

SCANFAX

February 1998

Volume 50, Issue 2



IEEE

A publication of the
Institute of Electrical & Electronics Engineers
— Chicago Section —

1997

The Year of Electric Deregulation in Illinois

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SCANFAX

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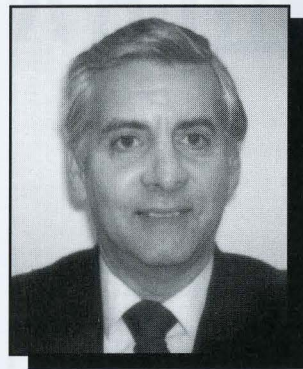
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Chairman's Message



Irwin C. Smiley, P.E.

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Chairman*

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The IEEE Executive Committee hopes that you were pleased with the new SCANFAX. Remember, this publication depends on each and every member's support!

As you know, IEEE is a grass roots organization. You, the members make it work through your dedication and effort. If you are not doing so already, please make a point of becoming active in technical chapters and/or the executive committee, attending chapter meetings and recruiting new members for IEEE. We need your support.

The month of February brings us Engineers Week. This week always falls around February 22, in honor of George Washington, who is referred to by many as "America's First Engineer." Since George Washington's time there have been many technological breakthroughs. In fact, "There has been more information produced in the last 30 years than during the previous 5,000," according to Richard Saul Wurman, Information Anxiety.

To celebrate Engineers Week, the engineering profession has special displays and programs designed for college, high school and grade school students to encourage them to take math, science and engineering courses. Some of the programs are combined with dinners and/or lunches.

The Illinois and National Society of Professional Engineers, (ISPE) and

(NSPE), have a program called MATH-COUNTS. This program is a mathematics competition for students in grades 6, 7 and 8. Students enter the competition at the state level, with the state winners going on to national competition in Washington D.C. The national winners receive cash scholarships and have the opportunity to meet the president of the United States. Please consider volunteering your time for this program. Those interested in helping with local competition can call the ISPE Chicago office (312-332-0107) for names of ISPE MATH-COUNTS chairmen in your area.

Along with encouraging these students to be active in math, science and engineering, we also want to emphasize to them the importance of being involved in community activities. This involvement helps them to become well-rounded individuals. They learn networking skills that will be valuable to them throughout their lives.

Our IEEE society is a major source of networking for all of us. The networking expands our technical knowledge and increases our contacts, while providing us with the opportunity to meet interesting fellow engineers. Networking makes us more valuable in our current and future work places.

Please call me if you would like more information regarding volunteer opportunities at (312) 938-0300. As always, I am open to suggestions and feedback. ■

Chicago Area National Engineers Week Luncheon

Friday, February 27, 1998

**Ramada-Congress Hotel
520 S. Michigan Ave.
Chicago**

**Registration and opening
reception — 11:30am
Lunch — noon
Festivities and keynote
address — 12:30pm**

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1997

The Year of Electric Deregulation in Illinois

By Christine M. Sloat, P.E.

In the early 1990s, after two decades of deregulating airlines, banks and gas utilities, the U.S. Congress focused its attention on electric utilities. In 1992, federal legislation, the National Energy Policy Act (NEPA), opened the electric utility industry to increased competition at the wholesale level... and empowered states with the authority to develop retail competition. NEPA allowed transmission access, also known as retail wheeling... an unprecedented allowance in American history. With the door opened by the NEPA legislation, the physical act of allowing electric power to be delivered across transmission systems regardless of who owns the electric power, or the transmission system, became a legal reality. The end result is that transmission access will lead to competition.

On December 16, 1997, Governor Jim Edgar signed three bills into law creating the state of Illinois' electric deregulation package. The "package" includes: HB362, the core electric deregulation legislation; HB1817, legislation addressing certain property valuations associated with the accelerated depreciation of electric utility facilities; and SB56, legislation identifying specific rate reductions for Central Illinois Light Company (CILCO) electric customers and earning allowances for the same company.

In a historical sense, five years is a very short period of time. However, for Illinois stakeholders (utilities, manufacturers, business groups, etc.), those five years represent hard work, heartburn and a very long road. For 1998 and beyond, deregulation is law... what events brought Illinois to this cross road?

History of Deregulation in Illinois

The issue of deregulation came to the forefront on a state wide basis early in 1995, when Illinois Power and Illinois Industrial Electric Consumers, a group of large industrial electric consumers, developed a negotiated agreement on how they believed electric competition should be implemented in Illinois. The agreement was attached, as an amendment, to Senate Bill 1058 and introduced to the Illinois General Assembly in March of 1995. The bill became known as Energy Choice 2000, and received much debate. Interestingly, at the time of the introduction of SB1058, Illinois Power was one of the only proponents of electric deregulation among utilities in the state.

Although the legislation stalled, the process resulted in the general Assembly passing Senate Joint Resolution 21, which created a Joint Committee of both the Senate and House Environment and Energy Committees. The Joint Committee on Electric Utility Regulatory Reform was charged with studying retail wheeling proposals for industrial, commercial and residential customers. A subgroup of the Joint Committee, the Technical

Continued on page 4.

Advisory Group (TAG), was developed as a clearinghouse for technical information.

With an issue as large and complex as electric deregulation, or "wheeling," it is not surprising that it took 18 months for the Joint Committee to produce a final report on its findings. The TAG group heard from over 100 participants, as negotiating sessions and public hearings gave rise to discussion on the many concepts involved in deregulation. However, the final report fell short in that the Joint Committee was unable to reach a consensus on a legislative proposal.

While the Joint Committee on Electric Utility Regulatory Reform was garnering information and debating the issues, the Illinois Commerce Commission (ICC) heard proposals for two pilot deregulation programs from Illinois Power (IP) and Central Illinois Light Company (CILCO). Despite objections from Commonwealth Edison Electric Utility (ComEd) and the Illinois Citizen Utility Board (CUB), the ICC approved both pilots in March of 1996. Illinois Power's program was limited, with only 20 of its largest industrial customers participating. The CILCO program (called "Power Quest") was wider in scope, covering large industrials, three residential communities and a shopping mall.

Late in 1996, the Coalition for Responsible Electric Choice presented a legislative proposal on deregulation, formally introduced as HB3776, which proposed direct access experiments beginning in 1998. Coalition members included ComEd, Illinois Power, the Illinois Manufacturers' Association, and other investor-owned utilities and business groups. This proposal also addressed an issue of great concern to utilities... stranded costs. These costs are incurred by electric utilities to meet Regulatory Compact obligations, which require the utilities to meet current and future load demand. In the past, utilities made investment decisions based on the understanding that the old regime of regulation would last well into the future. The utilities ensured sufficient power generating capacity by building addition-

al power plants, whose debts are recovered through a regulated rate of return. The coalition's legislation proposed 100% recovery of stranded costs through the process of a "transition charge." The transition charge would be assessed to all customers who choose an alternate energy provider, and would be applicable during the first five years after a customer became eligible for direct access. Governor Jim Edgar opposed this particular deregulation legislation.

At the same time as the introduction

of HB3776, another coalition was formed—the Consumer Choice Partnership. Coordinated by CILCO, the partnership also included industrial consumers and some trade associations. The position of the partnership was that choice of electric supplier begin in 1998 for all classes of consumer, and that a provision for limited stranded costs recovery be included in any competitive process. The legislation supporting the Customer Choice Program, introduced into the Illinois House of Representatives, called

for stranded costs to be approved on a case-by-case basis, and that utilities with rates higher than the Midwest average would be required to lower rates over a three year period.

During the same timeframe, another bill (HB1998) was introduced that would have opened all customers of investor-owned utilities to the competitive market beginning in May of 1998. A initial 10% rate decrease would be followed by future decreases. Unlike other "choice" legislation, HB1998 was considered

compromise legislation in that all consumers would remain with their present supplier, and transmission and distribution systems would remain regulated, with electric service providers required to register with the Illinois ICC.

With the numerous deregulation proposals on the table, Governor Edgar appointed a three member advisory committee in February 1997 to assist him in reviewing options. The committee concluded the review with two primary recommendations: that utilities be granted a

reasonable opportunity to recover stranded investments, and a transfer of transmission assets to an independent system operator. Subsequent to this report, Senate Bill 55 was introduced late in the spring legislative session. SB55 was touted as "the" deregulation bill, and received much scrutiny and amendment activity in the short time remaining before adjournment of the General Assembly.

Senate Bill 55

The spring legislative session saw the Illinois House of Representatives develop a new committee known as the Committee on Electric Utility Deregulation. A bi-partisan committee, their charge was to continue negotiations relative to deregulation in a public forum. The Senate, too, developed a subcommittee of the Senate Environment and Energy Committee to continue deregulation negotiations. Like its House counterpart, that committee publicly stated that electric deregulation would be a reality in 1997. However, concerns remained on both sides that more needed to be done to protect small consumers.

The majority of the amendments attached to SB55 originated in the House Deregulation Committee, and were a direct result of extended negotiations among stakeholders and legislators. SB55 provided that customer choice be phased-in for large industrial loads in 1999. By 2002, all Illinois public utility consumers would have electric supplier choice available to them. Rate reductions for residential consumers would begin in 1998, with potential additional reductions in future years. As for stranded costs, the legislation proposed a "lost revenues" methodology to determine the amount of transition costs recovered from customers, "sun-setting" in 2008. The "lost revenue" methodology contained a self correcting formula and the use of verifiable data, not estimates, for cost recovery as a means of protecting consumers.

SB55 also contained provisions relat-

2 LOCATIONS

CAREER FAIR

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Mon & Tues, February 2 & 3
3-7pm both days
Embassy Suites Hotel
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Wed, February 4 • 3-8pm
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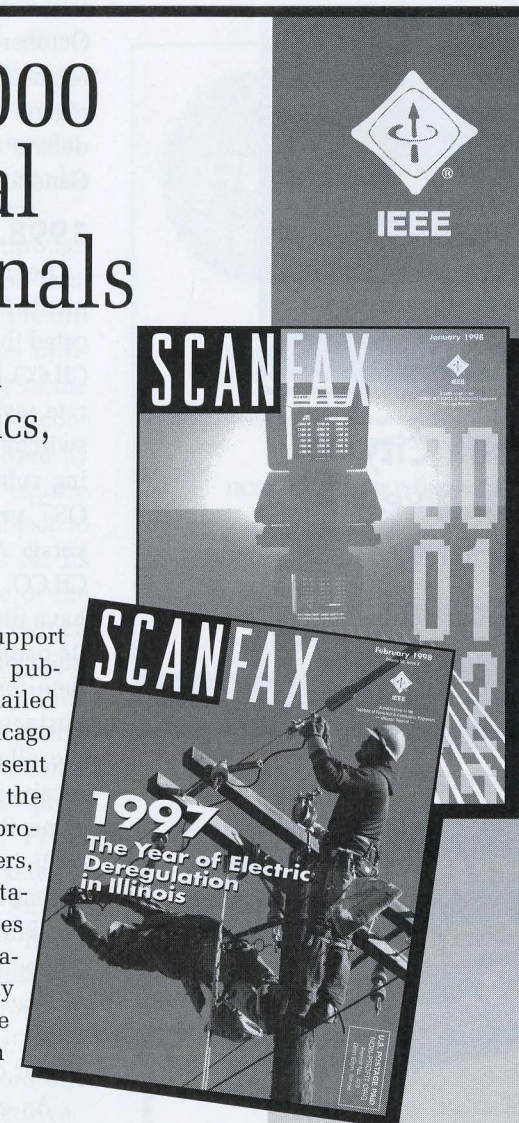
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ing directly to Illinois' electric cooperatives and municipal electric utilities. Those provisions allowed the current state of the law concerning a cooperative to remain the same, if an individual cooperative so elected, and gave authority to maintain present service area boundaries. All control regarding a cooperative would continue to belong to the cooperative's board. SB55 also made clear that these provisions did not conflict with the state's policy against duplication of facilities.

The language also gave a cooperatives member-elected board authority to make two types of elections. The first type of election authorized one or more customers of a cooperative's system to choose an alternative power supplier for a specified period of time. In the second, a board could authorize an election for the cooperative to opt-in to competition and compete for customers outside of its present service territory. The cooperative would continue to provide exclusive distribution facilities to existing and

future customers within its present service territory, regardless of a vote for competition.

Subsequent to its release from the House Committee on Electric Utility Deregulation, the full Illinois House passed the measure on May 30, 1997, calling for a 10 percent rate reduction in 1998, followed by a 5 percent reduction in 2000. All consumers would be able to choose suppliers by 2002. The Illinois Senate, citing a need for further review, was unable to consider the bill prior to its adjournment on June 1, placing the issue high on the agenda for the October session. Stranded cost recovery remained a contentious issue with regard to the bill and garnered heated debate during the months that the General Assembly was in recess.

1998... And Beyond

Revisiting retail wheeling experiments in the summer of 1997, data indicated that customers who switched from CILCO to another supplier experienced rate savings. Most of the customers that switched went to QST, a power marketing subsidiary of CILCO. However, the QST program was not without controversy. As an unregulated subsidiary of CILCO, critics charged that QST may have illegally obtained information from its parent company to successfully compete for, and ultimately win, customer business. CILCO representatives denied the allegations, pointing out that QST received the same information, at the same time via a fax program, as other participants. The CILCO program offered attractive rates, including 1.9 - 2.5 cents per kilowatt hour to its eight industrial customers, 4-6 cents/kWh for commercial customers and 6 cents/kWh for residential customers, who purchased power by aggregating.

As expected, the fall legislative session saw continued debate with regard to deregulation issues. SB55 did not make the final cut however, but was replaced with House Bill 362, a compromise bill much like its highly debated predecessor. HB362 passed both the Illinois House and Senate and was forwarded to the governor for signature.

With the swipe of a pen, Governor Edgar pushed Illinois to the forefront as a leader in the national spectrum of deregulation.

The new law provides residential customers with a 15 percent rate cut beginning in August of 1998, with an additional 5 percent rate cut in May 2002. All Illinois customers will be able to choose an electric provider by the time of the second rate cut. HB362 also provides for a number of consumer protections beyond rate cuts and phase-in periods. Utilities will still be obligated to serve residential and small business customers. Also, the bill contains provisions regarding consumer education on deregulation and choice, as well as protection against "slamming," a phenomenon experienced as a result of deregulation of the communication industry.

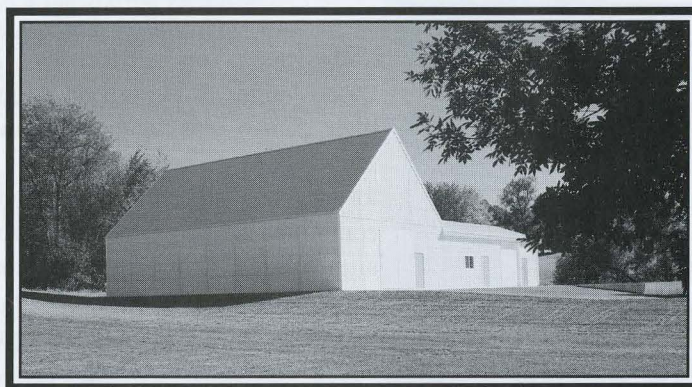
Stranded costs are addressed through a process of collection of transition fees, with a sunset of 2006. However, the bill is still considered costly by some utilities. In a press release on the day of the signing, Illinois' ComEd expressed concern over financial burdens imposed by the new law. As a result of the legislation, the utility is no longer subject to regulatory accounting principles for its generating business. At the time of the writing of this article, ComEd (which provides service across the northern one-fifth of Illinois, serving 3.4 million customers) anticipates a one-time charge to earnings of \$850 million to \$950 million by the end of 1997. In its press release, utility vice president, Frank Clark stated that "the 20 percent rate cut and shorter transition period for stranded cost recovery... will impose a financial burden on ComEd that will result in nearly \$375 million in lost revenue annually." Clark also added that the utility will be forced to operate more efficiently, in order to remain competitive.

The two companion bills signed into law along side HB362 addressed specific implementations of the deregulation law. SB56 permits Central Illinois Light Company (CILCO) to phase in the second 5 percent residential rate cut, as identified in HB362, over a period of five years. The second 'tag' bill, HB1817,

addresses property tax issues, freezing the depreciation process for nuclear plants over the next three years. The measure was included as a means to protect taxing districts from immediate revenue loss.

The Electric Service Customer Choice and Rate Relief Law of 1997 will begin a process of crumbling the electric utility monopoly in Illinois. Although many view this ground breaking legislation as a significant stride toward competition, many groups are still concerned with its implementation, as well as potential

shortfalls in certain vital areas. As this article was written in late December, we have not had an opportunity to investigate the bill in its entirety, nor have we been able to garner comment on specific concerns. We hope to address the implications of the new law, and future revisits of the law's provisions, in an upcoming article. If you have comments on this bill, or would like to refer a contact to us, please e-mail Scanfax at scanfax@ieee.fnal.gov. The information will be passed on to the author. ■



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February 22-28, 1998

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The theme for this celebration:

"Engineers—Turning Ideas into Reality"

National Engineers Week was first organized in 1951 by the National Society of Professional Engineers to help the public understand and appreciate the engineering profession.



IEEE Chicago Section

ANNUAL AWARDS BANQUET

Saturday, April 25, 1998

Westin O'Hare Hotel, River Rd. & Higgins, Rosemont, IL

Cocktails: 6:00 pm

Hot Hors d'oeuvres
Complimentary Cocktail
Dinner Music

Donations:

\$37.50 per person

Dinner: 7:00 pm

Appetizer, Salad,
Wine, Main Entree,
Coffee and Dessert

AWARDS

IEEE Fellow Awards
IEEE College/University
Student Chapter Awards

You may wish to form a group for a table of 10.

FOR TICKET INFORMATION CONTACT:

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Ticket Chairperson
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ANNUAL AWARDS BANQUET

Our section's 1998 Annual Awards Banquet is planned for Saturday evening, April 25th, 1998 at the Westin O'Hare Hotel, River Road and Higgins, Rosemont, Illinois.

Right now, we still don't know how many new IEEE Fellows we will be honoring at this event — we promise to tell you as soon as we find out.

Due to the higher cost for the dinners we have to raise our banquet ticket price slightly from \$35.00 to \$37.50. But, we want to encourage our IEEE Student Branch/Chapter Members to attend by offering them reduced price tickets (at \$30) for themselves and their friends, spouses, or "significant others." ■

WANTED!!

We need more members for our Dinner Committee to help with the arrangements, as well as soliciting support (by telephone calls) from our sponsors so we can keep the ticket cost very low. Recent graduates are particularly welcome, but extensive professional experience will not be deemed a detriment! Please send e-mail to j.feitler@ieee.org or call our IEEE office at 800-898-4333. ■

Joe Feitler

Publicity and Ticket Chair,

1998 Awards Banquet Committee

Calendar of Events

DATE	EVENT
February 10, 1998	IEEE Chicago Section EXECUTIVE COMMITTEE MEETING
February 11, 1998	Power Engineering Society THE HISTORY AND FUTURE OF UNDERGROUND DISTRIBUTION SWITCHGEAR
February 24, 1998	IEEE Fox Valley Subsection ELECTRICAL UTILITY DEREGULATION: WHAT DOES IT MEAN TO ME?
February 25, 1998	Washington Awards Dinner JOHN R. CONRAD TO RECEIVE WASHINGTON AWARD
March 25, 1998	IAS/IES APPLICATION CONSIDERATIONS FOR LOW VOLTAGE VARIABLE SPEED DRIVES
April 22, 1998	IAS/IES and Northwest Subsection APPLICATION CONSIDERATIONS FOR HIGH VOLTAGE VARIABLE SPEED DRIVES
April 25, 1998	IEEE Chicago Section ANNUAL AWARDS BANQUET
May 13, 1998	IAS/IES STAND-BY, CO-GENERATION, AND PEAK SHAVING POWER APPLICATIONS

POWER ENGINEERING SOCIETY

The History and Future of Underground Distribution Switchgear

Wednesday,
February 11, 1998

LUNCHEON MEETING

Robert B. Hardin, Marketing Engineer, S&C Electric Company

About the topic:

In the mid 20th century, the advent of underground distribution brought a whole new field of challenges and possibilities. As this field evolved, so too did the equipment used for switching and protection of underground systems. The reliability, safety and aesthetic benefits of UD systems are becoming increasingly important in today's competitive electric utility industry. New technology and design concepts are allowing UD switchgear to exploit these benefits now more than ever before. This talk will provide a brief history of UD switchgear and review the issues that will play a critical role in determining the shape of UD switchgear today and in the future.

About the speaker:

Robert Hardin joined S&C Electric Company in 1991 as a Marketing Engineer for Pad-Mounted Gear and Metal Enclosed Switchgear. He received a BS in Industrial Engineering from the

University of Illinois. Robert has served as S&C's representative to the Electric Section of the National Fire Protection Association and National Electrical Code since 1994. He currently is working in S&C Business Development Group handling a variety of responsibilities for VISTA and Metal-Enclosed Switchgear.

Place:

Chicago Bar Association, 321 South Plymouth Court (near Jackson & Dearborn), Chicago, IL 60604

Time:

Social: 11:30 am
Lunch: 12:00 pm
Presentation: 12:15 pm

For reservations:

Lunch tickets can be purchased in the lobby (\$10.50). Please call the IEEE Business Office at (800) 898-IEEE to make your reservation.

IEEE
FOX VALLEY
SUBSECTION

Electrical Utility Deregulation: What does it mean to me?

Tuesday,
February 24, 1998

WASHINGTON
AWARDS
DINNER

Mr. John R. Conrad to Receive Washington Award

Wednesday,
February 25, 1998

DINNER MEETING

Steve Lesniak, ComEd

About the topic:

Electrical deregulation has received quite a bit of attention so far as the technical side of the issue is concerned, but another question has been left unanswered: How does deregulation affect us concerning cost and quality of service? This talk will focus on the effects of electrical deregulation on commercial and industrial companies in Chicagoland and what ComEd is doing in preparation.

About the speaker:

Steve Lesniak is Account Manager for ComEd. He holds a BS and MS in General Engineering and an MBA from the University of Illinois at Urbana-Champaign.

Location:

Dreisilker Electric, 352 Roosevelt Road, Glen Ellyn, IL 60137

Time:

Networking/Social: 6:30pm.
Presentation: 7:00pm.
Tour of Facility: 8:15pm.

Directions:

Dreisilker Electric Motors, Inc. is located on Roosevelt Road on the north side just east of Lambert and west of I-355 and Main Street. Please park on the east side parking lot and enter the east door on the rear building. The presentation will be in the upstairs conference room.

For reservations:

Please call the IEEE business office at 1-800-898-IEEE (4333).

For more information:

Contact Howard W. Penrose at 630-469-7510 or h.penrose@ieee.org.

AWARDS DINNER

Mr. John R. Conrad, Chairman of the Board of Chicago-based S&C Electric Corporation has been elected to receive the 1998 "WASHINGTON AWARD," one of engineering's prized national honors. Under Mr. Conrad's leadership since 1945, S&C Electric has become a world leader and innovator in the design and manufacture of high-voltage switching and protection equipment. The IEEE has awarded John Conrad the "Award of Excellence in Power Distribution Engineering."

The award will be presented to Mr. Conrad during National Engineers Week at a banquet to be held Wednesday evening, February 25, 1998 at the Union League Club of Chicago. The IEEE is a sponsoring society of this annual event. The Chicago Section, in showing support of this prestigious award, is arranging tables for our members so we can be seated together. For reservations please phone Dennis Lamont at (847) 398-4510.

Location:

Union League Club, 65 W. Jackson Blvd., Chicago, IL 60604

Time:

Social: 5:30pm.
Dinner: 7:00pm.

For reservations:

Call Dennis Lamont at (847) 398-4510 to make your reservations. Tickets are \$60.00 each.

IAS/IES

Application Considerations for Low Voltage Variable Speed Drives

Wednesday,
March 25, 1998

JOINT MEETING WITH NORTHWEST SUBSECTION:

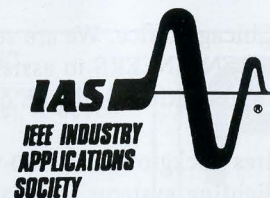
Application Considerations for High Voltage Variable Speed Drives

Wednesday,
April 22, 1998

Stand-by, Co-generation, and Peak Shaving Power Applications

Wednesday,
May 13, 1998

IAS/IES DINNER MEETINGS



About the dinner meeting format:

Each dinner meeting features an informative presentation on an electrical or electronic application topic of interest to the members of the organization, as submitted to the Executive Board. The topics are presented by industry professionals as application experts in that chosen field. The presentations are followed by open forum discussions on the topic. The dinner meetings start with an information social hour where individuals can socialize with fellow industry professionals followed by the dinner and the presentation.

Location:

Como Inn, 564 N. Milwaukee Ave, Chicago, IL

Directions: The Como Inn is located on Milwaukee Avenue just off the expressway on the east side of 90/94.

Time:

Social: 5:30pm.
Dinner: 6:00pm.
Presentation: 7:00pm.

For reservations:

Cost: \$20 includes the presentation and your choice of chicken or pasta for dinner. Please call the IEEE Business Office at (800) 898-IEEE or (630) 575-8045 with your entree preference.

NOTE: Attendance at IEEE Technical Meetings is acceptable as one PDH (Professional Development Hour) per meeting, where continuing education is required for renewal of the P.E. licenses.

NOTE: Elections for the IEEE, IAS/IES Executive Board will take place in June. We encourage all interested parties to contact the IEEE Business Office for details.

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Chicago Section Executive Committee Meeting

February 10, 1998 @ 7:15pm

DeVry, 1221 N. Swift Rd., Addison, IL

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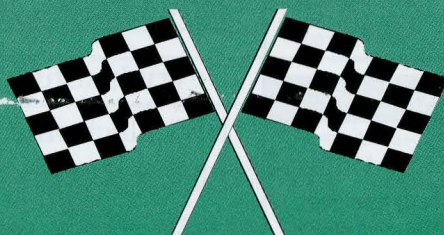


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