
April 1997

Rock River Valley Section
www.ieee.org/regional/section/rock_river/

Event

Sense

The Institute of Electrical and Electronic Engineers, Inc.

RRV Section Meeting

Byron Nuclear Station Tour

When April 24, 1997

Where Byron Nuclear Power Plant, Byron, IL

From Rockford take bypass 20 toward Freeport. Exit on route 2 to Byron. Turn left at first stop light in Byron. At the next stop sign go straight. This is German Church Road. Follow this road 4-5 miles to the power plant. The road will twist and turn. Turn right into the power plant and right again to the Training building.

Agenda 5:30 PM Tour Begins
7:30 PM Dinner

Program Tour of Byron Station Training Facility and Simulator Room.

Byron Station is one of Commonwealth Edison's Nuclear Generating plants located in Byron, IL. The Byron reactor is called a Pressurized Water Reactor (PWR). Made of eight-inch-thick steel and located inside a building made of reinforced concrete, the reactor vessel holds long metal tubes - called fuel rods - which contain uranium fuel. When uranium atoms are split in a process called nuclear fission,

a huge amount of heat is generated and allowed to heat the water surrounding the fuel rods which is kept under pressure to prevent boiling.

The Pressurized water flows into steam generators, where its heat is used to produce steam that is then directed into a turbine. The turbine which is directly coupled to a 1,175,055 kilowatt generator, spins at the speed of 1,800 revolutions per minute. The result is energy.

After passing through the turbine, the steam is cooled in condensers and becomes water that will go through the entire process again and again.

The generator output is 25,000 volts which is stepped up to 345,000 volts by two transformers.

In the simulator room, conditions such as those that existed at Three Mile Island can be duplicated so operators can be trained on how to react to similar conditions.

Meal Dinner will be at the Sunrise II Restaurant (101 West Second Street, 815-234-4229) in



Byron. Directions will be given at Byron Station after the tour. We will be ordering from the menu once we have all arrived. Please make your **tour** and/or **dinner reservations** by calling **Gloria** at **815-226-5247** by **Tuesday, April 15, 1997**. The cost of the **dinner** will be determined by your menu choice. There will be no RRVS subsidy for this meal.

Note **Tour reservation deadline is noon, April 17.** You must be at least **21**. Leave your name, **SSN**, and **citizenship**. The **tour maximum is 40**. **Only IEEE members may register until April 15.** The tour will be opened to non-members on April 15. You must have a reservation to attend and must wear sound shoes (i.e. no sandals, etc.).

RRVS Celebrates 50 Year Anniversary at March Mtg

The RRVS celebrated its 50 year anniversary of section existence at the March section/PELS chapter meeting on March 27 at Rock Valley College's Technology Center.

The centerpiece of the evening was the presentation that Power Electronics Society Distinguished Lecturer Dr. Robert Steigerwald from GE Corporate R&D made on Advances in Distributed Power Systems for Electronic Equipment: Applications, Converters, & Components.

Surrounding this centerpiece was an evening of lavish hors d'oeuvres, plentiful and tasty food and dessert, attendance by the IEEE Region 4 Director, Harry Bostic, and the Region 4 Central Area Chair, Dennis Lamont, attendance by three past RRVS chairs: Bill Paulson (1973), Larry Wachowiak (1979-80), Caio Ferreira (1989-94), a 60-page 50 year anniversary brochure, a special door prize given to 35 attendees (including non IEEE members) - a handsome short sleeve t-shirt customized for the RRVS, complete with the politically correct brand new IEEE slogan: IEEE: Networking the World. A record 42 people were in attendance at dinner. In honor of this event there was no charge for dinner.

Harry Bostic presented an ornate and well done 50 year anniversary banner from the IEEE to the RRVS. Bob Parro, RRVS Section Chair, accepted on behalf of the section.

During the introduction of the presentation portion of the

evening, Bob Parro highlighted the significant events that have transpired over the last 50 years in the development of computing technology. These events were sifted from the 50 year timeline of computing technology events included in the RRVS 50 year anniversary brochure. Four of the highlighted events were the introduction of four programming languages, Basic, COBOL, Fortran, and Lisp. Do you know what they stand for? Answers are on page 4. The four individuals who knew what those terms stand for won door prizes.

Young Engineers Invited to Free Videoconference on Career Issues

The American Society of Mechanical Engineers (ASME) is sponsoring a videoconference on April 16 which focuses on career topics of interest to young engineers. The 2nd Young Engineers Forum broadcast will address emerging technologies, opportunities for international employment, staying competitive in the employment market, managing interpersonal relations for career development, and lifelong learning and problem-solving techniques. IEEE member Robert L. Krause, P.E., will discuss "The MBA Option." For more information or for registration materials, contact ASME's Ellen Lung at lunge@asme.org.

May Meeting Preview

For our May meeting we will hold our annual picnic and section officer elections for Chair, Vice Chair, Treasurer and Secretary. This meeting is held at Sundstrand Park where the section executive committee hosts a no-charge

steak-on-the-grill dinner. We have found this to be an excellent way to wind up the meeting season and kick off a summer break from IEEE activities at the section level. Come join us for good food and networking in a relaxed, social setting.

March Meeting Recap

PELS Distinguished Lecturer Dr. Robert Steigerwald gave an interesting talk on the future of high-density switch-mode power conversion. Some of the topics touched on were power converter topologies, packaging, and miniaturization of passive components. He also peppered his lecture with some amazing photographs of the research hardware at GE Corporate R&D.



Submissions to *Event Sense*

Send articles and job ads to the *Event Sense* editor, Bob Parro, via e-mail (preferred), or fax. Job ads will run for two consecutive months. Contact the *Event Sense* editor if the ad needs to run longer. Please make submissions by the twenty-fifth of the month. All submissions are subject to editing for style, clarity, and space considerations.

e-mail: b.parro@ieee.org
fax: (815) 394-2497



RRVS Executive Committee

(l-r) **standing:** Larry Wachowiak, Treasurer; Hassan Mansir, IAS Chapter Chair; Don Zinger, NIU Student Branch Counselor; Matt Zimmer, Secretary and IAS Chapter Vice Chair; Roger Caruana, Education and Technical Activities Chair; **seated:** Caio Ferreira, Past Section Chair and current IAS Chapters' Department Chair, Bob Parro, Section Chair; Bill Barber, Section Vice Chair and Membership Chair; Jim Buerosse, PELS Chapter Chair; Paul Peterson, Joint Computer/Control Systems Chapter Chair and Awards Chair

The Rock River Valley Section would like to give recognition to the following area companies and university for supporting Section Officers:

Sundstrand Corporation • 3C Computer Systems • William Barber & Associates • Northern Illinois University

Rock River Valley Section of the IEEE 1996-1997

[WWW: www.ieee.org/regional/section/rock_river/]

Elected Executive Committee

Chair	Bob Parro	b.parro@ieee.org	(815) 394-2947
Past Chair	Caio Ferreira	c.ferreira@ieee.org	(815) 394-2903
Vice-Chair	Bill Barber	b.barber@ieee.org	(815) 235-4110
Secretary	Matt Zimmer	m.zimmer@ieee.org	(815) 394-3456
Treasurer	Larry Wachowiak	l.wachowiak@ieee.org	(815) 394-5676

Appointed Executive Committee Chairs

IAS Chapter Chair	Hasan Mansir	h.manisr@ieee.org	(815) 226-6875
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PELS Chapter Chair	Jim Buerosse	j.buerosse@ieee.org	(815) 226-6078
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RRVS Jubilee	Larry Wachowiak	l.wachowiak@ieee.org	(815) 394-5676

Northern Illinois University - Student Branch Officers

St Br Counselor	Prof. Don Zinger	d.zinger@ieee.org	(815) 753-0706
St Br Chair	Jeff Ciarlette		
St Br Vice-Chair	Chris Stegh		
St Br Secretary	Rob Reeder		
St Br Treasurer	Ryan McMillin		

*Messages for student officers can be left at the NIU Dept of Electrical Engineering,
(815) 753-9974 or e-mail at sb.niu@ieee.org*



Rock River Valley Section
Established 1947

Answers to meaning of programming language names in article on page 2. Basic - beginner's all-purpose symbolic instruction code; COBOL - common business oriented language; Fortran - formula translator; Lisp - list processing.

Internet Access For \$5/mo

Obtain text-based Internet access from the Sinnissippi Valley Freenet. Ideal for Commodore 64, Apple 2 and VT100 terminal users that don't have graphics capability. Access Winnebago County tax information. Send/receive e-mail. Contact Carol Ford at: sinnfree@sinnfree.org

Calendar

- April Section Meeting/Tour**Reservation Deadline April 17..... **Thursday, April 24**
Byron Nuclear Station, Byron, IL
- May Section Picnic/Elections** **Thursday, May 29**
Sundstrand Park, Belvidere, IL



1947 - 1997



IEEE
IEEE: Networking
the World



Joint Computer/Control
Systems Society Chapter
Established 1995



Industry Applications
Society Chapter
Established 1992



Power
Electronics
Society
Chapter
Established 1996

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Inside This Issue

- April Section Meeting/Tour Notice 1
- RRVs Celebrates 50 Yr Anniversary at March Mtg 2
- Young Engineers Invited to Videoconference on Career Issues ..2
- March Section Meeting Recap 2
- May Section Picnic/Elections Preview2
- RRVs Website & Officer Contact Information 3
- Calendar 4