

## **INTELLIGENT SYSTEMS SUBCOMMITTEE MEETING**

### **IEEE-PES Summer Meeting Chicago**

Time: 9 AM -11 AM, Tuesday, July 22, 2002

Chair: Kevin Tomsovic

Minutes: Dagmar Niebur

1. Minutes of the WM2002 subcommittee meeting in New York 1/29/02: Unanimously approved.
2. TF on Intelligent systems on distribution services TF: Butler
  - 2.1 The TF is working on distribution service bibliography, N. Schultz, D. Niebur, K. Miu and K. Because of the large amount of references the paper has been split into two parts. The first part (20 pages) was distributed to the subcommittee.
  - 2.2 A panel session with six speakers cosponsored by the WG on New Technologies and Practical Applications took place at this WM2002 on theoretical aspects: "Fundamental concepts of intelligent system applications to distribution services."The TF chair is working on the compilation of the panel review paper to be submitted as a paper. She is in contact with the editor of power engineering review, and waits for reply.
3. WG on New Technologies and Practical Applications: Dagmar Niebur
  - 3.1 The WG is co-sponsoring and contributing to the Distribution Systems TF's 2002WM panel and the bibliography paper, see above.
  - 3.2 A panel session on Intelligent Optimization Techniques for Power System Expansion Planning and Pricing took place on 7/21/2002. Speakers were R. Clayton, PG&E National Energy Group, J. Park, Konkuk University, C. Liu, University of Washington, A. Papalexopoulos, ECCO Int. Inc. and D. Favrat, Swiss Federal Institute of Technology, Lausanne. The panel was attended by more than 100 conference participants.

The WG chair suggested to repeat the panel at the GM 2003 Toronto and to invite a new set of speakers: Suggested speakers included: Allan Kurtz, VP of BPA and Dr. Soon from Brunel.

A general suggestion for panel organizers is to write a summary of the panel contributions and submit through the subcommittee to the new power engineering review based on abstracts and main discussion contributions.

Panel organizers should try to combine panel with SC meeting, start at 8 am
  - 3.3 At the WM 2002, D. Niebur had started to organize a panel session on "Multi-agent Systems for Power Systems". Contacted speakers included Chen-Ching Liu, Jim McCalley, Steve McArthur and Sarosh Talukdar. The session was proposed to take place at the 2003 Toronto meeting.

The SC suggested to ask Jim McCalley or Steve McArthur to chair the session.

The creation of a Task Force on the same topic was briefly discussed. Steve McArthur volunteered by email to chair the task force. Kevin and Dagmar will contact Steve.
  - 3.4 Other potential TF topics include intelligent systems for self-healing networks, network assurance or reliability., postponed.
  - 3.5 S. Santoso had proposed the creation of New TF on IS in Competitive Environment. Topics include: Market simulation, bidding, risk assessment; The decision for creation was postponed

- 3.6 S. Santoso proposed TF on IS in substations, most current systems are expert system based. The SC invited him to explore the topic. Care should be taken to avoid conflicts with T&D Committee activities. The decision for creation was postponed
- 3.7 S. Santoso proposed TF on Intelligent Data Analysis with focus on how to process data and convert it to meaningful actions, knowledge discovery, transformation of raw data into knowledge, disturbance, system restoration, abnormal operation; transformer maintenance data. Time frame would be 2-3 years with activities including panel sessions, papers, and potentially a tutorial organization.

*Action item:* Kevin will jot up a scope.

- 3.8 S. Santoso and H. Mori will work on combining potential sessions on Intelligent Data Analysis and Data Mining.

#### 4 Additional Sessions for 2002 Summer Meeting in Chicago

- 4.1 A repeat of the session on “Data Mining Applications to Power Systems” organized by H. Mori and G. Lambert Torres takes place at the IEE-PES 2002 Summer Meeting.
- 4.2 K. Tomsovic and D. Falcao organized a panel session for the 2002 Summer Meeting on “Intelligent Controls for Control Center Operation” which will summarize the effort of a CIGRE SC 38 TF chaired by K. Tomsovic. It will take place on Wednesday, July 24, 2002, 9-12 pm.

#### 5. Tutorial course updates

- 5.1 Tutorial on Heuristic Optimization – Organizer: Kwang Lee

The tutorial took place at the IEEE PES WM 2002 in New York and will be repeated on July 17, 2003 at this meeting. The tutorial text is available as 02 TP 160. Kwang Lee introduced the speakers and noted that he videotape the tutorial with the help of students. K. Tomosovic suggested to consider using audio support for power point presentations.

#### 6. Other business

- 6.1 ISAP 2003 will take place in Lemnos, Greece 8/31/03-9/3/03. The program and registration information can be found on the conference web page. The ISAP organizers have issued invitations to organize special sessions. Chen-Ching Liu volunteered to send proposal to NSF for travel funds, but to obtain funding is expected to be difficult.
- 6.2 Kevin Tomsovic is the Technical Conference Chair for PSACE, he extends invitation to SC members to organize application oriented sessions.
- 6.3 Reminder that the deadline for WG award nomination is October; qualifying WG publications include transaction paper or tutorial, power engineering review, deadline is October for award.
- 6.4 The SC suggested to nominate Kwang Lee for “exemplary service award”, as well as for a working group award of the WG on heuristic optimization.

Meeting adjourns at 10:30 am.

Respectfully submitted

Dagmar Niebur