

Holds B. Sc., M. Sc. and PhD in Electrical Engineering and has about 51 years hands-on experience with a wide range of several activities in electric power system, including studies, analysis, design, planning, operation and control.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 07/09/1944
Gender : Male

EDUCATION

: B. Sc. in Electrical Engineering, Cairo University, 1966
: M. Sc. in Electrical Engineering, Cairo University, 1974
: PhD in Electrical Engineering, Cairo University, 1988

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jul. 2013 till now
Employer : Ministry of Electricity, Egypt
Job title : Consultant for deregulated electricity technologies

Dates : From Apr. 2011 till Jul. 2013
Employer : Egyptian Regulatory Agency
Job title : Consultant for deregulated electricity market

Dates : From Nov. 2010 till Apr. 2011
Employer : OMAN Electricity Transmission Company (OETC)
Job title : Consultant for Establishing of geographical Information System Unit (GIS)

Dates : From Sep. 1995 till Sep. 2009
Employer : EPS (Electric Power Systems Engineering Co.)

Job title : Vice Chairman
Job Description :

- Managing the development team for GIS application projects of electrical distribution network.
- Managing the implementation of GIS TROUBLE CALL application for low voltage network.
- Managing the Development staff for electric network planning, design, operation and maintenance software packages.
- Managing the implementation of GIS BASE MAP CREATION Project (scale 1:1000).

Dates : From May 1990 till Sep. 1995
Employer : Saudi Consolidated Electricity Company in the Western Region (SCECO-WEST)

Job title : Project Manager for Engineering Applications

Job Description :

- Strategic plan development of engineering applications for SCECO-WEST.
- Detailed action plan development of the first ranked group of applications.
- Tender book and technical specification preparation of ready made Software for the first ranked group of applications.
- Project management for the implementation of the following applications:
 - Computer aided distribution network planning and designs (CADPAD).
 - Power system simulator (PSS/E).
 - Operation planning (MAINPLAN).The implementation of the a/m applications covers the following processes:
 - Customization and enhancements.
 - Development of software interfaces.
 - Data gathering and storing.
 - End users training.
 - Pilot studies.
 - Full implementation.
 - Geographic information System (GIS) which includes:
 - Data model customization for submitted software.
 - Benchmark process for software testing.
 - Data conversion for Medium and Low Voltage layers.
 - Layers (Jeddah, Makkah and Taif pilot projects).
 - GIS applications development.
 - End-User training.
- High level information architecture creation for SCECO-WEST using James Martin and EPRI business generic models.

Dates : From Jan. 1984 till Apr. 1990

Employer : EPS (Electric Power Systems Engineering Co.)

Projects :

- Greater Cairo high voltage network development up to the year 2002
- Optimization of electric energy losses in the medium voltage networks in Cairo zone
- Study of energy losses reduction in distribution systems in North Delta, South Delta and Canal electricity distribution companies

- Sidi Krir 1200MW thermal power plant engineering study
 - Alexandria high voltage network (220KV, 66KV) development up to the year 2000
 - Rehabilitation of existing 66KV substations in Cairo Zone
 - Billing system for big customers in Cairo
 - Inventory control for Canal Electricity Distribution Company
- Job title** : Director for electric power system studies computations
- Job Description** :
- Managing the company computer center (VAX m/c).
 - Perform the analysis for planning design and studies for the following:
 - Interconnected network analysis and studies.
 - KVAR planning for interconnected networks.
 - Short circuit studies for interconnected networks.
 - Grounding design of substation and O.H.T.L.
 - Automatic contingency ranking.
 - Distribution network analysis.
 - Power factor improvement for distribution network.
 - Energy loss saving for distribution network.
 - Optimal reconfiguration of medium voltage network.
 - Conduct planning studies for H.V. interconnected network and distribution network with the help of computing tools mentioned above.
- Dates** : From 1976 till Jan. 1984
- Employer** : Kuwait Institute of Applied Technology
- Job title** : Lecturer
- Job Description** :
- Developing the teaching material and lecturing the following courses:
 - Computer methods in power systems.
 - Electrical drawing.
 - Electrical installation and grounding.
 - Electric machines.
 - Preparing the instruction sheets and training plans for students.
- Dates** : From Jan. 1978 till Jan. 1984 (part time)
- Employer** : Kuwait Institute of Scientific Research (KISR)
- Job title** : System Analyst & Programmer
- Job Description** :
- Developing the computer programs for optimal Kvar planning of interconnected network.
 - Developing the computer programs for security assessments of electric power system.
 - Developing the computer program for electro-magnetic coupling between pipelines and H.V. O.H.T.L. (KNPC project).
 - Participated in the Gulf unified network study (KISR and Fahid University project).
- Dates** : From Oct. 1966 till Oct. 1976
- Employer** : Ministry of Electricity – Egypt
- Job title** : Electrical Design Engineer
- Job Description** :
- Technical studies, preparation of tender book and technical specifications for Cairo and West of Delta project.
 - Evaluation of bids, assistance in contract negotiations, contract

administration and construction supervision for Upper Egypt project, Cairo and West of Delta project.

- Perform the primary commutation and secondary commutation for indoor and outdoor substation project with the help of Yugoslavian and Russian consultants including all studies, drawings and schemes preparation control, metering and protection schemes preparation, grounding design, auxiliary equipment design, layout and sections for indoor and out door switchgear, indoor and outdoor lighting, etc.

- Field of experience :**
- Computer applications for high voltage interconnected network analysis, design and planning.
 - Computer applications for distribution network analysis, design, planning and operation.
 - Operation planning of electric power system.
 - Security assessment for electric power system.
 - Geographic Information System (GIS) and spatial analysis for electric distribution network.
 - High voltage substation design.
 - High voltage substation grounding design.
 - Interior lighting design and electric wiring of buildings.
 - Deregulated electricity market studies for technical and financial issues.
 - Expertise in Electrical Power System Data Modeling and Spatial Analysis.

Training experience:

Covering the teaching material, power point preparation and presentation for engineers and technicians in Egypt and Gulf countries during the past 30 years:

- Grounding design of substation and O.H.T.L.
- Deregulated electricity market design.
- Power flow analyses.
- Blackout Restoration Policy and Procedures.
- Protection system studies.
- Automatic contingency ranking.
- Power system stability studies.
- Power system operation.
- Power system security assessment.
- Reactive power planning.
- Gas insulated (SF6) switchgear.
- Power factor improvement.
- Power quality and harmonics.
- Flexible A.C. transmission system (FACTS).
- Distribution system analyses.
- Electrical drawing.
- High voltage substation design.
- Electrical installation of buildings.
- Electric safety.
- Geographic information system for electric utilities.
- Interior lighting design.
- Electric energy saving.
- Electric power losses studies.

- Quality management system (ISO) for electric utilities.
- Electric motors characteristics and maintenance.
- Static var compensators (SVC).
- Voltage stability of electric power system.
- Automatic voltage regulators (AVR).
- Risk management for electric power system.
- Smart grid applications for deregulated electricity.
- Smart meters application for deregulated electricity.

Publications:

- "Optimum selection of location & size of power capacitors for voltage control in interconnected networks", IEEE Winter meeting & tesla Symposium, New York – USA, Jan. 1976.
- "KVAR requirements Planning" (Electrical power and energy systems) Journal, Butterworth Scientific Limited, P. O. Box 63, Westbury House, Bury street, U.K., Jan. 1984.
- "New Technique for automatic contingency ranking in a power system based on reactive power as preventive control variable". Proceedings of the first symposium on electric power systems in fast developing countries March 21-24, 1987 Riyadh, sponsored by King Saud university in co-operation with IEEE Region - 8.
- "Optimal static capacitor allocation adopting linear system models" Al-Azhar University Research bulletin, No. 1-1975.
- "Automatic contingency selection for on-line security assessment in power systems" proceeding intercon. (Modeling, simulation) Monastir, Nov. 25-28, 1985 Vol2m, page 141 - 162.
- "CADPAD - Feederdesgn/DB2 interface for distribution network design and analysis (DNDA)" The Fourth Saudi Engineering Conference Nov. 5-8, 1995.
- "Geographic information system as a data bank for electric utilities". The third CIGRE Regional conference in the Arab States Qatar, May 1999.
- "A new definition of performance index for automatic contingency ranking in the domain of corrective power injection". The 4th Afro – Asian international Conference 1998.
- "Data Bank for distribution network analysis and operation", annual conference of Egyptian Syndicate, Apr. 2000.
- "Proposed algorithm assisting decision making for real time control of reactive power at emergency conditions". The 4th CIGRE regional conference in the Arab States, LIBYA, Mar. 19-21, 2001.
- Security Assessment for Reactive Power Ancillary Services in Competitive Electricity Markets GCC Power 2009 Riyadh – KSA, Oct. 19-21, 2009.
- THE SMART TROUBLE CALL SYSTEM FOR POWER DISTRIBUTION NETWORKS, Ahmad M Al-Kandari, Jamal Madouh, Anwar Alnaqi, Ahmed Sami, PEIT' 011, October 09-12, 2011, Alexandria, Egypt.
- ROLE OF GEOGRAPHIC INFORMATION SYSTEM FOR ASSET MANAGEMENT INFORMATION RISK ASSESSMENT IN ELECTRIC UTILITIES, Ahmed Sami Abdelsalam, Ayman Ahmed Sam, Ahmad M Al-Kandari, Anwar Alnaqi International Conference on Information Technology, System & Management (ICITSM 2012).

- Proposed Business Process Inventory of GIS Data Collection for Enterprise Asset Management, Ahmed Sami, Ayman Sami, INTERNATIONAL CONFERENCE "Spatial Data Infrastructures & Spatial Information Management 2013", 13-16 November 2013, FON University, Skopje.
- Impact of Distributed Generations (DG) on the Market of Reactive Power Ancillary Service, Ahmed Sami Abdelsalam, Ahmad M Al-Kandari, 3rd International Conference on ADVANCED CONTROL CIRCUITS AND SYSTEMS (ACCS'013), 30 November – 03 December 2013, Luxor, Egypt.