



Electric Power Program Series

A Publication of Decision Systems International

February 1991

DSI Weighs the Future from Past Lessons

This first newsletter of DSI's Electric Power Program Series is dedicated to past participants of our courses in London (U.K.), Munich (Germany), Marbella (Spain), and Monaco.

As we started this series in 1988, in London we focused on the concept of providing state-of-the-art professional development education through a combination of U.S. and European world-class speakers.

Intensive learning in pleasant environments

In developing the overall curriculum, we tried to make sure that the topics covered were the most current, that the presentations were at the most appropriate level for the mix of professionals attending, and that the sites chosen provided the needed detachment from the pressures and routines of daily office work.

One-on-one attention

As we applied our experiences, plans, and sincere efforts, we learned a lot from "working in the field," so to speak. It has become clear to us that our approach to professional development education can easily be refined to meet almost everyone's need. We learned, for example, that formal private consultation sessions with our attendees bring us close to the "real" problems that they are facing back at home.

Toward a full-service organization

The result of our attempts to listen to your needs has prompted us to reorganize DSI to become more of a full service professional development entity. Starting in 1991, we will be offering a range of consulting and software evaluation services that are consistent with our overall mission of objectivity and professionalism in making any recommendations. The new generation of participants in our courses will be placed in touch with a host of possibilities to take back home to improve the performance of his (or her) company, to make better technical and managerial decisions, and to rely on a proven service by DSI long after he returns back home from an exciting and intense professional educational experience.



Monaco will be the site of six courses highlighted by a special session covering Artificial Neural Networks in Power Systems. Details on page 3.

Special Programs Offer Tailored Courses to Fit Specific Needs

Starting in 1991, based on the excellent suggestions and requests from course participants and associates, DSI will embark on special in-house programs which are designed to the individual needs of power companies and institutions.

At present, programs being finalized cover topics including power utility control centers, on-line dynamic security assessment and advanced power system analysis. A program is also in the works for expert system and neural networks applications to power systems.

Locations for these special programs are being negotiated for several key areas including Southeast Asia, South America and the United States.

Any of these intensive short courses, as well as courses from the general topic list can be designed for specific interests. Speakers from the list on pages two and three can also be arranged.

Please indicate on the survey on page four any special courses or specific speakers and fax the information to the DSI number on the survey.

INSIDE

'91 Preview
Speaker List

SURVEY:

- Previous courses
- Future topics
- Locations

Fax us your response.

Special Course Program

MONACO

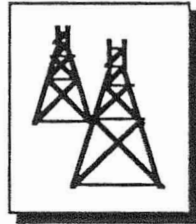
July 1 - 5, 1991

Six Intensive Short Courses From the

ELECTRIC POWER PROGRAM SERIES

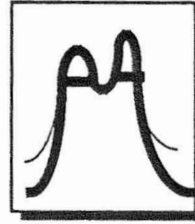
**Emerging Bulk
Power Markets**

July 1-3, 1991



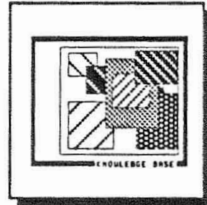
**Demand Side
Power System
Planning**

July 3 - 5, 1991



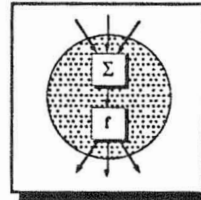
**Expert System
Applications to
Power Systems**

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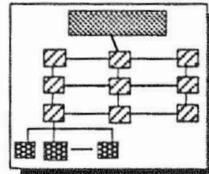
**Artificial Neural
Networks**

July 1-3, 1991



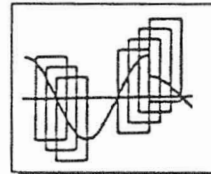
**Distribution
Automation**

July 1-3, 1991



**Computer Relaying
for Protection and
Control**

July 3 - 5, 1991



DECISION SYSTEMS
INTERNATIONAL

Atlanta London

ARTIFICIAL NEURAL NETWORKS

Mohamed A. El-Sharkawi

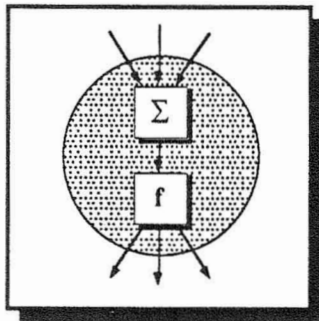
Course Director, Dr. Sharkawi, is a pioneer in applications of Artificial Neural Networks to Power Systems. Since 1980, he has been a professor in the Department of Electrical Engineering at the University of Washington. Dr. El-Sharkawi is the Chairman of the IEEE Power Engineering Society task force on "Applications of Neural Networks to Power Systems." He organized and chaired several special sessions and panel discussions on the subject in various IEEE conferences. He is the organizer and chairman of the first conference, to be held in Seattle, in 1991, which is dedicated to the applications of Neural Networks to power systems. Professor Sharkawi has published numerous papers in the areas of neural networks applications to power system, power system dynamics, power electronics and electric drives and high performance tracking and control.

Robert J. Marks II

Dr. Marks is a foremost international authority on Artificial Neural Networks. He is currently professor in the Department of Electrical Engineering at the University of Washington. He was the Chair of IEEE Neural Networks Committee and was the co-founder and first Chair of IEEE Circuits and Systems Society Technical Committee on Neural Systems & Applications. Professor Marks was also elected the first President of the IEEE Council on Neural Networks. He is a Fellow of the Optical Society of America - A. He is also a member of the Editorial Board for The International Journal of Neurocomputing. He has published over one hundred journal and proceeding papers in the areas of artificial neural processing signal analysis, detection theory, signal recovery, optical computing and signal processing. Dr. Marks has two U.S. patents in the field of artificial neural networks.

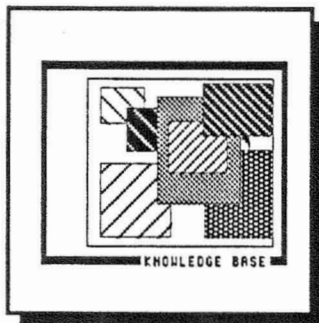
ARTIFICIAL NEURAL NETWORKS

JULY 1 - 3, 1991



EXPERT SYSTEMS

JULY 3 - 5, 1991



EXPERT SYSTEMS

Chen-Ching Liu

Course Director, Dr. Liu, is Associate Professor in the Department of Electrical Engineering at the University of Washington. Dr. Liu is one of the pioneers in applying expert systems to power system problems. He has been conducting expert system research sponsored by EPRI, National Science Foundation (NSF) and several power utilities. He received the Presidential Young Investigators Award from the NSF in 1987. He has taught short courses at IEEE PICA and IASTED conferences, universities and utilities. Dr. Liu was chairman of the Organizing Committee of the 2nd Symposium on Expert Systems Applications to Power Systems, Seattle, 1989. He is chairing IEEE and CIGRE task forces in expert systems.

George Knight

Dr. Knight is a research fellow at Imperial College, London, U.K., and a consultant in power system planning and operations. He worked on these areas in CEGB for many years, also in R&D and before that in distribution planning. He has been active in the international field and published numerous papers on emergency control of power systems and on planning and operation techniques and practice. His publications include a book on the application of mathematical models to the synthesis of optimum designs and operating states of power systems. He has studied the application of expert systems from the viewpoint of potential users.

Ignacio J. Perez-Arriaga

Dr. Perez-Arriaga is Professor of Electrical Engineering and Director of the Instituto de Investigacion Tecnologica (IIT) in the Universidad Pontificia Comillas, Spain. His areas of interest include reliability, control, optimization and applications of knowledge engineering in electric power systems. He is the author or co-author of more than 30 international publications. During the last five years, he has been principal investigator in several research projects concerning expert systems for the diagnosis of incipient faults, and on-line security support of power plants and systems.