

# CABA Connected Home Council (CHC) Draft Meeting Minutes

November 16, 2020 12 NOON – 1:30 PM (ET) via Webinar

#### **CHC Executive:**

CHC Chair, Roy Perry (Alarm.com)

CHC Vice-Chair, Jim Hunter (Delos Living LLC)

CHC Vice-Chair, Byron BeMiller (Semtech Corporation)

CHC Vice-Chair, Charles Hume (Southwire Company, LLC)

#### Present:

Aconterra Capital Partners, Ron Schuermans

Alarm.com, Inc., Roy Perry

ASE Smart Energy, Antoine Karam

BC Hydro, Cristian Suvagau

BC Hvdro. Markus Zeller

BC Hydro, Michael Li

BC Hydro, Tim Mosley

BC Hydro, Tracy Xu

Blue Tag Credits (BTC), Aaron Needham

Bradford White Corporation, Ryan Kiscaden

BRE Group, James Gbadamosi

CABA, Ron Zimmer

CABA, Andrew Glennie

CABA, Conrad McCallum

CABA, Greg Walker

CABA, Sashien Godakandae

Canadian Home Builders' Association (CHBA), Brett Cass

CEDIA, Walt Zerbe

Consortium for Energy Efficiency CEE, Kim Katz

Consortium for Energy Efficiency CEE, Patrick Casper

CSA Group, Laura Contasti

CSA Group, Nicki Islic

CSA Group, Parag Phalak

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

Delos Living LLC, Jim Hunter

Enbridge Gas Inc., David Moffat

Energy Metrics LLC, Prahlad Balasubramanian

ERG Energy Efficiency, Michael Dabbene

ETA International, David Weaver

FortisBC, Steven Groves

Frost & Sullivan, Maurice Okawaki

Honda R&D Innovations, Inc., Nathan Zhang

Ken Wacks Associates, Ken Wacks

LG Air Conditioning Technologies, Ruben Willmarth

Manitoba Hydro, Sean Woroniak

MW Consulting Corp, Michael Wiebe

National Research Council (NRC), Ajit Pardasani

Parks Associates, Elizabeth Parks

PointCentral, Jamey King

Prysmian Group, Claude Régnier

QUANTUM Lighting, Inc, Len Horvath

Resideo Technologies, Inc., David Kaufman

Siemens Industry, Inc., Hans-Joachim Langels

SnapAV, Eric Harper

Southwire Company, LLC, Charles Hume

Stantec Consulting Ltd., Dane Labonte

Stelpro, Sergio Marques

Strategy Analytics, Inc., Jack Narcotta

Sustainable Resources Management Inc., David Katz

tekmar Control Systems Ltd., Greg Leupin

Telnet Management Consulting, Inc., Fawzi Behmann

TELUS, Davar Bajelan

University of Illinois, Brian Pastor

University of Illinois, Harshal Mahajan

### 1. Agenda - 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.

Keynote Presentation "Smart Load-Shift Strategies for Electrical
 Heated Homes" (30 min)
 - Jim Hunter (Delos Living LLC), Ajit Pardasani
 (National Research Council)



Ajit Pardasani Senior Research Officer, Intelligent Building Operations National Research Council



Description: New Brunswick is a winter peaking province as it uses electricity as the primary method for space and water heating. A typical household in New Brunswick uses 63% of its annual electricity consumption for space heating. Peak demand in the province is caused by heating loads during the winter and is acute on the coldest days when demand for heating is at its highest and is met by oil and gas fired plants. NB Power, Siemens Canada and National Research Council of Canada have partnered since 2014 to conduct a series of pilot studies to evaluate the reduction in morning peak loads through smart thermostats in detached homes that used electrical baseboard heaters. The latest in the series was the smart grid pilot study consisting of 567 owner-occupied homes that used electric baseboard heaters in three (3) cities of the province in 2016-17 to evaluate demand control using Open ADR-compliant connected thermostats. The aim of the field study was to investigate how much electrical energy could be shifted from peak demand hours to the immediately preceding hours while maintaining acceptable thermal conditions. This presentation will summarize the results and lessons learnt from the pilot studies, including the influence of various building and occupant characteristics on the shift. Ajit Pardasani, Senior Research Officer, Intelligent Building Operations, NRC Construction Portfolio, utilized a PowerPoint presentation to share research and information on this project.

# Call to Order, Welcome and Introduction, about the CHC - Roy Perry (Alarm.com)

CHC Chair Roy Perry (Alarm.com) welcomed everyone and introduced: CHC Vice-Chair Jim Hunter (Delos Living LLC), CHC Vice-Chair Byron BeMiller (Semtech Corporation), CHC Vice-Chair Charles Hume (Southwire Company, LLC), CHC White Paper Sub-Committee Chair Ken Wacks (Ken Wacks Associates) and the Keynote Speaker Ajit Pardasani (National Research Council). Roy Perry (Alarm.com) also outlined the role of the CHC.

### **4.** Administrative - Roy Perry (Alarm.com)

### 4.1 Motion to approve Past CHC Minutes

Roy Perry (Alarm.com) informed everyone that the meeting minutes from the September 2, 2020 CHC meeting were circulated and were posted on the CABA Web site in the CHC section: <u>CLICK HERE</u>. In addition, the CHC terms of reference, members and recorded presentations are also found HERE.

Motion to approve the September 2, 2020 CHC minutes was moved by Maurice Okawaki (Frost & Sullivan) and the motion was seconded by Ken Wacks (Ken Wacks Associates). Unopposed motion carried.

### 4.2 Discussion of the new proposed CHC Steering Committee

A new CHC Steering Committee was proposed. This Steering Committee will be made up of approximately 10 individuals selected by the CHC Executive Committee. This Steering Committee will be led and organized by the CHC Chair (not CABA Staff) and will have quarterly meetings. The Steering Committee will select topics and speakers for all CHC webinars and work with the speakers to select a date/time for the webinar. These webinars would take place immediately before each of the quarterly CHC meetings.

Motion to approve a new CHC Steering Committee as discussed was made by Jim Hunter (Delos Living LLC) and the motion was seconded by David Katz (Sustainable Resources Management Inc.). Unopposed motion carried.

### **5.** Research Update - Greg Walker (CABA)

"Privacy and Cybersecurity in the Connected Home" 2020 CHC Landmark Research - Greg Walker (CABA)



LANDMARK RESEARCH PROJECT



Charles Hume (Southwire Company, LLC) gave a brief overview of how the CABA Board selected the 2020 CHC Landmark Research Project, "Privacy and Cybersecurity in the Connected Home". CABA and the CHC are still actively seeking funders for this research. Only the funders will receive the full \$130,000 of research. Funding opportunities range from \$1K-\$10K depending on the benefits. 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 research prospectus and other supporting documents.

Eight (8) CABA members have already joined this research project:

















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

An overview was given of the CHC White Paper review process, completed CHC White Papers and papers in progress. CHC 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 CHC White Paper Sub-Committee (WPSC), they must have significant technical material of relevance to CHC 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: <a href="www.caba.org/chc">www.caba.org/chc</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>.

#### CHC White Paper Sub-Committee (WPSC)

- Ken Wacks Associates, Kenneth Wacks
- Frost & Sullivan, Konkana Khaund
- LumenCache, Inc., Derek Cowburn
- National Research Council Canada (NRC), Heather Knudsen

#### 6.1 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

### 6.2 In Progress:

# "Part 2: Power over Ethernet (PoE) & Digital Electricity (DE) in Commercial and Multiple Dwelling Residential Buildings"

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

- Sinclair Digital Holdings (Chair)
- Axis Lighting
- Contemporary Controls Systems, Inc.
- Ken Wacks Associates
- LumenCache, Inc.
- National Electrical Manufacturers Association (NEMA)
- National Research Council Canada (NRC)
- Public Services and Procurement Canada
- Renesas Electronics America Inc.
- Somfy Systems, Inc.
- Southwire Company, LLC
- Telecommunications Industry Association (TIA)
- UL LLC

# "Human Centric Lighting: Non-Energy Benefits of Lighting and its Smart Controls"

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

- Human Centric Lighting Society (Chair)
- ArcoLogix LLC
- Ken Wacks Associates
- Legrand
- Mecho
- National Electrical Manufacturers Association (NEMA)
- SnapAV
- Syska Hennessy
- UL LLC

### "Connected Home Cybersecurity Regulations"

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

P.A.ID Strategies (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 (NEMA)
- Telecommunications Industry Association (TIA)

### **7.** New Business – Greg Walker (CABA)

#### 7.1 Other new CHC business

Greg Walker (CABA) made a call for new business such as: future CHC Guest/Keynote presentation topics and speakers, new CHC White Papers, new research projects and meeting ideas, etc. He also indicated that the next CHC meeting will be held February, 2021 with details to be forwarded soon.

David Katz (Sustainable Resources Management Inc.) volunteered to do a webinar or to be a keynote speaker at an upcoming CHC meeting. He wanted to speak on the building envelope for MDUs.

# 7.2 McKechnie Family LIFE Home – University of Illinois Urbana-Champaign

Greg Walker (CABA) gave an overview of the next CHC Webinar on the "McKechnie Family LIFE Home" at the University of Illinois Urbana-Champaign. Brian Pastor (University of Illinois) gave a brief overview of the research project and thanked the CHC for the opportunity to give the next CHC presentation.

# 8. Adjournment (1:30 PM ET) - Roy Perry (Alarm.com)

Next CHC Meeting, January 2021

CABA CHC meetings are open to CABA Members and invited guests, and everyone is encouraged to participate. <u>CLICK HERE</u> for more info on the CHC, past minutes, participants, and terms of reference. Any CABA Member that

attended as a guest will be added to the CHC unless they <u>notify the CABA</u> <u>office by December 15, 2020 that their name should not be added</u>. 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 CHC or CABA. <u>CLICK HERE</u> for more information on the 24 CABA Benefits.

Regards,

Greg Walker

CABA Research Director Continental Automated Buildings Association (CABA)

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