



# Madison Section NEWSLETTER

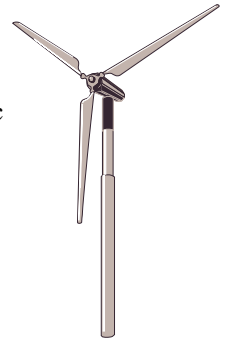
Volume 4, Number 2

Serving IEEE Members of South Central Wisconsin

February 2001

## MGE Wind Farm Construction and Operation

**Date/Time:** Thursday, February 15, 2001, 11:45 AM - 1:00 PM  
**Speaker:** Donald D. Peterson, Exec. Director Energy Products and Services, Madison Gas and Electric Company  
**Location:** Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at Mineral Pt. Rd.), Ph 829-1444  
**Menu:** Pizza buffet, salad and soft drinks (cost \$8.00)  
**RSVP:** by Feb. 12th to Roy Thompson via email (roy.thompson@tdstelecom.com) or call 608/664-4415



*Non-member guests are always welcome!*

The presentation will focus on the following topics:

- Wind Turbine Specifications
- Siting and Approvals
- Construction Challenges
- Project Performance
- Green-Priced Energy

Don has held various management positions at MGE including Supervisor - Generation and Transmission Planning, Manager - Residential Marketing Services, and Executive Director - Energy Products and Services. His duties have included power plant and transmission line planning and design and working with utility customers regarding their use of electricity and natural gas. He received a Bachelor of Science degree in Electrical Engineering from the University of Iowa in Iowa City and is a registered Professional Engineer in the State of Wisconsin. Don also was a past Chairman of the IEEE Power Engineering Society, Wisconsin Chapter.

## Coming in March... Converting Technology into a Company

**Date/Time:** Thursday, March 15, 2001, 11:45 AM - 1:00 PM  
**Speaker:** Eric C. Apfelbach, President & CEO, Alfalight, Inc.  
**Location:** Rocky Rococo's Pizza, 7952 Tree Lane (Madison Beltline Hwy. at Mineral Pt. Rd.), Ph 829-1444  
**Menu:** Pizza buffet, salad and soft drinks (cost \$8.00)  
**RSVP:** by Mar. 12th to Roy Thompson via email (roy.thompson@tdstelecom.com) or call 608/664-4415

*Non-member guests are always welcome!*

This presentation will focus on the opportunities, challenges, and strategies of taking technology-based concepts and ideas, and creating a business. It will use Alfalight, Inc. as an example, giving a complete view of how Alfalight, Inc. is positioned and how it got there.

*...continued on page 2*

## CONTENTS

Meeting Notices	1
National Engineers Week	2



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E-mail Coord.: John Cortsvet, 831.2945  
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Member at Large: Les Schroeder, 258.7160 x241  
[l.schroeder@ieee.org](mailto:l.schroeder@ieee.org)

Member at Large: Sandy Rotter, 278.0377  
[rotter@ieee.org](mailto:rotter@ieee.org)

Member at Large: Dan Danbeck, 262.3748  
[danbeck@engr.wisc.edu](mailto:danbeck@engr.wisc.edu)

Mr. Apfelbach has devoted his career to working in global high technology business, holding positions in engineering, sales, marketing, and operations. He began his career in the semiconductor industry in 1984 as a process engineer, transitioning to the semiconductor equipment business from 1989 to 1995. Eric held multiple roles of increasing responsibility, ending as the Site Manager for the global IBM account. He entered the flat panel display industry in 1995, becoming the VP of Operations at Standish LCD, supplying high reliability, high volume LCD display products. In 1997, he assisted in the sale of the company to Planar Systems, a publicly held display company in Beaverton, Oregon. Eric was promoted to VP/General Manager of the LCD Division and made a Corporate Officer shortly after the sale. In late 1999, Eric joined Alfalight, where he used his broad high tech management background to help build Alfalight, Inc. from a concept to a competitive high power laser company. He is an active member of The Executive Committee (TEC), an international association of CEOs.

## National Engineers Week

### *50 Ways One Engineer Can Make a Difference*

One person can make a difference in the engineering profession and in National Engineers Week. In recognition of our 50th anniversary, here are 50 ways to try.

1. Organize an Engineers Week Committee with your office or professional society chapter.
2. Visit the National Engineers Week Internet site - [www.eweek.org](http://www.eweek.org) - to find out what's new.
3. Enter news of your local activities on the [www.eweek.org](http://www.eweek.org) database and enter your name as a local contact
4. Volunteer to help a local middle school participating in the National Engineers Week Future City Competition™. Or, you can help sponsor a prize or judge a local contest. You may even win a trip to Washington, D.C.! Visit [www.futurecity.org](http://www.futurecity.org)
5. Contact a teacher or principal to speak at a local elementary, middle or high school and provide hands-on experiments relevant to engineering and careers.
6. Visit Internet sites of your professional and technical organizations to see what they are doing for Engineers Week. If they don't show anything, help create ideas and suggest they link to [www.eweek.org](http://www.eweek.org)!
7. Contact National Engineers Week headquarters to see if there is an Engineers Week organization in your area.
8. Ask local outdoor advertising companies for billboard space. Engineers Week headquarters will provide the material to be posted free-of-charge. You can order an outdoor advertising kit in September at [www.eweek.org](http://www.eweek.org).
9. Suggest an interesting engineering sight or landmark in your community to National Engineers Week headquarters. Suggestions must be accessible to the public.
10. Contact the Junior Engineering Technical Society ([www.jets.org](http://www.jets.org)) to request guidance brochures for various engineering disciplines and explore high school programs.
11. Open your college engineering lab for public tours.
12. Help local boy and girl scouts with their engineering badges.
13. Present a demonstration for high school science and math clubs.
14. Create special exhibits in public spaces at your office.
15. Contact your employer's internal communications staff and let them know when Engineers Week will occur. Present ideas for ways to celebrate the company's achievements.

16. Visit [www.discoverengineering.org](http://www.discoverengineering.org) and promote this site to middle school students.
17. Contact a middle or high school and offer to have a student shadow you on the job.
18. Write a letter to your local newspaper editor letting him/her know about the importance of engineering to your community.
19. Plan a special recognition luncheon in your office and invite the CEO or chief technical officer to participate.
20. Order Engineers Week materials that can help with your programs.
21. Visit [www.greatachievements.org](http://www.greatachievements.org) for useful information about great engineering achievements of the past 100 years.
22. Donate mystery books with an engineering background, children's books, posters and bookmarks to a local public or school library for an Engineers Week "corner."
23. Write and test a hands-on engineering activity to interest students (see samples in the volunteer kit or at this site) and send your ideas to Engineers Week headquarters.
24. Visit [www.nae.edu/awards](http://www.nae.edu/awards) to learn about the Charles Stark Draper Prize, the "Nobel Prize" of engineering.
25. Organize an extracurricular program for young students, such as a tour or competition. Build spaghetti bridges, race boats or design and build Rube Goldberg-like machines.
26. Contact a local speakers bureau (try the Chamber of Commerce) and offer to speak before local civic and business groups.
27. Develop and maintain a directory of engineering societies or company engineers willing to visit schools, and let schools know this list is available.
28. Recruit a local class to participate in the Discover Engineering interactive telecast from the National Technological University. Be sure to stay with the class during the telecast to provide your perspective.
29. Organize a walking or bus tour of interesting engineering achievements in the community.
30. Sponsor a workshop to help teachers understand what engineers do.
31. Host a program at a local Boys & Girls Club.
32. Participate in an engineering fair at a local college. Many engineering schools host such fairs during Engineers Week.
33. Enter a contest here.
34. Suggest a contest to [eweek@nspe.org](mailto:eweek@nspe.org).
35. Place Engineers Week tent cards on tables in the company cafeteria.
36. Offer to create an Engineers Week Internet site for a local committee.
37. Order Engineers Week notecards for informal correspondence.
38. Volunteer to serve as a judge for a school science or technology fair.
39. Wear an Engineers Week t-shirt or cap.
40. Send an Engineers Week mug or mousepad to clients or your children's teachers.
41. Take information from the Engineers Week Internet site on the engineering of chocolate, potato chips and other little-known engineering connections and pass it along to your company newsletter, local newspaper or local school.
42. Suggest improvements to this web site.
43. Help with a local MATHCOUNTS competition that occurs during Engineers Week.
44. Contact a high school guidance counselor. Offer to talk with students and provide Engineering & You brochures or an Engineers Week video for the guidance office.
45. Organize an essay contest for a local class.
46. Contact a local science center. Provide bookmarks and posters or offer to run a hands-on demo.
47. Work with community television to provide Engineers Week videos, engineering movies and public service announcements.
48. Order a National Engineers Week banner from a local sign store and display it at your workplace entrance.
49. Participate in the first annual "Introduce a Girl to Engineering Day."

UNIVERSITY OF <b>WISCONSIN</b> MADISON	College of Engineering Department of Engineering Professional Development
<div style="border: 2px solid black; padding: 5px; margin: 0 auto; width: 80%;"> <h2 style="text-align: center; margin: 0;">Winter/Spring 2001 Telecommunications Short Courses</h2> </div>	
<ul style="list-style-type: none"> <li>■ <b>Preparing for 3G Wireless Technology: New Wideband CDWA/TDMA Standards and Systems,</b> <i>February 19–21, 2001 in Madison, WI</i></li> <li>■ <b>Using and Installing Fiber Optic Systems for Communications,</b> <i>February 26–28, 2001 in Madison, WI</i></li> <li>■ <b>Fundamentals of Data Communications,</b> <i>March 5–7, 2001 in Madison, WI</i></li> <li>■ <b>Siting Wireless Communications Antennas and Towers</b> <i>March 12–14, 2001 in Las Vegas, NV</i></li> <li>■ <b>DC Power System Design for Telecommunications,</b> <i>March 27–29, 2001 in Madison, WI</i></li> </ul>	
For further information...	
Web: <a href="http://epdweb.engr.wisc.edu">epdweb.engr.wisc.edu</a> or E-mail: <a href="mailto:danbeck@engr.wisc.edu">danbeck@engr.wisc.edu</a>	

50. Number 50 comes from engineer Ron Clark, who plans to offer the Engineering merit badge to the local Boy Scout troop, visit the local school's solar powered vehicle, and offer a tour of a power plant.
51. Number 51, from Jeremy Hubers: Get involved with a volunteer organization such as Habitat for Humanity and represent your engineering chapter with a volunteering spirit.

**25th Annual Great Lakes Biomedical Conference**

**April 6, 2001**

**Golden Rondelle Theatre, S.C. Johnson Wax, Racine Wisconsin**

**Computer Assisted Surgery**

For the past 30 years we have seen diagnostic imaging revolutionized and also watched as significant advances in robotics and robotic assisted surgery occur. Now with further integration of the computer through software developments and image processing advances, a stronger bridge is being developed between diagnostic techniques and surgical treatment. At this meeting, our two speakers will present a historical view of image-guided surgery, explain current technologies and implementation challenges, and show us what is emerging in a broad array of clinical areas including neurosurgery and cardiac surgery.

**Terry Peters, Ph.D.**

Scientist, Imaging Research Laboratories, John P. Robarts Research Institute

**Richard A. Robb, Ph.D.**

Scheller Professor in Medical Research, Mayo Medical School and Graduate School

**Registration Information & Call for Posters**

<http://www.eng.mu.edu/glbc>



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Our members have professional interests in computers, power engineering, signal processing, communications, industry applications and a number of other technical fields.

**For more information, contact John Hicks at (608) 233-4875 or [jhicks@facstaff.wisc.edu](mailto:jhicks@facstaff.wisc.edu).**

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1/2 Page	215	203	195	193
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