



Austin and San Antonio Chapter of the Association of Energy Engineers



October 2006



Volume 1, Issue 9

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ENERGY INDEX

- Department of Energy
Building Energy Codes

www.energycodes.gov

- Solar San Antonio

www.solarsanantonio.org

- Watt Watchers of Texas

www.wattwatchers.org

KUDOS

The North Texas Chapter of the Association of Energy Engineers was given the Chapter of the year award at WEEC 2006. Below is a picture of chapter president, Michael Langton accepting on the chapters behalf.

CONGRADULATIONS!



A Note From The President

Greetings fellow AEE chapter members and supporters! It seemed like summer would never end, but now there is a pumpkin on the porch and the holidays are coming at 90 miles an hour. It is time to shift in to the heating season and a different set of energy issues. Don't forget to have your heating units checked out for safety and efficiency.

Bruce (my partner here at Northside ISD and our chapter VP), and I recently attended the Texas Energy Smart Schools Action Plan Conference 2006. We are very aware of the potential savings in school facilities. The conference was worthwhile and informative. It was hosted by Solar San Antonio. Mr. William (Bill) Sinkin is the Chairman and solar energy behind Solar San Antonio. San Antonio owes Mr. Sinkin a debt of gratitude for so many things. Solar San Antonio is his vehicle to save our natural resources for future generations. Mr.



Sinkin I want to thank you for your vision, leadership and citizenship!!!

I want to thank Mr. Brian Kingman of Schneider Electric for last month's presentation of the Energy Profiler Online product and related technologies. Energy Profiler Online is the industry's leading load data visualization and analysis application. The product is a very powerful tool in managing energy usage. If you would like Brian's contact information, checkout last month's newsletter or contact me.

I am looking forward to our field trip to the J.K. Spruce Coal Fired Power Plant, hosted by CPS Energy. I have been there

once before and it was a great tour. For more information please refer to AEE newsletter and/or visit online.

October is Energy Awareness Month. Department of Energy's, Federal Energy Management Program's (FEMP) 2006 Energy Awareness Month theme is,

Energy Independence Depends on US-Choose Wisely, Use Wisely

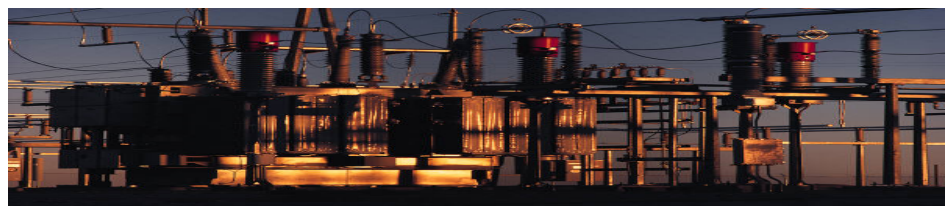
As always I thank our AEE members and supporters for all that you do to make a positive difference. If you are not an AEE member please consider becoming one. The challenge to become more energy efficient is growing very fast. Together we can meet the challenge.

See you here in San Antonio.

Frank Thomas, CEM

Chapter President

frankthomas@nisd.net



October Field Trip

(Continued from page 2)

ing. The rail cars which contain in excess of 120 tons of coal are dumped in an operation that has to be seen to believe! The coal is then transported on a hooded conveyor system to be stored. The entire system is designed to minimize dusting and provides both storage and distribution options to the two plants. Both plants are capable of burning 814 tons of coal per hour or 13.5 tons per minute!!

Generation - The coal is pulverized into a talcum like power and fed into the boiler furnace via the coal silo's. You will be able to view the "fireball" produced in boiler from an observation port several stories up on the plant. This heat allows the boiler to create 3.3 million pounds of 1,005 degree (F) steam at 2,400 psi. This steam rotates the generator turbine at 3,600 rpm which can result in the production of almost 600 mega watts, or for those of you into horsepower...that's 804,000 HP! All water used for cooling in the operation comes directly from Calavaras Lake.

The entire operation is controlled and monitored through the control room which is the "brains of the operation"

Environmental - The environmental impact of the plant is carefully monitored from the handling of dust in the coal delivery system, to the handling of emissions and by products of the combustion process. The J.K. Spruce Plant's state-of-the-art design places CPSE as one of the leaders among utilities in protecting the environment. When coal is used as a fuel to generate electricity, there are several combustion by products such as nitrogen oxides, fly ash, bottom ash, and sulfur dioxide. The sulfur compounds are removed via a scrubber system that reduces emissions by at least 70%. The fly ash is collected via the two baghouses that remove approximately 40,000 pounds per hour from the flue gas. The collected material is then recycled through a company which uses it as a concrete additive. Some 200 tons of fly ash went into the 80,000 cubic yards of concrete used to construct the Alamodome. The bottom ash is an excellent filler for bricks and is used as

a substitute for sand. A mixture of fly and bottom ash makes an excellent road base material and is used extensively on CPSE power plant roads. Approximately 99 percent of combustion by-products were recycled during the 1999-2000 fiscal year.

Additional Tour Information

Please be reminded that you must have RSVP'd for this event as only 30 participants are allowed on the tour. A waiting list has been created in case there are any cancellations. It is advised that you wear close toed, comfortable shoes and pants. The charter bus provided by CPSE will be leaving the Northside Activity Center located at 7001 Culebra and IH 410 at 9:30am. You will be receiving an e-mail with additional information. Upon our return, there are some restaurants in the immediate vicinity for those who would like to eat lunch together and discuss the tour and other energy related issues!!

Fly Ash Bagogue



J. K. Spruce Control Room
The Brain of the Power Plant



LEARN MORE ABOUT



Presentations/Field Trips 2006

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

October: CPS Energy Coal Plant Tour

November: Infrared Imaging Solutions

December: End of Year Luncheon/Program

January: Energy Management Methods

Do you have any ideas for future topics, speakers, or field trips? Please contact Bob Spiegel Rspiegel@ieee.org or

Understanding Engineers...Take Nine



A man is flying in a hot air balloon and realizes he is lost. He reduces height and spots a man down below. He lowers the balloon further and shouts, "Excuse me, can you tell me where I am?"

The man below said, "Yes, you're in a hot air balloon, hovering 30 feet above this field."

"You must be an engineer," said the balloonist.

"I am," replied the man. "How did you know?"

"Well," said the balloonist, "everything you have told me is technically correct, but it's of absolutely no use to anyone."

The man below said, "You must be in management."

"I am," replied the balloonist, "but how did you know?"

"Well," said the man, "you don't know where you are, or where you're going, but you expect me to be able to help. You're in the same position you were before we met, but now it's my fault."

Newsletter Comments? Contact Bruce Dschuden at brucedschuden@nisd.net



2006 Officers

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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

October Chapter Meeting

October 24, 2006

"JK Spruce Power Plant Tour"

CPS Energy San Antonio, TX

RSVP Only





Austin/San Antonio Chapter of the Association of Energy Engineers

<http://www.txaee.org>

Local Chapter Dues for 2006: \$ 20.00

Date _____

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.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.

For inquiries regarding this invoice please contact Isidro Rodriquez at 512-322-6333 or isidro.rodriquez@austinenergy.com

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

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