in Canada for a period of time.
    d. During a telephone conversation, an ISED staff member noted that some dimmers are marked as compliant with FCC Part 15 requirements. To the ISED staff member this implied, mistakenly in our view, that some wall dimmer products are already voluntarily certified for emissions requirements and that this voluntary certification is a common industry practice. The staff member also mistakenly implied that the addition of wall dimmers to the scope of ICES-005 is not a burden. This is not a correct conclusion; NEMA knows of no such voluntary certifications. Although we have no knowledge of the products to which the ISED staff member was referring, logically the dimmers were likely wireless dimmers that are *intentional radiators* (which are in scope of verification testing requirements in FCC Part 15). Consequently any observation about the testing and

marking of an intentional radiator wall dimmer to incidental radiator sibling products is not supportable.

e. NEMA Members are participating in working groups in ANSI C63.29 to develop test methods for dimmers that may contain digital devices, which includes some wall dimmers. When these efforts conclude, ISED Canada should review the work and solicit public comment and collaboration on whether and how to incorporate these new procedures into Standards.
f. If regulations for regular wall dimmers were to be set, adapting products and reporting processes to include them would require manufacturers to divert significant engineering resources from more value-added work.

Conclusion: It is premature to set emissions verification requirements for regular wall dimmers, and therefore they should be removed from mention in section 1.1

3. We are aware of several entities submitting comments to this draft Issue 5 document, and that many of them are more substantive and lengthy than our own. It follows that to assure proper handling and due diligence with respect to the development of ICES-005 Issue 5, NEMA strongly recommends ISED Canada issue for additional comment and discussion a revised draft document which addresses and incorporates these numerous comments. To enable maximum efficiency and accuracy, this next draft should be a full version of the proposed Standard with all editorial and substantive changes input into the current ICES-005 Issue 4 to provide proper context.