

The Beacon

Happy Holidays!

The Monthly Publication of the Maine Section, IEEE www.ieee.org/maine

Chairman's Message

Welcome to the Maine Section IEEE e-mailing List!

by Brian Conroy, Acting Chair

November, '00
Volume 10
Number 2

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Announcements

A couple of years ago The Maine Section of IEEE started asking our members if they would sign up to receive our newsletter, the *Beacon*, via e-mail notification. We send subscribers an e-mail message that the latest issue is available and provide a hypertext link to the issue out on the Internet.

We've been operating with the electronic version of the *Beacon* for two years and it has been working out great! Our electronic subscribers have enjoyed receiving the *Beacon* two weeks before our paper subscribers. Also, our electronic subscribers can view or print the document in either html for pdf formats.

The electronic version of the *Beacon* has several advantages over the paper version. The biggest advantage is more timely information on meeting announcements and other time-sensitive materials. As soon as our editor is finished creating an issue, he e-mails it to our webmaster. Our webmaster then posts it on our web site and sends out the e-mail notification. The readers can view the issue about a day or two after it leaves the editor.

Another great benefit is that we can send out special notices and updates to members in a very short period. This was not possible with the time it took to send out a mailing. This means e-mail recipients have the advantage of receiving meeting updates that we could not get to out postal recipients. And on-line members are directed to our web site where they can register for a meeting with just a few keystrokes! They can also learn more about our sites and venues as we supply the available links in our announcements.

With the paper issue, our editor e-mails the issue to our circulation director. Then a bundle of issues and mailing labels are printed. The

labels are mated to the issues and the load is taken to the post office. This method takes more labor, materials, and money and can take over two weeks to reach our readership from the editor.

In order to get time-sensitive material to our readers sooner, the Maine Section has decided to adopt the following policy:

*The Maine Section newsletter, the **Beacon**, will be issued electronically to all members with a valid e-mail address. members who currently receive the paper **Beacon** will continue to receive the paper version also.*

In effect, this makes the electronic version our default medium and the paper version the exception. The paper version will remain available for who currently receive it. We hope this decision will provide a better service to our readers.

In the future, we would like to limit the paper issue to those without e-mail or those who specifically request the paper copy. This will end up saving trees, time, and money. If you have any questions or concerns about this policy, please feel free to contact me at :

brian.conroy@cmpco.com

(207) 797-3076

2 Partridge Lane

Falmouth, Maine 04105.

Webmaster's Note:

*This column along with a notice of the availability of this issue of the **Beacon** on the web was sent via email to all addresses on our maine-ieee list. If you did not receive these and you have a valid email address, you may subscribe yourself to the maine-ieee list (see instructions on the web) or send an email to potts@ieee.org and I will add you to the list.*

Magic of Christmas

Maine IEEE Annual Dinner & Christmas Concert Social

Saturday, December 9, 2000

Enjoy a holiday tradition and socialize with friends and colleagues at the 14th annual Maine Section IEEE dinner and Christmas concert. The evening is sure to be another memorable and pleasurable event. We have our own room reserved at F. Parker Reidy's restaurant and a contiguous block of seats reserved at the concert.

For 20 years, the Portland Symphony's "Magic of Christmas" concerts have been the brightest event of the holiday season. Make it part of yours. Enjoy festive Yuletide music performed by the full symphony orchestra, organist Ray Cornils, the 100-voice Magic of Christmas Chorus and special guest stars. Its the most wonderful time of the year! As always, everyone is welcome at this event.

4:00 PM Social at F. Parker Reidy's
5:00 PM Dinner at F. Parker Reidy's
6:30 PM Kotzschmar Organ Concert
7:30 PM Magic of Christmas with
Portland Symphony Orchestra

F. Parker Reidy's is located at 83 Exchange St., Portland (5 minute walk to city Hall, park on street or in city lot.)

Please register soon as the Maine Section has reserved a block of 30 concert tickets and the tickets will be issued on a first come-first served basis. As of October 16th, 22 tickets have been reserved. After this block of tickets are taken, tickets may be available to purchase through the PSO ticket office at:

www.portlandsymphony.com

Dinner choices can be made at the restaurant, but reservation must be paid by December 1st. Complete meals with tax and tip will include choices of:

Haddock
Chicken
Sirloin
Scallops

A variety of children's meals will be available for those under 12 years old for \$10 all inclusive.

Total adult dinner and ticket cost: \$42.00

Total child dinner and ticket cost: \$30.00

Dinner prices will include dinner, tax, and tip. A cash bar will be available. Tickets will be distributed during dinner. To register, please make checks payable to Maine IEEE for the total cost of tickets and meals and mail to:

Brian A. Conroy
2 Partridge Lane
Falmouth, ME 04105-2435
(207) 791-1023
brian.conroy@cmpco.com

Don't delay, order today! This even is sure to bring out the best in Holiday spirit!

ExCom Meeting Announcement

The next Maine Section Executive Committee meeting will be held on either Wednesday or Thursday, November 15 or 16, at CMP's NASC facility in Augusta, ME. The meeting begins at 5:30 PM. **Visitors are welcome!** Check the web or contact Brian Conroy at brian.conroy@cmpco.com or (207) 791-1023 for finalized date and directions.

New Section Web Address

The Maine Section is pleased to announce a simpler address for the Section website:

www.ieee.org/maine

The original address, www.ewh.ieee.org/r1/maine/, is still valid. Please visit our website for up-to-date listings, calendar changes, and cancellations.

ATP TUTORIAL
sponsored by
PES/IAS Chapter of the Maine Section IEEE
Thursday & Friday, December 7 & 8, 2000

Scope:

ATP (Alternative Electromagnetic Transients Program) , a version of the Electromagnetic Transients Program (EMTP), is the widely used software for digital simulation of power system transients. The recent release of ATPDraw, a graphical preprocessor to ATP has made ATP much easier to learn and apply. This ATP Tutorial will help the ATP students install their own copy of the program suite, guide them through the ATPDraw features, present the Analyzer program features and demonstrate the ATP application to dynamic relay testing.

The tutorial is intended for Protection Engineers, Planning Engineers, Consulting Engineers, Educators and all power personnel who are curious about the transient behavior of power systems. The format of the tutorial is HANDS-ON.

Instructor:

Jules Esztergalyos, former Chief System Protection Engineer, consultant since 1999, is a nationally and internationally recognized expert in Power System Stability, Control and Protection. Among the many projects in Jules's 38 year career in Protection and Control, his development of BPA's Digital Model Power System from 1987 to 1997 makes him eminently qualified to present this tutorial. He has authored many papers in EHV control and protection.

Daily schedule:

Thursday, Dec. 7: 1-5 PM and 7-8:30 PM (demo)

Friday, Dec 8: 8-12 AM

Location: (Detailed directions will be mailed to the registrants)

CMP Service Building
Canco Rd, Portland, ME

Handout materials:

The students will receive a copy of the ATP Draw and Analyser manuals, a CD with the ATP program suite and a CD with practice cases.

Required tools:

Students are highly encouraged to bring a laptop equipped with a CD reader.

Cost:

\$200 per single attendee

\$150 per attendee for two or more from company attending

Lodging and meals:

Refreshments will be provided. The following hotels are listed for convenience:

Holiday Inn By The Bay 207-775 2311

Double Tree 207-774-5611

Embassy Suites 207-775-2200

Days Inn 207-772-3450

Registration:

Contact : Paul Lerley paul.lerley@cmpco.com V: (207)-623-3521 Ext 3820 F: (207)-626-9503

ATP Tutorial Contents

Thursday (1 -5 PM)

Session 1.1 (2 hours)

- a) Introduce ATPDraw. Introduction to ATPDraw program features.
- b) Explain the purpose of ATP and compare to ASPEN or other fault calculation programs
- c) Describe the ATP components, installation procedure, input and output files and directory structure.
- d) How to build a two-machine system within ATPDraw using ASPEN Z1/Zo two machine model.
- e) How to generate an EMTP data *.atp file to set up steady state load flow
- f) How to calibrate steady state load flow of the two-machine system
- g) How to generate an EMTP list *.lis file to check load flow
- h) How to generate an EMTP data *.atp file to generate 3-phase and phase-to-ground fault studies at pre-selected busses.
- i) How to generate an EMTP list *.lis file to check the fault study
- j) Calibrate ATP fault studies to ASPEN fault studies.

Break

Session 1.2 (2 hours)

- a) Prepare Your First Fault Case
- b) Set fault and line breakers timing sequence. Apply a line -to-ground fault
- c) Make fault data file *.atp file, adjust time settings.
- k) Run ATP to generate a line-to-ground fault on the two-machine system
- d) How to generate an EMTP list *.lis file for faults
- e) Run ATP to generate the plot file *.pl4
- f) Introduce Plot XY. Run PlotXY to check the fault voltage and current values.
- g) How to copy plot XY and paste the file *.PL4 result of the fault into *.doc file
- h) How to model a parallel lines with mutual coupling - ASPEN model Z1,Z0,Zm

Evening Demo (7 - 8:30 PM)

The engineers will get a homework assignment to apply line-to-ground and 3 phase faults on the model.

Friday (8 -12 AM)

Session 2.1 (2 hours)

- a) Introduce the Analyzer
- b) Introduction to Analyzer program main features
- c) How to Open an ATP generated MAIN case *.pl4 file
- d) How to Open a Comtrade, ASCII, SWX file generated by other devices
- e) Display of multiple Channels of six file *.pl4 signals Va, Vb,Vc,Ia,Ib,Ic
- f) How to save the six channels as a Comtrade file with header
- g) How to save the six channels as a Table (ASCII) file with header
- h) Print of multiple Channels of six file *.pl4 signals Va,Vb, Vc,Ia,Ib,Ic
- i) Analyze functions - Introduction
- j) Analyze functions - Filter - LP,HP,BP,BR - LP filter six channels
- k) Analyze functions - Z1,Z2,Z0 calculation
- l) Display R1 and X1 on XY plot mode
- m) How to resample a *.pl4 file /save new file in Comtrade format
- n) How to import a second file - and compare signals *.pl4 vs. Comtrade
- l) Compare two files with different sampling rates
- m) Zoom in/out functions

Break

Session 2.2 (2 hours)

ATPDraw/ATP Advanced features

- a) Introduction to Frequency dependent line Models - J. Marti
- b) Prepare Your First Fault Case using the J.Marti line model
- c) How to model parallel lines with mutual coupling - J. Marti model
- d) Introduction to TACS - How to calculate instantaneous and rms power
- e) Use of TACS
- f) Introduction to MODELS - How to calculate instantaneous and rms power in MODELS
- g) Use of MODELS - creating the support (*.sup) and model (*.mod) files
- h) Calculation of flux vs. amps of a saturable inductor with TACS and MODELS
- i) Show example - Montana 10.adp a complete frequency dependent model of the 500kv Series Compensated lines in Montana.
- j) Note: ATPDraw/ATP has too many models. The time remaining, we will show as many as we can including Transformer, Induction Motor, a variable source Generator etc.

End of Tutorial

My Choice.....

by

Lou Luceri, Past Director, Region One

Editor's note: Although the IEEE President-Elect election is over, the Section Executive Committee wanted the members to have the opportunity to read this endorsement for the candidacy of Art Winston.

First, let me thank you for voting for me and allowing me to serve as your Regional Director in 1998- 1999. You put your trust in me and put your vote on the line. I started putting some sweeping changes into effect, many of which have begun to appear in the makeup and the operation of the Region under the leadership of our Region Director, Dr. Irv Engelson. We are now more closely aligned with the operation of the IEEE Board, we have begun a streamlining process within the Regional Board of Governors to allow more decision making at the local level, and hopefully, we will increase the speed in which we can disseminate information to the membership.

It's that time of the year where I must now make a choice for IEEE President-Elect of the Institute for 2001. I, like you must also put my vote on the line and trust that I make a good choice. This year, I am exercising my voting right and choosing Dr. Art Winston for that position. I had the pleasure of working with Art on the Regional Board for a number of years, and find that he is a man of impeccable character. His background, both in industry and academia provides him with the ability to recognize the needs of the engineer who works on both sides of the arena. This has been an issue among the membership in the past, namely, how does "our" position really get represented?

This year, I attended the Professional Development Conference in Scottsdale, AZ over the Labor Day weekend. One of the activities was a debate among the candidates for IEEE President-Elect. Let me tell you first, that all the candidates are very well qualified and fielded the questions with ease. They are all good, believe me! They all know the issues and each has his own ideas as to how to handle them. But there was one thing about Art that stood out above the others: he was direct, succinct, to the point, and delivered non-nonsense answers that have still made a lasting impression on me. That's one thing that I have always liked about Art—he doesn't beat around the bush and back into a solution—he's up front and tells it like it is.

Art is also in a unique position as a petition candidate. He is not dependent on the support of the IEEE Board of Directors, and therefore is beholden to no one.

Being an unencumbered leader with no Institutional ties allows him to present understanding and unbiased opinions on major issues.

Regarding his background as a leader, Art has demonstrated his executive ability as Senior Associate Director of the Gordon Institute of Tufts University, and has established an impressive record of achievements in industry as well as being an entrepreneur with his own company. Art has also represented the Region in many ways. He is a past chairman of the Boston Section, he has served as Region One Director, Vice-President of Educational Activities, chairman of the IEEE Audit Committee, Chair of Life-Member Activities, and is a member of the IEEE Foundation. As Harold Goldberg has stated: *Art is no lightweight.*

I think that he will make a fair and competent leader, and that's why I'm voting for him. I hope that this encourages you to do the same.

If you would like further information on Art, and the position that he has taken on IEEE issues, I suggest that you examine his web site at: <http://www.arthurwinston.com>. Then, draw your own conclusions. I'm confident that you will agree with me.

Senior Member Benefits

Have you been an electrical engineer for at least 10 years? Then why not apply for Senior Member status in the IEEE and get some well deserved recognition for your accomplishments? The senior member grade is the IEEE's distinguished title for professional technical excellence bestowed by your professional peers. Being a senior member also can be a plus when interviewing for a position, seeking a promotion or requesting conference travel.

Each newly-elected senior member now receives an engraved IEEE senior member plaque made of wood and bronze (a \$25 value) that any member would be proud to display. New senior members also can request that a letter of commendation, signed by the IEEE president, be sent to their employers extolling the significance of being elected to IEEE senior member grade. Application and nomination forms can be accessed online at:

www.ieee.org/organizations/rab/md/smforms.htm.

Senior membership is good for the profession, it's good for the IEEE and it's good for **YOU**, the member.

Beacon Publishing

The Beacon is published on a monthly schedule based upon the need to advertise upcoming meetings. All material submitted for the Beacon must be received by the editor no later than the 15th of the month preceding the issue in which it should be included. Sorry, NO EXCEPTIONS!!

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