Nico DeGiorgio - Secretary

Greetings valued ASHRAE members! Our March meeting was a technical presentation by ASHRAE Distinguished Lecturer and university professor, Dr. Douglas Reindl. This was a 2-part technical presentation covering ammonia refrigeration basics and thermal energy storage. Here are some of the interesting takeaways from the presentations:

- Anhydrous ammonia is a synthetic refrigerant yet does not directly contribute to ozone depletion and has a low global warming potential.
- Yes, anhydrous ammonia is technically flammable, but it is a Class 2L which represents a “lower flammability” classification particularly due to the burning velocity at ambient temperature and pressure conditions.
- Ammonia is compatible with carbon steel, stainless steel, and Aluminum, but not compatible with Copper, copper alloys, and Zinc.
- Peak electrical demand typically occurs at 6pm, which doesn’t exactly match the peak of PV generation at noon.
- The current electrical demand curve has been nicknamed the “duck” curve and will soon change shape due to the increasing popularity of plug-in vehicles.
- A microgrid is defined by “a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate both connected or island-mode.”
Membership Highlights

Logan Costa-Smith
Logan passed the Fundamentals of Engineering (FE) exam on January 6, 2019. He holds a 2017 BSME from Santa Clara University, and participated in the Men’s Crew team on campus. After college, Logan spent a year living and working in Sacramento before returning to Fresno and coming to work at LEG.

Hannah Moss
Hannah received her California Registered Professional Engineer (PE) in 2018. She holds a 2014 BSME from CSU Fresno. She interned with LNC while in school before joining Teter A&E, where she continues to work today.

Mark Bennett
Mark also received his PE in 2018. He holds a BSME from UC Davis with a double major in Mechanical and Aerospace Engineering. He currently works for Lawrence Engineering Group as both an HVAC and plumbing design engineer.

Membership Committee
ENTER TO WIN $244*

Don’t forget our ongoing Membership Contest! You could win $244! Ask any of the Membership Committee Members for details.

NO LIMIT ON NUMBER OF ENTRIES
FOR INFORMATION CONTACT:
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U.S. DEPARTMENT OF ENERGY
Energy Efficiency & Renewable Energy

Justin Westmoreland, PE - GAC Chair

- The U.S. Department of Energy (DOE) has issued a notice of proposed rulemaking (NOPR) and request for comment to "update and modernize" DOE's current methodology for the establishment of new or revised energy conservation standards and test procedures for both consumer products and commercial/industrial equipment.
- Clarifying the Process Rule’s application with regard to equipment covered by ASHRAE Standard 90.1 (major topic 3 of 8)
- DOE will accept comments, data, and information regarding this notice of proposed rulemaking before and after the public meeting on 21MAR19, but no later than 15APR19
The Boardroom

Sophia Nyberg - President

Items Discussed at the March Meeting

- PAOE (Presidential Award of Excellence) points were reviewed and 5 of 8 categories are on track to meet PAR by the end of the year. All 8 have achieved the minimum set by Society and the Region. This is a huge feat for our chairs and officers! Congratulations team!

- The upcoming student shotgun tournament on April 12. Keep that date open to come out and support our students.

- Fresno County Office of Education (FCOE) Science Fair took place March 11-14. Cathy Johnson and Ryan Carlson volunteered to judge and Mike Cantelmi and Paul Bedard volunteered to be present on the day of the award to represent our chapter. (Winners were Sam Heinrichs and Jason Yang).

- The chapter sponsored a table at the LCOE mechanical engineering banquet and was represented by Nico DeGiorgio and Anthony Kupina.

- We received Region X approval to disburse the $33,000 profits from our 2018 CRC which includes:
  - STEM Donations to FCOE, Fresno USD Thomas ES, Clovis USD Valley Oak, and $10,000 towards our ASHRAE Foundation Endowment. A committee is needed to get through the logistics - this is open for those who like to participate. Please email anyone of the officers or board members for more information.

- The Golf tournament was big topic as we are still looking to secure a new site for this year’s tournament, as well as a golf tournament chairperson to lead the committee.

- And finally, a Region motion to add a $6 per area member CRC fee was discussed among the board. No decision was made yet, and it will be further discussed during the April BOG meeting.

A big thank you to all our chapter officers, board members, and chair people! This chapter would not be nearly as great without your dedicated efforts!