Hello again Austin - San Antonio Chapter members. I hope you are enjoying the great change in the weather that this time of year always brings. Hopefully it will prompt you to take the drive to our San Marcos locale Logan’s along 1-35 South, where Dr. Norman Muraya, of Austin Energy, will present his talk on electric vehicles entitled – EV and F1 Unplugged!

Thanks again to HTS for providing lunch and Chris Richardson for providing the presentation on Variable Refrigeration Flow to a packed house last month in San Antonio.

I made the observation during our September meeting that the turn out when we meet in San Antonio is always huge and that I will be making an effort to pick a new venue in hopes of encouraging larger participation.

Since I have received no suggestions for the Holiday meeting place and charity contribution, I will meet with the Board and firm something up to announce during the November meeting. Again your input is welcome.

As I write this, we have not received any volunteers for the position of Vice President. This is your chance to see someone else run the monthly meetings and the Board meetings. I can’t believe people aren’t sick of me yet!

This brings me to mention again that this is your Chapter, so please try to attend our Chapter meeting and speak your mind regarding any improvements and presentations. You have been blessed to have such a dedicated Board for so long but new blood is always a good thing and you will be greeted with open arms and learn how to run an effective organization by the existing team.

Have a great month,
Frank Richards
Austin –San Antonio AEE Chapter
Interim President
October Speaker

Dr. Norman Muraya, PE, CEM, CMVP, BPI, CSDM
Measurement and Verification Engineer
Austin Energy

Norman Muraya drives both an ICE and an EV. He has 23 years of experience with motors spanning from Texas A&M University industrial energy audits in the Houston region, to the Austin Energy electrical motor rebate program. He hosted the national motor challenge and was an author in the CEE Motor Efficiency, Selection, and Management Guidebook. Norman is also the Benchmark Subcommittee Chairman of the Large Public Power Council (LPPC). Norman graduated from Texas A&M University with a Ph.D. in Mechanical Engineering.

October Presentation

EV and F1 Unplugged!

Back from Washington, DC, where he presented a paper on Electric Vehicles earlier this month at AEE’s 2014 WEEC (World Energy Engineering Congress), is our own chapter member and Scholarship Chair Norman Muraya who is asking us to join him for an engaging conversation on established and disruptive automobile technologies of the internal combustion engine (ICE), electric vehicles (EV, plug-in-hybrids, hybrids, hydrogen), and compressed natural gas. Norman will make available slides and information comparing the various technologies and we, the audience, will DRIVE the topic and GEAR the votes on each conclusion!

Norman will make available automobile information and slides comparing internal combustion engine (ICE), electric vehicles (EV, plug-in-hybrids, hybrids, hydrogen), and compressed natural gas. The audience, will DRIVE the topic and GEAR the votes on each conclusion!

Bring your information or select from the Energy Engineering list below:

Formula 1 is in town this weekend. Of course you know F1 are electric cars and energy efficiency & thermal storage are critical? Turbocharged 600 bhp 1.6L V6 up to 220 MPH, 15,000 RPM, and 5 g acceleration cornering. Many of us think of car performance as 0-60, and how many buckets of fuel we can throw at an ICE with less than 15% efficiency. However, F1 are limited to 100kg of fuel and cannot afford to waste energy decelerating. The race cars receive significant power from dual electric wheel motors (similar to the new D85 TESLA).

EV Complaints: Charging time, range and cost, and hefty subsidization, limited offerings, as dirty as their coal power plant source. EV are first generation products and must overcome economies of scale: higher production cost, skepticism of technology, reliability, rare earth elements in unstable un-environmental countries, and lack of infrastructure (range anxiety).

EV user claims: 700% less energy, zero pollution, fuel cost, net cost), 7,000 fewer moving parts to maintain, 5 more years of warranty, $19,000 in fuel savings over 8 years, eliminate oil & international forces & disruptions, highest cus-
October Presentation...Cont’d

(Continued from page 2)

tomer satisfaction, least repair and fuel cost.

Oil: What is its true cost. Where oil comes from, our total effort and security cost to acquire. The largest import source of tar sands requires 5-to-1 ratio of oil to oil-to produce. Typical fracking water ratio is 5-to-0.6. Liquid fuels are 38% of all CO2 emissions.

EV and electric Grid. Multi-fuel, Multi-directional. EV interactively integrate with the buildings and distributed generation. This real time model allows self-healing grid, enable intermittent renewable and zero energy homes, real time pricing, grid ancillary services. The value to the grid for 2 kW increases as one progresses from simple energy ($0.20/hr) to peak demand reduction ($23/hr) and ultimately voltage regulation (CVR and IVCC) and frequency response (up to $3,000/yr).

EV for Free? Reports from those claiming net zero cost over 5 years.

Hydrogen Car solution: zero pollution, quick charge, long range. Is the future now?

“Lightland” concept of Austin. A crystal city that is non-carbon-emitting, weightless, with information and transport in renewable, wireless and optical light.


Can’t Make The Meeting

If you can’t make it to the meeting, not to worry….

At 11:45 am, please call in at: 1-860-970-0300, participant access code 157500 #

Participants please DO NOT PLACE PHONE ON HOLD (or we all will hear your music). It would be a good idea to MUTE your line after you get in. Please press * 6 to MUTE. When you want to talk, then UNMUTE by pressing * 6 again, and then you can talk. This will lower background noise on the conference line.

The web link is:
https://www.freeconference.com/DesktopConnect.aspx?
E=950E867F4CA2E8149F97BEEDDCBDC7F4&B=14662118&I=1
Please insert your name and company when you are prompted.

If you attended remotely, please email Linda.Rickard@AustinEnergy.com to let her know you attended the web presentation.
She will add your name to the roster.
On The Scene

Photos by Miles Abernathy and Ashley Heisler

Our September chapter meeting was held in San Antonio, TX and hosted by HTS. The meeting featured a presentation by Chris Richardson on Variable Refrigerant Flow (VRF) HVAC systems. In addition to the presentation, the group received a tour of the facility and a great BBQ lunch...THANK YOU to HTS and David!
Do you know of a technology or a tour that would be of interest to our chapter membership? The board of directors welcomes your ideas and thoughts as they begin to develop the 2014 meeting calendar. Our chapter is only as good as the membership makes it...It is your chapter, please participate and provide input into the selection of presentations and tours!

Contact Program Director Adam Jalani ajilani@clearesult.com with your ideas!

2014 Calendar

<table>
<thead>
<tr>
<th>Month</th>
<th>Subject</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>EV and F1 Unplugged!</td>
<td>San Marcos, TX</td>
</tr>
<tr>
<td>November</td>
<td>Pending</td>
<td>TBD</td>
</tr>
<tr>
<td>December</td>
<td>END of YEAR CELEBRATION</td>
<td>TBD</td>
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The Location for October Meeting will be:
Logans Roadhouse
1141 N. I-35
San Marcos, TX

Understanding Engineers...Take 10

No correlation to engineers other than the sign is outside a favorite lunchtime haunt for firms in the area.

Interesting place...editor
Our Mission:

◊ Advance the professional careers and the common purposes of its members. Facilitate networking, social exchange and training.

◊ Present and discuss energy, environmental topics, and members’ ideas. Stay abreast of fast changing developments. Anticipate their future.

◊ Disseminate information to the trade and to the general public via meetings, publications, trade shows and presentations.

◊ Build an exciting, expanding chapter

◊ Cooperate with other AEE chapters and related organizations.

◊ Promote energy efficiency.

◊ Promote renewable resources

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2014 Officers

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
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<td>President (Acting)</td>
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<tr>
<td>Frank Richards</td>
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</tr>
<tr>
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<td>Vice President</td>
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<tr>
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<td>Historian/Photographer</td>
<td><a href="mailto:miles99@gmail.com">miles99@gmail.com</a></td>
</tr>
</tbody>
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Join Us at Our Next Meeting!

Date: 28 Oct 2014
Time: 11:30 – 1:00
Location: Logan’s Roadhouse
1141 Hwy. 35 N
San Marcos, TX
11:30am Garage Room
512.805.8888

Follow us @TXAEE!

www.txaee.org

We’re On The Web!!
MEMBERSHIP INVOICE
Austin/San Antonio Chapter of the Association of Energy Engineers
http://www.txaee.org

__________________  
Date

Local Chapter Dues for 2014  $ 30.00

☐ New Member  ☐ Renewal  ☐ Discount AEE International
(Attach Coupon to this Form)

Please fill out the following information.

Name:  ____________________________
Company:  ____________________________
Address:  ____________________________
City/State/Zip:  ____________________________
Business Phone:  ____________________________
FAX:  ____________________________
E-mail Address:  ____________________________

Suggested Speaker Topic or Tour:  ____________________________

Chapter meetings typically are held the 4th Tuesday of each month at 11:30 a.m. Location for the meetings is posted on the Austin/San Antonio AEE Web Site http://www.txace.org/calendar.htm. Look forward to informative, professional, and educational presentations in the energy field, plus field trips to various locations in Austin and San Antonio.

__________________  
Remit to:  Austin AEE
PMB 287
815-A Brazos Street
Austin, TX  78701-2509

For inquiries regarding this invoice please contact:  
Karma Nilsson at 210-353-2815 or knilsson@cpsenergy.com

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