



# IAB News

Newsletter of the Industrial Advisory Board, Power Systems Engineering Research Center

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## A Productive December IAB Meeting

The December 2001 PSERC Industrial Advisory Board meeting held on the Texas A&M University campus demonstrated significant progress in PSERC's evolution. Over twenty-five industry representatives attended, along with numerous guests, faculty, and students. Discussions were forthcoming and pertinent to current issues with real progress made in a number of areas.

The IAB closed session approved a slate of projects to recommend to the Director for 2002 funding. Considerable discussions in the meeting showed the ability of PSERC to adapt to changing needs of industry with an accommodation of the need for special treatment of arising security issues.

The Board also approved [bylaw](#) changes. One change allows the appointment of an Interim Director. This empowers the appointment of Peter Sauer as the Interim Director in 2002 while Bob Thomas, PSERC's Director, is on sabbatical.

Another bylaw change establishes an Associate Membership category that facilitates PSERC membership by smaller businesses with less than \$5 million in revenue. Associate members will pay a membership fee equal to half of that of a full member and will have the same rights and responsibilities as full members except that they will not be able to vote on policy and funding matters before the IAB.

A significant opportunity for industry members is now afforded through a bylaw change approving additional membership support. PSERC members may contribute additional membership funds beyond their primary membership. Unlike primary memberships, these additional memberships may be used for targeted support of individual projects recommended by the IAB and approved by the Director. The funds may also be used for other approved PSERC research, education or outreach activities.

Peter Sauer stated that work on bylaw revisions will continue with results reported at the next IAB meeting.

Dennis Ray, Executive Director, reported on IAB recruitment efforts and student programs being undertaken. Some of the results of these efforts can be found in other areas of this newsletter.

Board members also communicated that they would like to receive a concise report covering on-going projects in PSERC. Jim Crane and Dale Krummen agreed to work with Dennis Ray to create a suitable report format and present the proposal at the next IAB meeting.

Finally, kudos go to Mladen Kezunovic, his colleagues, and students at TAMU for being such gracious hosts and providing

accommodations very suitable for the meeting.

## New Projects Approved for Funding in 2002

At the December Industrial Advisory Board meeting, the IAB recommended approval of a \$1.2 Million dollar research budget for 2002. Subsequently, Bob Thomas, PSERC's Director, approved a set of projects that included the recommended projects plus an enhanced ASU project on synchronous generator model parameter estimation. This enhanced project was approved by an email poll of the Board members after the IAB meeting. It will be substituted for a proposed intrusion detection and mitigation project that the Board tabled due to security questions.

Detailed descriptions of all current projects, including those recommended at the IAB meeting in December, can be found in the document "Current Project Descriptions" in the [PSERC Documents](#) folder on the website ([www.pserc.wisc.edu](http://www.pserc.wisc.edu)). If you have any questions about accessing the descriptions, contact [Dennis Ray](#).

## Calendar in Brief

Feb. 22-23, Executive Committee Retreat, Santa Fe Institute

March 5 and April 2, Internet Seminars

April 18-19, [EMI, Power Quality and Safety Workshop](#), Atlanta GA

May 14-16, [Reliability and Risk Assessment Short Course](#), Atlanta, GA

May 30-31, IAB Meeting, Schenectady, NY

August 15-19, Summer Retreat, Near Portland, OR

December 12-13, IAB Meeting, Atlanta, GA

(A [complete calendar](#) is on the PSERC website: [www.pserc.wisc.edu](http://www.pserc.wisc.edu))

## Greene Addresses IAB Opening Session

Mike Greene, President, TXU (now Oncor) Transmission and Pipeline Business gave a rousing endorsement to the much-anticipated opening of electric competition in Texas. Greene pointed out how the Texas market structure was significantly different from the California model and was more similar to the British model that is enjoying more success. Greene also noted that the existing wholesale market in Texas had already sustained the addition of several new power plants and at least one major transmission line. Greene said that TXU is looking forward to competing in the new market, and that competition will provide choices for businesses and consumers.

“The research topics that PSERC is pursuing could not be more timely,” Greene said as he summed up the need for new technology and solutions to keep pace with the competitive marketplace.

## New Members

PSERC is delighted to have several new members this year.

- [ALSTOM ESCA](#) - Jay Giri, Director, Applications Engineering
- [NxtPhase](#) - Craig Herdman, Chief Technical Officer and President.
- [PJM Interconnection](#) - Dr. Jianzhong Tong, Senior Strategist in System Operations Development
- [Pacific Gas and Electric Co.](#) - Robert Stuart, Manager of Operation Engineering

As members of industry, we have contacts with people in other companies who should join PSERC. Spread the word about the value of PSERC membership and let [Dennis Ray](#), Executive Director, hear your suggestions for possible new members.

## New Short Course and Workshop

The [EMI, Power Quality and Safety Workshop](#), April 18-19, will bring together leaders from industry, academia and government to discuss

and formulate research needs in the area of electromagnetic influence, power quality and safety.

[Power System Reliability and Risk Assessment](#) is a short course scheduled for May 14-16. This is a three-day short course on power system reliability modeling and analysis, and also covers engineering for risk assessment and decision-making for planning and operational decisions.

Both events will be held at the Georgia Institute of Technology, Atlanta, Georgia. Go to the [Calendar](#) on the PSERC website for links to more information.

## Transfer Capability Tutorial Over the Web

You can now interactively calculate transfer capabilities on sample power systems, and use a tutorial and research material on transfer capability at [www.pserc.cornell.edu/tcc/](http://www.pserc.cornell.edu/tcc/).

Calculation capabilities include sensitivity and uncertainty analyses with generalized DC load flow methods. The website was produced by PSERC researchers in collaboration with L.R. Christensen Associates. Development of the website and an associated [report](#) was funded by the National Science Foundation.

## Faculty News

Bob Thomas (Cornell and PSERC Director) was recently appointed a member of the [National Academies Committee on Science and Technology for Countering Terrorism](#): Panel on Systems Analysis and Systems Engineering. The project is aimed at "helping the Executive Office of the President to use the nation's and the world's scientific and technical community in a timely response to the threat of catastrophic terrorism." The panel report is due to the President's Science Advisor on or about April 1, 2002. Bob also plans to help organize and participate in a panel session on this topic at the next IAB meeting.

The [National Transmission Grid Study Report](#) is about to be released. Fernando Alvarado (Wisconsin), George Gross (Illinois), Tom Overbye (Illinois), and Shmuel Oren (Berkeley)

have contributed to this significant report. As directed by the Administration's National Energy Policy, the report addresses current US transmission issues.

On February 12, [Tim Mount](#) (Cornell) presented results of experimental economics research to the National Association of Regulatory Utility Commissioner's Committee on Electricity. Attended by state commissioners from across the US, the Committee met in Washington as a part of NARUC's Winter Meetings. Mount has been conducting local and national experiments on market designs with a team of engineers and economists at Cornell: Duane Chapman, Dick Schuler, Bill Schulze, Bernie Lesieutre, Jim Thorp, Bob Thomas and Ray Zimmerman.

## Recognitions

Congratulations to the following members of the PSERC community for their special recognitions!

New IEEE Fellows include:

- Hamid Elahi (GE Power Systems)
- Jay Giri (ALSTOM ESCA)
- Nick Miller (GE Power Systems)
- Shmuel Oren (Berkeley)
- Rao Thallam (Salt River Project)

Mike Ingram (TVA) received an EPRI "Lighting the Way Award" in recognition of his contribution to the [EPRI Power Quality Program](#).

Jerry Heydt (ASU) was named ASU Regents Professor.

The 2001 graduating class of the National University of Engineering in Peru honored Fernando Alvarado (Wisconsin) for his distinguished service to the field.

## Finding Students Gets Easier

Members can post [job opportunities](#) on the PSERC website and have them distributed over a new student listserv. They can also screen students for possible positions by reviewing compiled [student profiles and resumes](#). Faculty are letting students know about opportunities, too. Contact [Dennis Ray](#), Executive Director, for more information on how to use these services in your search for job candidates.