June 2024.

Dr. Hemmat H. Safwat is an Energy Expert.

## Education

Mechanical Engineering

B.Sc. 1964 – Cairo University, Egypt M.Sc. 1967 – Cairo University, Egypt

Ph.D. 1968 – West Virginia University, West Virginia, USA D.Sc. 1972 – Delft University of Technology, The Netherlands

## **Business Administration**

MBA 1988 - Golden Gate University, California, USA

After professional career that spanned over 50 years in technical and managerial capacities, Dr. Safwat retired in September 2020 and currently serves as an Energy Consultant in areas of current interest under the energy transition era; "renewable energy, energy storage and Hydrogen".

Earlier in his career Dr. Safwat was in academia between 1964 to 1973, where he taught and carried out research at Cairo University, Egypt, West Virginia University, USA and Delft University of Technology, the Netherlands. During that time, he completed his M.Sc. in Solar Energy Utilization, Ph.D. Radiation Heat Transfer, D.Sc. in Fluid Mechanics.

In 1974, Dr. Safwat joined Bechtel, San Francisco and initially was a technical specialist and evolved to supervisor, and, to a project manager position. He was at Bechtel for 23 years, participated in energy technology evaluations, mechanical analysis for nuclear power plants systems. The tasks included solving critical issues for numerous BWR and PWR nuclear plants that were under construction in the US and abroad. In 1989, he assumed a position in Cairo as Project Manager for fossil power plants localization in Egypt as well as planning for Nuclear Power Plant at Dabaa Egypt. He led the Generic Fossil Program that was the basis for the Sidi Krir 1&2 and Ayoun Moussa 1&2 power plants that have been in operation since the late 1990s. He was instrumental in forming the joint venture company between Bechtel and the Egyptian Ministry of Electricity "PGESCo" in 1994. Upon returning to the USA in 1996, he was Bechtel's project manager for nuclear plants improvement program in central USA.

On a sabbatical leave from Bechtel 1986 -1987, Dr. Safwat served as Professor at the American University "AUC" Engineering Department, Cairo, Egypt.

In June 1997, Dr. Safwat joined Enron and served as a general manager for the development of power and desalination plants for Enron International – Middle East. For about five years he managed the development of independent power plants IPPs and Independent power and water plants (IPWPs) in Egypt, UAE, Oman, Saudi Arabia, Palestine, and Brazil.

In late 2001, Dr. Safwat joined Consolidated Contractors Group Offshore "CCC" (at the managing office in Athens, Greece). Dr. Safwat led the power plants bidding both for EPC and development projects. The projects included power plants in Egypt, UAE, Kuwait, Jordan, Syria, Lebanon, Yemen, Algeria and in Africa Mali, Nigeria and Ghana. Dr. Safwat also led in 2011 the formation of CSPC (Consolidated Sicon Power Company) a fully owned company by CCC that handles EPC power including renewable energy.

CSPC bid and undertook PV (Photo Voltaic) solar power projects, in Egypt, Mauritania, Jordan, Nigeria, Saudi Arabia, and Senegal. Also, wind projects in Romania, Nigeria, Saudi Arabia, Egypt and Djibouti.

Dr. Safwat has more than 50 publications and two books, he is an ASME fellow. He chaired sessions in numerous conferences. Dr. Safwat has been active in several professional associations ASME, SME, AEE. He is also a professional engineer.

Dr. Safwat has taken strong interest in Economics since the late 1980's and has now published two books in economics. He continues his research in economics, knowledge, and energy.

.