

# CABA Intelligent Buildings Council (IBC) Draft Meeting Minutes

Wednesday, November 18, 2020 12 NOON - 1:30 PM (ET) via Webinar

#### **IBC Executive:**

IBC Chair, Trevor Nightingale (National Research Council)

IBC Vice-Chair, Bob Allan (The Siemon Company)

IBC Vice-Chair, Harsha Chandrashekar (Honeywell International Inc.)

IBC Vice-Chair, Robert Lane (Robert H. Lane & Associates Inc.)

IBC Vice-Chair, Terrence DeFranco (lota Communications, Inc.)

#### Present:

ABB, Inc., John Leraci

ABB, Inc., Julie Petrone

Albireo Energy, LLC, Hector Lizarraga

Alertus Technologies, Joe Nixon

Armstrong Monitoring, Stephanie Pichette

ASE Smart Energy, Antoine Karam

Automated Logic Corporation, Troy Maeder

AVIXA. Rochelle Richardson

Belimo Americas, Tom Daenzer

CABA. Andrew Glennie

CABA, Conrad McCallum

CABA, Greg Walker

CABA, Ron Zimmer

CABA, Sashien Godakandae

CAIL, Lindsay Pick

ComEd, An Exelon Company, Rick Tonielli

CommScope, Inc., Amy Wong

CommScope, Inc., Connie Kestermann

CommScope, Inc., Crystal Thomas

CommScope, Inc., Morne Erasmus

CommScope, Inc., Ronna Davis

Community Smart Living, Inc. (powered by Netex), Jason Kotler

CSA Group, Karim Nazarali

CSA Group, Parag Phalak

Cyber Power Systems (USA), Inc., Daniel Niewirowicz

DCI Co., Ltd., Kelly Jenkins

Distech Controls Inc., An Acuity Brands company, Asim Baig

Distech Controls Inc., An Acuity Brands company, Kevin Ridder

Drewlo Holdings, Andre Harris

Eagle Technology, Inc., Harshad Shah

Ei Electronics US, Inc., Barry Donahoe

Energy Metrics LLC, Prahlad Balasubramanian

Energy Metrics LLC, Rajendran Avadaiappan

exp. US Services, Inc., Chris Larry

ExteNet Systems, Inc., Ron Scott

Frost & Sullivan, Maurice Okawaki

Graybar, David Eckell

Harbor Research, Inc., Michael Levy

Honeywell International Inc., Harsha Chandrashekar

Honeywell International Inc., Sathish Nanjappa

Intel Corporation, Michael Clay

J2 Innovations, Scott Muench

Johnson Controls Inc., Alison Hong

Jtechreps.com, Ray Endsley

Kele, Inc., Richard Campbell

Ken Wacks Associates, Ken Wacks

Kimberly-Clark Professional, Balaji Kandadai

KMC Controls, Inc., Jason Mills

Lawrence Berkeley National Laboratory (LBNL), Christoph Gehbauer

Layer Zero Services, Chris Frazer

LumenRadio, Inc., Maciej Oldziej

METZ CONNECT USA, Inc., Hugh Daly

MOEN Inc., Jerry Fairborn

National Research Council (NRC), Brad Kelly

National Research Council (NRC), Guy Newsham

National Research Council (NRC), Trevor Nightingale

O3 Energy Corporation, LLC, Brad Stutzman

Padi LLC, Anto Budiardio

PoE Texas, Erica Hockley

PoE Texas, Joe Herbst

PoE Texas, Tyler Andrews

PoE Texas, Ward Ramsdell

Raybased AB, Jan Ryderstam

Robert H. Lane & Associates Inc., Robert Lane

RYCOM Inc., Rvan Garner

Siemens Industry, Inc., Bonnie Brook

Siemens Industry, Inc., Dan Finnegan

Siemens Industry, Inc., Hans-Joachim Langels

Siemens Industry, Inc., Michael Brook

Siemens Industry, Inc., Richard Rivera

Siemens Industry, Inc., Roberto Ramirez

Signify, Harsha Banavara
Sinclair Holdings, LLC, Farukh Aslam
Sinclair Digital, LLC, Luis Suau
Somfy Systems, Inc., David Parrett
Southwire Company, LLC, Charles Hume
Sustainable Resources Management Inc., David Katz
Telecommunications Industry Association (TIA), Marta Soncodi
The Chicago Faucet Company/Geberit Group, Greg Hunt
The Chicago Faucet Company/Geberit Group, Richard Nortier
The Siemon Company, Bob Allan
Tridium, Inc., Vincent Fonti
Turner Construction, Janet McElroy
University of Strathclyde, George Chen
University of Waterloo, Joyce Kim
Yorkland Controls Ltd., Mark Coleman

### 1. <u>Agenda</u> - Greg Walker (CABA)

Greg Walker (CABA) thanked everyone for attending, outlined the agenda and alerted everyone that the meeting was being recorded and will be made available to the industry.

# 2. <u>Call to Order, Welcome and Introduction</u> - Trevor Nightingale (National Research Council)

CABA Board member and IBC Chair, Trevor Nightingale (National Research Council) welcomed everyone and introduced: IBC Vice-Chair Bob Allan (The Siemon Company), IBC Vice-Chair Harsha Chandrashekar (Honeywell International Inc.), IBC Vice-Chair Robert Lane (Robert H. Lane & Associates Inc.), IBC Vice-Chair Terrence DeFranco (Iota Communications, Inc.), IBC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and the Keynote Speakers, Farukh Aslam (Sinclair Holdings, LLC), Luis Suau (Sinclair Digital, LLC). Trevor also outlined the role of the IBC.

### 3. <u>Administrative</u> - Trevor Nightingale (National Research Council)

### 3.1 Motion to approve Past IBC Minutes

Trevor Nightingale (National Research Council) informed everyone that the meeting minutes from the August 24, 2020 IBC meeting were circulated and were posted on the CABA Web site in the IBC section: <a href="www.caba.org/ibc">www.caba.org/ibc</a>.

Motion to approve the August 24, 2020 IBC minutes was moved by Bob Allan (The Siemon Company) and the motion was seconded by Chris Larry (exp. US Services, Inc.). Unopposed motion passed.

4. "Digital Building Implementation and Automation at the Marriott Sinclair Hotel" (30 min) - Terrence DeFranco (lota Communications, Inc.), Farukh Aslam (Sinclair Holdings, LLC), Luis Suau (Sinclair Digital, LLC) (30 – 40 min)



Farukh Aslam CEO and President Sinclair Holdings, LLC



Luis Suau VP/CTO Sinclair Digital LLC





Description: This presentation provided a brief overview of the technology powering and enabling building automation in the famed Marriott Sinclair Hotel. The Marriott Sinclair Hotel, which opened in January of 2020, is the pinnacle of Digital Buildings. It is a 16 story, 1929 era historical building whose use changed from an office building and was transformed into a Marriott Autograph collection boutique luxury hotel. While larger projects for PoE lighting have been installed, this project brought in more PoE devices than just lighting plus motorized shades & curtains, door locks, GPON ONT's, minibars, a TV embedded in bathroom mirrors, USB-C Chargers, etc. In addition to the extensive use of POE, the project also included the use of the first LG Li-lon Energy Storage System in the US and use of VoltServer's Digital Electricity to power the distributed network; the closest deployment to a DC Building microgrid. The approach saved 25% in electrical cost while providing a robust and reliable digital infrastructure for integration and guest room automation. There was also a television news report on the project that can be viewed at this link:

https://www.intel.com/content/www/us/en/customer-spotlight/stories/sinclair-customer-spotlight.html

### White Paper Sub-Committee Update - Ken Wacks (Ken Wacks Associates)

An overview was given of the IBC White Paper review process, completed IBC White Papers and papers in progress. IBC White Papers are secondary

literature review articles that are approximately 10-20 pages in length. These papers are written and distributed free of charge to inform the industry. For the papers to be approved by the IBC White Paper Sub-Committee (WPSC), they must have significant technical material of relevance to IBC members - they must not contain marketing material or promote an agenda. Any CABA member can and is encouraged complete the new one (1) page white paper proposal template and submit it to <a href="walker@caba.org">walker@caba.org</a>.

If needed, CABA will secure a writer and/or a Working Group for the paper. If a CABA Member brings forward a proposal but is not able to find an author for the paper, the Member will need to send CABA \$500 USD. CABA will attempt to locate an author from one of many research firms. The \$500 will be given to the author(s) as an honorarium for their work in writing the paper. If an author cannot be found, the \$500 will be returned to the Member.

All completed and approved CABA White Papers are placed in the CABA Public Library, Members Library, CABA NewsBrief, CABA Twitter Feed, CABA LinkedIn Group and promoted at industry events. To view the CHC White Paper terms of reference, previous CHC White Papers and additional information, please go to: <a href="www.caba.org/ibc">www.caba.org/ibc</a>. All completed CABA White Papers, and those under development, can be found at: <a href="www.caba.org/whitepapers">www.caba.org/whitepapers</a>.

If you or someone that you know would like to join one (1) or more of the following White Paper Working Groups or recommend a new White Paper, please contact Greg Walker (CABA) at <a href="walker@caba.org">walker@caba.org</a>.

#### IBC White Paper Sub-Committee:

- Ken Wacks Associates, Kenneth Wacks
- Consultant, Brittany Hack
- Consultant, Steve Samson
- Frost & Sullivan, Dilip Sarangan
- Intelligent Buildings Europe, Nikiforos Panorios
- National Research Council Canada (NRC), Heather Knudsen
- Sustainable Resources Management Inc., David Katz

If you or someone that you know would like to join one (1) or more of the following White Paper working groups, please contact Greg Walker (CABA) at <a href="mailto:walker@caba.org">walker@caba.org</a>.

#### 5.1 Recently Completed:

## "Application of Wireless Power Transfer (WPT) in Smart Homes and Buildings"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

- Shanghai Jiao Tong University (Chair)
- Princeton University (Chair)
- AirFuel Alliance
- Ken Wacks Associates

### 5.2 In Progress:

### "Impacts of Automated Shading in Building Projects"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper. TRC Energy Services (Chair)

- Axis Lighting Inc.
- Draper, Inc.
- Ecotay Inc.
- Ken Wacks Associates
- Lawrence Berkeley National Laboratory (LBNL)
- Lutron Electronics Co., Inc.
- Mecho
- NYSERDA (New York State Energy Research and Development Authority)
- PLC-Multipoint, Inc.
- Screen Innovations
- Somfy Systems, Inc.
- Sustainable Resources Management Inc.
- Vistar Energy Consulting
- Window Products Management

### "Fire Alarm Systems in Buildings"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Canadian Fire Alarm Association (Chair)

## "Architecting Intelligent Self Learning Adaptive Smart Campus Framework for Smart Cities"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

NAVTAT Solutions (Chair)

## "Needlepoint Bipolar Ionization and its Contribution to Smart and Safe Buildings"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

Pure Air Control Services, Inc. (Chair)

# "Part 2: The Evolution of Integrating LiFi Technology into Smart Lighting and Control Systems for the Intelligent Building"

Ken Wacks (Ken Wacks Associates) gave an overview of this paper.

- Wharton County Junior College (Chair)
- Acuity Brands, Inc.
- ArcoLogix LLC
- SnapAV
- Ken Wacks Associates
- National Electrical Manufacturers Association
- Telecommunications Industry Association (TIA)
- **6.** Research Update Greg Walker (CABA), Michael Levy (Harbor Research, Inc.), Harsha Chandrashekar (Honeywell International Inc.)

## **6.1 2019-2020 IBC Landmark Research "Intelligent Buildings and COVID-19"** – Greg Walker (CABA)



The CABA Board of Directors have shifted the focus of the "Evidence for Building Retrofits that Improve Organizational Productivity (Phase 2)" research to "Intelligent Buildings and COVID-19". The cost to join this project and get the full \$100,000 of research is only \$6K. The research prospectus is currently under development. To receive this research and become a funder, please contact Greg Walker (CABA) at <a href="walker@caba.org">walker@caba.org</a>.

Eighteen (18) CABA members have already joined this research project:





































# **6.2 2020 IBC Landmark Research "Intelligent Building Energy Management Systems"** - Michael Levy (Harbor Research, Inc.)



Michael Levy (Harbor Research, Inc.) gave a brief overview of this 2020 IBC Landmark Research Project, "Intelligent Building Energy Management Systems". CABA and the IBC are still actively seeking funders for this research. Only the funders will receive the full \$130,000 of research. Harbor Research was selected to conduct this research. To receive this research and become a funder, please contact Greg Walker (CABA) at <a href="walker@caba.org">walker@caba.org</a>. <a href="CLICK HERE">CLICK HERE</a> for the full research prospectus and webinar recording explaining the project.

Due to the current economic conditions related to COVID-19, the CABA Board of Directors has moved to extend a special one-time discount to organizations potentially interested in joining.

Special pricing is now \$3K (normally \$5K) for the Bronze Funder Level and \$6K (normally \$10K) for the Silver Funder Level. <u>CLICK HERE</u> to see the benefits associated with each funding level and to learn more about this CABA research project. Equivalent discounts are available for the CABA Landmark Research Project: "<u>Privacy and Cybersecurity in the Connected Home</u>" For information on

becoming a funder for either project, please contact the CABA Research Director, Greg Walker, at <a href="mailto:walker@caba.org">walker@caba.org</a>.

Twenty-One (21) CABA members have already agreed to help fund this research project:













































# **6.3 Annual "BACS Market Sizing North America"** - Harsha Chandrashekar (Honeywell International Inc.)

Harsha Chandrashekar (Honeywell International Inc.) gave a brief overview of a new, invitation only, research on market sizing of building automation control systems.

Eight (8) CABA members have agreed to fund and participate in this research project:



















### 7. <u>New Business</u> - Trevor Nightingale (National Research Council)

#### 7.1 Other new IBC business?

Trevor Nightingale (National Research Council) made a call for new business such as: future IBC Guest/Keynote presentation topics and speakers, new IBC White Papers, new research projects and meeting ideas, etc. He also indicated that the next IBC meeting will be held January 2021 with details to be forwarded soon.

**8.** <u>Adjournment</u> (1:30 PM ET) - Trevor Nightingale (National Research Council)

Next IBC Meeting, January 2021

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CABA IBC meetings are open to CABA Members and invited guests, and everyone is encouraged to participate. <a href="CLICK HERE">CLICK HERE</a> for more info on the IBC, past minutes, participants, and terms of reference. Any CABA Member that attended as a guest will be added to the IBC unless they notify the CABA office by December 15, 2020 that their name should not be added. Non-CABA members that attended this meeting as a guest, should contact Greg Walker, CABA Research Director, to indicate if they wish to join the IBC or CABA. <a href="CLICK HERE">CLICK HERE</a> for more information on the 24 CABA Benefits and please circulate them to others in your organization.

Regards,

Greg Walker
CABA Research Director
Continental Automated Buildings Association (CABA)

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Web site: http://www.caba.org

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