



CHAPTER MEETING MINUTES

May 3, 2017

50th Penn Place
Oklahoma City

Members 51 Guests 1 Students 7

President Wilson called the meeting to order at: 11:48 am

President Wilson opened the meeting welcoming our guests including students from OSU and UCO. He gave a quick final CRC overview (for John Semtner and Joe Sanders stating that this year's conference in OKC was a great success with approximately 150 people in attendance including spouses. Expressed Joe and John's appreciation for all of the committee members and volunteers that helped put it on.

Next year's convention will be in San Antonio during Fiesta.

Trapper turned the floor over to Tino Mendez to install the incoming ASHRAE Officers and Board of Governors for 2017-2018. Tino called the following persons to the front of the room:

OFFICERS:

Damon McClure – Pres.
Trapper Wilson – VP
Jeff Forman – Pres Elect
Madison Schultz - Secretary
Stephanie Thomas - Treasurer

BOG's:

Andy Donehue
David Royal
Robert Lewis
Caleb Spradlin
Michael Wilson

Andy Donehue introduced the guest speaker Evan Berger, Director of Energy Solutions for CALMAL Corp who spoke on "Hidden Costs in Daytime Energy Use".

- Even though he's not an engineer, he has researched and read thousands of pages of rate case legislation and took some time off as an investment banker where he admitted he "took his soul for a stroll."
- Discussed the benefits of using an Ice Bank or Ice-on-Coil Internal Melting Technology to decrease the cost of energy in commercial applications by lowering the cooling tonnage for various facilities.
- Residential energy rates are based solely on cost per kWh. Commercial rates are a combination of the cost per kWh plus Demand Charges @ peak kW's which are derived from the highest 15 min interval of each month.
- Rates are complicated because of lawyers, regulators and utility companies that strive to keep the customer in the dark as to how the rates are calculated.
- Oklahoma demand rates are high in comparison to the US at around \$12.75/kWh.
- Actual daytime cost per kWh is around \$0.12/kWh while nighttime is about \$0.04.

- Therefore, since cooling during the day triggers the peak demand, the presenter suggests making ice at night when the demand is low and utilizing Ice Banks during the day to supplement the mechanical chiller systems during the daytime peak hours.
- Q and A session.

The meeting was adjourned at 12:45 pm

Respectively Submitted,
Jeff Forman
ASHRAEcok Secretary 2016-2017

ASHRAE COK May 2017 Meeting Attendance

Total: 51
Guests: 1
Students: 7

	Last Name	Name	Company	Type	Total Fee	Paid	Notes
✓	1 Abiah	Mitch J Abiah	Frankfurt Short Bruza	Member	25	Amount due: \$25.00	
✓	2 Arango	Tony Manuel Arango	Trane	Member	20	Paid by cc	
✓	3 Azhdari	Shahrokh Azhdari	Frankfurt Short Bruza	Member	20	Amount due: \$20.00	
	4 Brazeale	Daniel Lyle Brazeale	Engineered Equipment Inc.	Member	0	No charge	EEL Prepaid
	5 Carrington	Terry Carrington		Member	20	Paid by cc	
	6 Carter	Randall D Carter	ZRHD PC	Member	20	Paid by cc	
	7 Chandler	Jim Chandler	Boone & Boone Sales	Member	40	Paid by cc	
✓	8 Cooper	Scott Cooper		Guest	0	No charge	Student
✓	9 Crawford	Roy R Crawford, PhD	Johnson Controls	Member	20	Paid by cc	
✓	10 Dolan	Chris Dolan	Engineered Equipment Inc	Member	0	No charge	EEL Prepaid
✓	11 Donehue	Andy Donehue	Trane	Member	20	Paid by cc	
✓	12 Ellis	Richard R (Rick) Ellis, Jr	MTF Engineering	Member	20	Amount due: \$20.00	
✓	13 Erdman	Robert F Erdman, Jr	Frankfurt Short Bruza Assoc	Member	20	Amount due: \$20.00	
	14 Everett	Brent Everett	Univ Of Oklahoma	Member	20	Paid by cc	
✓	15 Futrell	Cory Futrell	Frankfurt-Short-Bruza Associates	Member	20	Paid by cc	
✓	16 Garcia	Bryan D Garcia, PE	Trane Company	Member	20	Paid by cc	
✓	17 Gramling	Joshua D Gramling, PE	Boeing	Member	25	Paid by cc	
✓	18 Herndon	Andrew Herndon	Oklahoma State University	Guest	0	No charge	OSU Student
✓	19 Hinton	Larry J Hinton	Hinton Refrigeration Co	Member	20	Paid by cc	
✓	20 Hixon	Hunter Hixon		Guest Student	0	No charge	OSU
✓	21 Janco	Albert N Janco, PE	ALBERT N. JANCO, PE CONSULTING ENG	Member	0	No charge	No lunch
✓	22 Jarred	John Jarred	Boone & Boone Sales	Guest		Paid by Chandler	
✓	23 Jones	Gary Jones		Member		Paid by Marsh	
✓	24 Keyes	Jason H Keyes	Automated Building Systems	Member	20	Paid by cc	
✓	25 Kim	Bosung Kim	Oklahoma State University	Guest	0	No charge	OSU Student
✓	26 Kincher	Mark L Kincher	University of Central Oklahoma	Member	0	No charge	UCO Student
✓	27 Lister	Douglas Lister, PE	ZRHD	Member	25	Paid by cc	
✓	28 Loeffler	Alan N Loeffler	Federal Corporation	Member	20	Amount due: \$20.00	
✓	29 Marsh	Richard D Marsh	Trade Mechanical Contractors Inc	Member	40	Paid by cc	
✓	30 Mason	Samantha Mason	Hinton Refrigeration Company	Member	20	Paid by cc	
✓	31 McDonough	Robert G McDonough	MCD Company	Member	20	Amount due: \$20.00	
✓	32 Mendez	Florentino J Mendez, PE	Retired	Member	20	Paid by cc	
✓	33 Oliver	Kaylee C Oliver	Guernsey	Member	20	Paid by cc	
✓	34 Powell	Luke Powell	Oklahoma State University	Guest	0	No charge	OSU Student
	35 Royal	David M Royal	Automation Integrated, LLC	Member	20	Paid by cc	
✓	36 Sexton	Samuel Shaun Sexton	OSD Engineering Company	Member	20	Paid by cc	
✓	37 Spradlin	Matthew Caleb Spradlin	HP Engineering	Member	20	Amount due: \$20.00	
✓	38 Stoabs	Charles D Stoabs	Streets, LLC	Member	20	Paid by cc	
✓	39 Sullivan	mark s sullivan	Carrier Enterprise	Member	20	Paid by cc	

	Last Name	Name	Company	Type	Total Fee	Paid	Notes
✓	40 Sullivan	Steven R Sullivan	OG&E	Member	20	Paid by cc	
✓	41 Thomas	Stephanie A Thomas	Moxify Engineering LLC	Member	20	Amount due: \$20.00	Paid via Square
✓	42 Thomas	Christopher M Thomas	Moxify, LLC	Member	20	Amount due: \$20.00	Paid by S Thomas
✓	43 Trotter	Kyle Trotter		Member	20	Paid by cc	
✓	44 Wilson	Trapper D Wilson	Engineered Equipment Inc	Member	0	No charge	EEl Prepaid
✓	45 Wilson	Jared Wilson	Benham	Member	20	Paid by cc	
✓	46 Wolfe	James M Wolfe	Wattie Wolfe Co	Member	0	No charge	Wattie Prepaid
✓	47 Yadon	David Craig Yadon	Mechanical Sales Midwest, Inc.	Member	20	Paid by cc	
✓	48 Prade	Paula					
✓	49 Ward						
✓	50 Guidione	John					
✓	51 Rortner	Pastor J.					OU
✓	52 Gordon	Dwayne	MEP Associates, LLC				
✓	53 Wise	Harold					OSU
✓	54 Walker						
✓	55	Danner					

✓ Marshall

49 + 2 presenters = 51