CABA Intelligent Buildings Council (IBC)
Draft Meeting Minutes
Thursday, July 22, 2021
12 NOON - 1:30 PM (ET) via Webinar

IBC Executive:
IBC Chair, Brian Ensign (Superior Essex Communications)
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.)

Present:
Aircuity, Inc., Dan Diehl
Aircuity, Inc., Sarah Callahan
BC Hydro, David Rogers
BC Hydro, Markus Zeller
Belimo Americas, Tom Daenzer
Brainwave Research Corp., Rene Pardo
BSRIA Inc., Lone Hansen
CABA, Andrew Glennie
CABA, Conrad McCallum
CABA, Marta Klopotowska
CABA, Sashien Godakandae
Carlini & Associates, James Carlini
Center for Energy and Environment (CEE), Patrick Casper
CommScope, Inc., Morne Erasmus
CommScope, Inc., Ronna Davis
CSA Group, Sam Loggia
Digital Twin Consortium, Dan Isaacs
Dish Network L.L.C., Jeff Richardson
Distech Controls Inc., An Acuity Brands company, Asim Baig
Distech Controls Inc., An Acuity Brands company, Kevin Ridder
E2C Technology, Anno Scholten
Ei Electronics US, Inc., Barry Donahoe
exp. US Services, Inc., Chris Larry
Frost & Sullivan, Maurice Okawaki
Honeywell International Inc., Sathish Nanjappa
Hydro-Québec, Karine Lavigne
Igor Inc., Kimberly Johnson
Igor Inc., Walter Donich
Iota Communications, Inc., Kimberly Velez
IQuity Inc., David Emptage
Johnson Controls Inc., Arun Veda
Johnson Controls Inc., Joseph Klotz
Johnson Controls Inc., Marc Bertolin
KB Home, Jacob Atalla
Kele, Inc., Richard Campbell
Ken Wacks Associates, Kenneth Wacks
KMC Controls, Inc., Brad Kehler
L&T Technology Services Limited, Kailash Kulkarni
Legrand, Shana Longo
LonMark International, Ron Bernstein
Markland Associates Ltd, John Bowen
Multi-Tech Systems, Inc., Daniel Quant
Multi-Tech Systems, Inc., Jerry McDermott
Natural Resources Canada (NRCan), Bo Jiang
NYSERDA, Thomas Yeh
Panduit Corp., Marc Goodman
Panduit Corp., Sandy Beggs
PLC Multipoint, Inc., Yoelit Hiebert
Plutinsus, Wolfram Willuhn
Service Robotics & Technologies, Inc. (SRT Labs), Sam Kome
Siemens Industry, Inc., Paul Turnbull
Siemens Industry, Inc., Pornsak Songkakul
Siemens Industry, Inc., Richard Rivera
Siemens Industry, Inc., Roberto Torres
Southwire Company, LLC, Charles Hume
Superior Essex Communications, Brian Ensign
Sustainable Resources Management Inc., David Katz
tekmar Control Systems Ltd., Erric Balt
Telecommunications Industry Association (TIA), Marta Soncodi
The Chicago Faucet Company/Geberit Group, Richard Nortier
The Siemon Company, Bob Allan
TSC – Development, James Smith
UL LLC, Adam Lilien
VoltServer, Dan Lowe
VoltServer, Stephen Eaves
Welltower, Patrick ODonnell
WiredScore, Stefan Schmidt
Z-Wave Alliance, Mitchell Klein

1. **Agenda** - Greg Walker (CABA)
2. **Call to Order, Welcome and Introduction** - Brian Ensign (Superior Essex Communications)

CABA Board member and IBC Chair, Brian Ensign (Superior Essex Communications) welcomed everyone and introduced: IBC Vice-Chair Bob Allan (The Siemon Company), IBC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and the Keynote Speaker Stephen Eaves (VoltServer). Brian also outlined the role of the IBC.

3. **Administrative** - Brian Ensign (Superior Essex Communications)

3.1 **Motion to approve Past IBC Minutes**

Brian Ensign (Superior Essex Communications) informed everyone that the meeting minutes from the February 17, 2021, IBC meeting were circulated and were posted on the CABA Web site in the IBC section: [www.caba.org/ibc](http://www.caba.org/ibc).

Motion to approve the February 17, 2021, 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. **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 walker@caba.org.

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: www.caba.org/ibc. All completed CABA White Papers, and those under development, can be found at: www.caba.org/whitepapers.

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 walker@caba.org.

**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 walker@caba.org.

**4.1 Recently Completed: None**

**4.2 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.
- exp. US Services, Inc.
- Ken Wacks Associates
- Lawrence Berkeley National Laboratory (LBNL)
- Legrand
- 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)
- exp. US Services, Inc.

“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
- Ken Wacks Associates
- National Electrical Manufacturers Association (NEMA)
- PureLiFi
- SnapAV
- Telecommunications Industry Association (TIA)

5. “Digital Electricity in Intelligent Buildings” - Bob Allan (The Siemon Company), Stephen Eaves (VoltServer)
Steve Eaves will present an overview on an emerging electricity distribution technology called Digital Electricity or DE. DE transmits electricity in discrete, data enabled packets, each verified for safe transmission on communication cable from a transmitter to a receiver. DE travels with data and installs with the same ease, safety, and speed as Power over Ethernet (PoE) but has 20 times the power and distance capability. Moreover, DE and PoE are often paired to serve a connected building. Steve will discuss the technology, show use cases, and discuss why a new format for electricity is timely for intelligent buildings.

6. **Research Update** - Bob Allan (The Siemon Company), Greg Walker (CABA)

6.1 2021 IBC Landmark Research “AI and Predictive Maintenance in Intelligent Buildings” - Bob Allan (The Siemon Company)
Bob Allan (The Siemon Company) and Greg Walker (CABA) gave a brief overview of this 2021 IBC Landmark Research Project, “AI and Predictive Maintenance in Intelligent Buildings”. Only the funders will receive the full $130,000 of research but the Executive Summary of the research will be available to CABA Members. Bob mentioned that the CHC is actively seeking funders for this research and outlined the funding levels (starting at $5,000).

Seventeen (17) CABA members funded this research project:

6.2 Annual “BACS Market Sizing North America” - Greg Walker (CABA)

Greg Walker (CABA) 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. Other Business - James Carlini (Carlini & Associates), Brian Ensign (Superior Essex Communications)

7.1 Paradigm Shift Impact on Commercial Buildings in a Post-Pandemic Market - James Carlini (Carlini & Associates)

James Carlini (Carlini & Associates) gave a good presentation on the changes in the intelligent buildings and smart cities post COVID. He proposed a research study on digital twins addressing redundancy and routing diversity. James can be reached at 773-370-1888 or james.carlini@SBCGLOBAL.NET.
7.2 Other new IBC business - Brian Ensign (Superior Essex Communications)

Brian Ensign (Superior Essex Communications) 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 late September or early October 2021 with details to be forwarded soon.

David Katz (Sustainable Resources Management Inc.) mentioned a smart air filter from a Canadian company who may be interested in joining CABA and the IBC. David also mentioned his BIQ piolet program, if you would like to know more information contact David at dkatz@sustainable.on.ca.

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

   Next IBC Meeting, May or June 2021

CABA IBC meetings are open to CABA Members and invited guests, and everyone is encouraged to participate. **CLICK HERE** 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 August 30, 2021 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. **CLICK HERE** for more information on the 24 CABA Benefits and please circulate them to others in your organization.

Regards,

Greg Walker, CAE
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Continental Automated Buildings Association (CABA)
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