DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	235783
Document Title:	jim edelson Comments - Indoor Horticulture Lighting
Description:	N/A
Filer:	System
Organization:	jim edelson
Submitter Role:	Public
Submission Date:	11/23/2020 2:35:44 PM
Docketed Date:	11/23/2020

Comment Received From: jim edelson
Submitted On: 11/23/2020
Docket Number: 19-BSTD-03

Indoor Horticulture Lighting

Over the past 6 years, New Buildings Institute (NBI) has developed and submitted indoor horticulture lighting efficacy proposals in several states and for the International Energy Conservation Code. NBI chose the photosynthetic photon efficacy (PPE) specification, and pioneered it in energy codes, because of its direct and effective application to indoor horticulture uses. Though the concepts were new when it was introduced in Oregon, Washington and Seattle, it was quickly understood that PPE provided both a basis to achieve energy savings and a simplicity in enforcement as a building code specification.

As NBI began to develop this specification in 2016 for the 2018 IECC, we undertook a broad survey of the fixture market and proposed 1.6 Î¼mol/J based on the available data at that time. The specification was approved in 2019, and will be published in the 2021 IECC. However, we subsequently have undertaken additional surveys, and believe the proposed level of 2.1 Î¼mol/J proposed in the CASE study is more appropriate for currently available fixtures. Further, NBI did not have the capability to determine a PPE for fixtures in greenhouses in time for the development of the 2021 IECC. Thus, fixtures in greenhouses are exempted in the 2021 IECC. We do support the analysis in the CASE study for a PPE of 1.7 Î¼mol/J for applications in greenhouses.

NBI appreciates the leadership and methodology chosen for implementing this important measure in Title 24. NBI intends to continue its involvement in setting indoor horticulture lighting efficacy for city, state and national energy codes, and intends to follow the lead of California on this specification for the foreseeable future.