



# Austin and San Antonio Chapter of the Association of Energy Engineers



July 2007



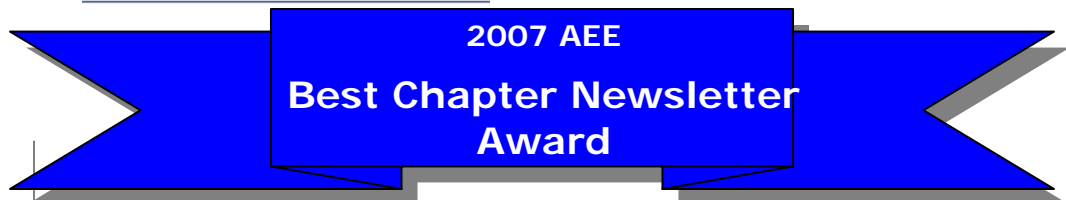
Volume 2, Issue 6

## INSIDE THIS ISSUE:

July Presenter's	2
July Presentation	3
July Meeting Site	4
Presentations/Field Trips	4
Chapter / Meeting Information	5
Join Us!	6

## ENERGY INDEX

- Federal Energy Efficiency & Renewable Requirements  
AEE Online Workshop  
August 3, 2007  
Presented in One 2 Hour Live Online Session  
For Additional Information Contact:  
Valerie Oviatt 2770.925.9633  
[registrar@aecenetr.org](mailto:registrar@aecenetr.org)
  - WEEC 2007 and Expo  
August 15-17, 2007  
Georgia World Congress Center  
Atlanta, Georgia  
For More Information:  
[www.energycongress.com](http://www.energycongress.com)



## A Note From The President

Greetings fellow AEE chapter members and supporters!

Another month has sped by, or maybe it progressed normally and I'm just getting older?

I would like to thank Scott Jarman of Austin Energy for his presentation on the Austin Climate Protection Plan. Unfortunately I was unable to attend but I did hear good comments about the meeting and Scott's ability to "improvise" when faced with having to go old school in presenting with-out the aid of a computer/projector.

If you notice the top of this months news letter, our publication was given the Best Chapter Newsletter award from AEE for 2007! Thanks to my co-editor Frank Thomas and the rest of the Board for providing information for this publication. We are always looking to improve on what we hope is of value to our members.

We have firmed up the calendar for the next few meetings. In August, we will have a presentation from Dub Taylor at SECO on SB12 and HB 3693 and how this legislation will impact Texas. September will feature a field trip to the York chiller manufacturing facility in San Antonio.



Please check our website from time to time for additional information and updates.

This month's presentation is shaping up to be both informative and a good time for one and all. Information about the presentation as well as the host facility can be found in the pages of this publication. I would like to take a few moments to give some additional information on the study that was done and the role that our chapter took in this project. At our December of 2003 meeting, Kristin Heinemeier then of BESL did a presentation on the commissioning process. This process was one that Frank and I had been interested in for some time as we saw first hand the value in this with the number of buildings that are being constructed here at Northside. Also in attendance at this meeting were Dub Taylor and Felix Lopez of SECO. Being familiar with the programs

that SECO had to offer and their interest in improving the efficiency of public school operation, the question was posed, would SECO be interested in funding a study to determine the viability of commissioning in new school construction? Following the meeting, chairs were drawn up around the table and discussion ensued. As a direct result of that AEE presentation, the study came to fruition. It has been previously mentioned in this publication, the importance and value of being not only members but active members. This month's presentation is testament to that very statement!

In closing, I would like to once again thank each and every one of you for your continued support of our chapter. I invite you to be involved, get those friends and colleagues to join us at our meetings to explore and share new and innovative ideas in Energy Engineering!

See you in (Helotes) San Antonio!

Sincerely,

*Bruce*

Bruce Dschuden, CEM  
Chapter President

[brucedschuden@nisd.net](mailto:brucedschuden@nisd.net)

## July Presenters



### *William E. (Dub) Taylor*

Director, State Energy Conservation Office  
Texas Comptroller of Public Accounts

Dub Taylor is the Director of the State Energy Conservation Office (SECO) at the Texas Comptroller of Public Accounts. Under his direction, SECO helps the state make the most of domestic energy, reduce state and local government energy costs and promote cost-effective clean energy technologies. SECO's mission is to maximize energy efficiency while protecting the environment.

Before SECO, Taylor's public sector experience includes six years with the Texas Rail-

road Commission's Alternative Fuels Research and Education Division. Prior to public service, Taylor worked in real estate, property appraisal and property tax consulting.

A native of Dallas and graduate of the University of Texas at Austin, Taylor lives in Austin with his wife and two young children. Taylor currently serves on, and is actively involved in a number of energy/environmental-focused national, state and local organizations.



### *Frank E. Thomas Jr., CEM*

Energy Manager, Northside ISD

Frank is a Certified Energy Manager (CEM). He is currently an Energy Manager at Northside Independent School District, which he has been since 1990. Prior to that, he taught Industrial Technology for eight years at Northside.

His educational background includes a B.S. Industrial Arts - Southwest Texas State University and a M.S. Industrial Technology - University of Texas at Tyler.

Professional organizations include, Association of Energy Engineers since 1991,

AEE Certified Energy Manager 2001. Frank

was Program Director Austin/San Antonio AEE 2003 and also served as President in 2005/06. He has served 11 Years as a member of the SAWS Community Conservation Committee, where he served as Chairman, 2001. He also has served as a member SAWS Rate Advisory Committee 2000 & 2003.



### *Michael Martin, CEM*

Chief Energy Engineer, Brooks Energy and Sustainability Lab

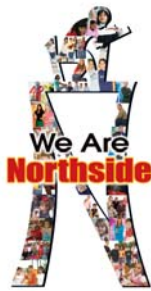
Mr. Martin is a highly qualified engineer with 20 years experience in technical and management positions in design, construction, operation and maintenance, and contract oversight. Background includes M.S. Degree in Engineering Management and B.S. in Mechanical Engineering. Currently a Ph.D. candidate in Environmental Engineering.

With 23 years service in the U.S. Air Force in both the special munitions and engineering fields, Mr. Martin transitioned into the civilian sector accepting a position as Director of Maintenance and Operations for a public school district in Washington. Moving back to Texas A&M University to work his doctorate, Mr. Martin was hired by the Texas Engineering Experiment Station as a research engineer to work both energy and environmental projects for the university.

Mr. Martin advanced to the position of senior energy engineer, responsible for the direction and accomplishment of assigned projects for the Department of Defense, the State of Texas, and numerous private entities. Mr. Martin also drafts and reviews environmental assessments for the U.S. Air Force, researching current and potential areas of

concern for mission critical air operations in the southeastern United States.

Mr. Martin's background includes mechanical/environmental engineering, HVAC, control systems, building energy management, fire and water systems, hazardous materials management, asbestos management planning, pollution prevention programs, and environmental assessments and audits. His experience includes capital projects to \$15 million in scope, and facilities engineering for large and remote sites. Mr. Martin has managed budgets for up to \$46 million annual capital and O&M projects. Mr. Martin is an AEE certified energy manager and a full professional member of the Building Commissioning Association.



**“BOTH NISD AND SECO WERE INTERESTED IN THIS STUDY AS A METHOD TO DETERMINE IF CX WOULD PROVE BENEFICIAL IN ADDRESSING ISSUES COMMON TO ALL NEW CONSTRUCTION”**



The July presentation “The Viability of Commissioning in New School Construction” will provide insight into the study conducted by Northside Independent School District (NISD) in conjunction with Texas Engineering Experiment Station (TEES) and the State Energy Conservation Office (SECO). Building Commissioning (Cx) is defined as the systematic application of design review and assistance coupled with construction monitoring, detailed field testing, verification, operation effectiveness, validation, and documentation. Both NISD and SECO were interested in this study as a method to determine if Cx would prove beneficial in addressing issues common to all new construction such as:

- Sustainability
- Utility Costs
- Energy Consumption
- Facility Effectiveness
- Maintenance Issues

The study at NISD took a baseline facility, Blattman Elementary School which

## July Presentation



opened in 2003 and through a process of data collection established a matrix that would provide an “apples to apples” comparison with Krueger Elementary School which began design in 2003. The A/E firms used in the Blattman project were also used for the Krueger project in order to maintain design concept integrity.

One of the big questions was what if any improvement could come from the process. NISD employs 38 people in the Facilities and Operations Department which is a mix of professional engineers, registered architects, project managers, construc-

tion inspectors for all trades and as well as CADD operators. The entire construction process is watched over and monitored closely...would there be any improvement that Commissioning could bring to the table to a district such as Northside?

To get the answers to this question as well as an in depth study of data and modeling used for the project, please make plans to attend the July 24th meeting at O'Connor High School. Come and enjoy the presentation as well as a great Mexican Buffet compliments of our sponsors!

## Thank You Sponsors

Thank you to our sponsors of this presentation. Your support is deeply appreciated and valued. If you are attending our July 24th meeting, please take a moment to thank the following:

Lunch:

- Trane San Antonio
- Engineering Economics, Inc.
- Austin/San Antonio AEE

Refreshments:

- CPS Energy



## Presentations/Field Trips 2007

The following speakers, presentations, and field trips are scheduled for upcoming meetings:

July: New School Commissioning Study Report - BESL/Frank Thomas - NISD San Antonio

August: Texas Energy Legislation Update - Dub Taylor SECO

September: York Manufacturing Plant Tour - San Antonio

October: Wind Energy in the Lone Star State (*Tentative*)

Do you have any ideas for future topics, speakers, or field trips? Please contact Linda Rickard  
[Linda.Rickard@AustinEnergy.com](mailto:Linda.Rickard@AustinEnergy.com)



### O'Connor HS Multi Purpose Building

This month's meeting will be held at O'Connor HS in Helotes Texas. Helotes is a small community (pop 4,285) northwest of San Antonio that heralds itself at the gateway to the Texas Hill Country. Additionally it represents the geographic center of the Northside Independent School District. The high school was opened in 1998 with the multipurpose building coming as part of an addition to the CE

Vickery Agriculture Center in 2004. The agriculture center is home to all students enrolled in agricultural studies from across the District. The FFA chapter at O'Connor is one of the largest in the country. Two additional livestock barns/parking have recently been completed. As you enter the campus, follow signs to the rear of the campus to park and look for the building pictured!

## Understanding Engineers...Take Six

A mathematician, a physicist, and an engineer were all given a red rubber ball and told to find the volume.

The mathematician carefully measured the diameter and evaluated a triple integral.

The physicist filled a beaker with water, put the ball in the water, and measured the total displacement.

The engineer looked up the model and serial numbers in his red-rubber-ball table.



### Newsletter Comments? Contact:

Bruce Dschuden at [brucedschuden@nisd.net](mailto:brucedschuden@nisd.net)

Frank Thomas at [frankthomas@nisd.net](mailto:frankthomas@nisd.net)



### 2007 Officers

Bruce Dschuden	President	<a href="mailto:brucedschuden@nisd.net">brucedschuden@nisd.net</a>
Frank Thomas	Past President	<a href="mailto:frankthomas@nisd.net">frankthomas@nisd.net</a>
Mark Krawczyk	Vice President	<a href="mailto:Mark.Krawczyk@freescale.com">Mark.Krawczyk@freescale.com</a>
Karma Nilsson	Treasurer	<a href="mailto:knilsson@cps-satx.com">knilsson@cps-satx.com</a>
Felix Lopez	Membership (Austin)	<a href="mailto:felix.lopez@cpa.state.tx.us">felix.lopez@cpa.state.tx.us</a>
Brian Keller	Membership (San Antonio)	<a href="mailto:Brian.Keller@eeiengineers.com">Brian.Keller@eeiengineers.com</a>
Frank Richards	Communications	<a href="mailto:Frank.Richards@austinenergy.com">Frank.Richards@austinenergy.com</a>
Robert Spiegel	Webmaster	<a href="mailto:Rspiegel@ieee.org">Rspiegel@ieee.org</a>
Linda Rickard	Programs	<a href="mailto:Linda.Rickard@AustinEnergy.com">Linda.Rickard@AustinEnergy.com</a>
Sid Rodriquez	Scholarships	<a href="mailto:isidro.rodriquez2@austinenergy.com">isidro.rodriquez2@austinenergy.com</a>

### *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

*We're On The Web!!*

[www.txaee.org](http://www.txaee.org)

### July Chapter Meeting

July 24, 2007

"The Viability of Commissioning In New Public School Construction"

Northside Independent School District

O'Connor High School

Multi Purpose Building

Helotes, TX

210.336.9705

(See WebSite for Map)



# MEMBERSHIP INVOICE



Austin/San Antonio Chapter of the Association of Energy Engineers

<http://www.txaee.org>

\_\_\_\_\_  
Date

**Local Chapter Dues for 2007**

**\$ 20.00**

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 4<sup>th</sup> 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.txaee.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:  
Felix Lopez (Austin) at 512-463-1080 or [felix.lopez@cpa.state.tx.us](mailto:felix.lopez@cpa.state.tx.us) or  
Brian Keller (San Antonio) at 210-496-3100 or [brian.keller@eeiengineers.com](mailto:brian.keller@eeiengineers.com)*

---

**Amount Paid** \_\_\_\_\_  
**Method of payment** \_\_\_\_\_  
**Check Number** \_\_\_\_\_  
**Payment received by** \_\_\_\_\_  
Name \_\_\_\_\_ Date \_\_\_\_\_