

IEEE/PES Transformers Committee

Chair's Report

Las Vegas, NV

October 24-28, 2004

1.1 Future PES Meetings

2005 PES General Meeting

The IEEE Power Engineering Society 2005 General Meeting will be held 12 – 16 June 2005 at the Hilton San Francisco Hotel in San Francisco, CA. This premier power engineering conference will bring together power engineering practicing engineers and academics from all over the world. The aim of the conference is to provide an international forum for these experts to promote, share, and discuss various issues and developments in the field of electrical power engineering.

The theme of the meeting is *Leading the Way in Uncertain Times*.

The preferential topics for the meeting are as follows.

Track 1: Understanding and Responding to System–Wide Events, covering such topics as:

- The Northeast Blackout of August 2003
- Physical and cyber security concerns
- Line loading, interconnect issues, IPPs
- Operating strategies under reduced generation availability (extreme contingencies)
- Releasing excess capacity through VAR control

Track 2: Securing New Sources of Energy, covering such topics as:

- Inherently safe nuclear reactors, clean coal technologies, gas turbine peaking units
- Solar, wind, tidal, geothermal, biomass, fuel cells
- Dispersed generation

Track 3: Improving Reliability and Power Quality, covering such topics as:

- Power electronic switching (sub-cycle source transfer, plant-wide UPS units)
- Super-conducting energy storage
- Advances in SCADA systems (closed loop systems, advanced communications)

Track 4: Using Innovative Measurement and Control Techniques to Improve Customer Service, covering such topics as:

- Advanced protection algorithms, system modeling, economic dispatch
- Fault locating, down conductor detection
- Optical sensing, non-standard instrument transformers

Track 5: Surviving New Markets and New Structures, covering such topics as:

- Software tools (load flow, fault analysis, risk assessment, economic analysis)
- Bundled services and other new post-deregulation economic models
- Improving power engineering education

Full papers must be submitted to the on-line submission and review site; a link to the site will be available from the PES home page on or about 18 October 2004. All papers must be submitted by 13 December 2004.

Additional information about the meeting will be posted as it becomes available at <http://www.ieee.org/power>

CIGRE/IEEE PES Symposium CFP

5-7 October 2005, New Orleans, LA, USA

CIGRE and IEEE PES, in cooperation with the US National Committee of CIGRE and Study Committees C5 'Electricity Markets and Regulation', C1 'System Development and Economics', C2 'System Operation and Control', and D2 'Information Systems and Telecommunications' are organizing an International Symposium on Congestion Management in a Market Environment.

PARTICIPANTS

The Symposium is directed towards utilities, manufacturers, system operators, traders, transmission owners and regulators as well as towards universities. Other organizations in the Electricity Industry should also be interested.

BACKGROUND AND SCOPE

With the opening of electricity markets and changes in the power flows, the issue of available transmission capacity is of more and more importance. Market orientated answers and real-time solutions are implemented or under consideration; diligent management of existing assets and timely investment decisions to increase capacity and to improve the management systems are fundamental. The general purpose of the symposium is to provide a forum for discussing the congestion management issue for internal and cross border exchanges: operation aspects, market oriented answers, system development approaches and IT tools, and to consider potential future solutions and research needed.

THE MAIN TOPICS INCLUDE:

Operation

- Assessment of available transmission capacity.
- Interaction between market mechanisms and system operation.
- Communication needs with market players.
- Real-time method to solve congestion and security requirements.

Market

- Market solutions: theoretical and practical approaches (nodal pricing with FTRS, auctions, market splitting...
- Relations ISO - Market operator, integration or separation.

- Revenues from market mechanism, profit, non-profit approaches.
- Organisation of markets: secondary markets, financial security.

System adequacy

- Transmission investment: balance between capital costs and market costs.
- Transmission capacity: managing open access and reliability.
- Asset management: maximizing transmission availability.
- Long-term development strategies: role in market environment.

IT

- Development strategies for IT systems.
- Risks associated with use of Internet/intranet: how to improve security.
- Moving to integrated utilities: blurring the borderline real-time/commercial.
- Intelligent electronic device: a tool to improve the control of power systems.

1.2 Power & Energy Magazine

Mel Olken encourages submissions by all Technical Committees for articles in the P&E magazine and the content is at the discretion of our committee. They suggest articles detailing the work of the technical committees. Our input was due June 2004.

1.3 2004 General Meeting, Denver, CO

1.3.1 General Membership Meeting

PES President Hans B. Püttgen addressed the membership and discussed the issues challenging PES.

Current issues include:

- Losing members in region 1-7
- Gaining members in region 8-10
- Need to do a better job of retaining students as society members after graduation
- Need to attract members from emerging and non-traditional sectors
- Need to collaborate with other societies worldwide

Mr. Püttgen discussed changes the industry is going through. The electric energy and information distribution market merge is upon us. Utilities are seeking to become one-stop energy shopping sources. Asset management, reliability and system hardness are the top issues. Distributed generation and energy storage are becoming more important.

Regarding information dissemination, publications and meetings we have to continue to move towards electronic publication versus paper. PES is looking at various models to disseminate information and one for example has publications available at no charge to members and has authors paying to put papers on

websites. On thing PES is doing right and that is doing a good job of performing technical reviews of papers.

IEEE Xplore is continuing to rapidly grow. To make sure papers and panel sessions get into Xplore requires these documents are Xplore compliant. PES is looking at electronic libraries with sister societies such as IAS or Power Electronics.

Meetings can no longer depend on volunteers only as utilities are downsizing and volunteer resources are shrinking. We will have to rely more on in-house staff, 3rd party support and more corporate support. More permanent corporate support is needed.

President Püttgen laid out goals for 2004:

#1 – Stabilize general meeting layout - Also implement PSC&E (Power Systems Conference & Exposition)

#2 – Build employer's support – Ways to do this include use of "What's in it for me" brochure, offer power system courses for non-engineers, invite industry leaders to speak at conferences even if they are attorneys or accounts.

#3 Membership Development – Mr Püttgen suggested recruiting members from emerging technology industry segments, students, authors of technical papers and non-engineering persons attending the meetings.

#4 – Broadly publicize the T&D vision and seek broad support. This is to be implemented by the technical council.

#5 – Support smaller targeted meetings such meeting in Washington DC on hydrogen economy or at Notre Dame on ethics, etc.

#6 – Achieve launching of IEEE PES digital library

#7 – Better publicize various options available to PES members

#8 – Get technical committees to meet together during the general meeting and T&D exposition.

1.3.2 Emerging Technologies Coordinating Committee

The main topic of the ETCC meeting was about wind power. It was expressed IEEE needs to put more time towards wind power. Renewal of the tax credit will make wind power grow. ETCC provides a good forum for wind power issues.

In New York at the PSC&E there will be a joint meeting of various PES technical committees to discuss where wind power will ultimately be placed within PES. For the New York meeting five wind power related papers have been accepted at this point

1.3.3 Technical Council

Power and Engineering magazine articles from technical committees need to get information to Mel Olken with Keith Gray coordinating the schedule. They are looking for articles on what committees are doing. Responsibility for getting this done will move towards the technical committee chairs.

IEEE 488.2 (PSIM) is the first dual logo (IEEE/IEC) document to be approved. A maintenance procedure for dual logo documents is now in place

Terry deCourcelle made a presentation to Technical council on the results of a focus group. It was found the average age of PES members was in the upper 40's. Ideas were collected on how to develop new members and they include providing mentoring, getting students involved in technical committees and corporate funding for students to go to meetings. Ideas on getting students involved in technical committees include setting up a young engineer coordinator, student coordinator and creating positions on technical committees.

John Newbury (Power System Communications) talked about the work being done in the area of Broadband Power Line Carrier. The FCC is pushing BPL as a means to bring the internet to the rural areas. Up until now BPL development has been a broken group of various users and equipment producers. No standards exist to cover the electrical requirements or installation standards for this equipment. The Power Systems Communications committee is currently developing a standard to attempt to address some of these issues. Technical council designated a task force including myself, John Newbury and someone from T&D to address what standards are needed to address this new industry segment.

1.4 Status of IEC/IEEE Dual Logo Document C57.135

The final draft International Standard ballot in TC14 will open Friday, 24 September and will close on Friday, 26 November. This is the final ballot for approval of this document as an IEC/IEEE dual logo document.

Respectfully submitted,
Ken Hanus
Chair, IEEE PES Transformers Committee