

## DOCKETED

<b>Docket Number:</b>	17-BSTD-01
<b>Project Title:</b>	2019 Building Energy Efficiency Standards PreRulemaking
<b>TN #:</b>	220425
<b>Document Title:</b>	Docket No. 17-BTSD-01 â€œ Non-Residential Lighting Measures for 2019 Standards
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	UC Davis
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/27/2017 10:30:09 AM
<b>Docketed Date:</b>	7/27/2017

*Comment Received From: Konstantinos Papamichael*

*Submitted On: 7/27/2017*

*Docket Number: 17-BSTD-01*

**Docket No. 17-BTSD-01 – Non-Residential Lighting Measures for 2019 Standards**

*Additional submitted attachment is included below.*



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July 27, 2017

California Energy Commission  
Docket No. 17-BTSD-01  
Docket Unit, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Re: Docket No. 17-BTSD-01 – Non-Residential Lighting Measures for 2019 Standards**

I strongly support measures proposing installation of automated demand-response (ADR) equipment in non-residential buildings over 10,000 square feet in area, regardless of lighting power allowance. The ADR equipment should be capable of receiving ADR signals from utilities, using OpenADR 2.0a or newer versions.

California utilities already use OpenADR 2.0a and it makes sense for buildings over 10,000 square feet to include equipment capable of receiving OpenADR 2.0 signals and communicate with building equipment, such as lighting, HVAC and appliances, using OpenADR or other protocols, such as BACnet, to appropriately adjust electricity demand.

Considering electric lighting, the ADR controls should affect at least 75% of the buildings installed lighting power, to provide flexibility for minor lighting loads, such as those in closets, storerooms and utility areas. The change in electric lighting output should be negotiated by utilities and their customers, including reduction and/or increase of electricity consumption.

This ADR requirement should include 75% of the building's exterior lighting, such as parking, pathway and facade lighting. Outdoor lighting will be very effective in contributing to the goals of ADR signals, especially those asking for increase in electricity consumption for maintaining an efficient and effective electricity grid.

These ADR capabilities appropriately extend the 2016 standards, which require ADR capability but do not explicitly ask for installation of ADR equipment that can receive and respond to DR signals from utilities.

Thank you for the opportunity to express my views.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Konstantinos Papamichael'.

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