

Maher K. Saleh, P.E., CFEI
Senior Managing Engineer

Professional Profile

Mr. Saleh is a highly experienced consultant specializing in engineering and root-cause failure analysis of electric distribution systems designed for commercial, industrial, chemical, food processing, pharmaceutical, residential, and electric utility industries. These engineering and technical support activities have included lead responsibility and major deliverables spanning the range from general engineering applications to those specialized requirements associated with the handling of hazardous and explosive materials; the design of clean room environmental systems; and critical-mission facilities.

Mr. Saleh has over 35 years of experience in conducting and leading investigations and condition assessment surveys of large facilities that have been damaged or affected by man-induced or nature-borne events including explosions, fires, volcanic eruptions, floods, and hurricanes. These investigations have required understanding and interpretation of national and local standards and codes as they apply to each specific incident. Mr. Saleh has conducted failure analysis investigations of electrical and mechanical equipment and systems, as well as having developed recovery plans from disasters in the United States and abroad, including Central America and the Caribbean Islands.

Prior to joining Exponent, Mr. Saleh worked for the engineering-consulting firms of Burns and Roe, Stone and Webster, Gibbs and Hill, and Thornton Tomasetti. He was also Product Manager for the U.S. subsidiary of Flakt, Inc., where he was responsible for the development and marketing of pollution control equipment including electrostatic precipitators and associated equipment for the electrical utility and pulp and paper industries. There, he worked as a consultant for companies such as Micron Technology, HDR Corporation, Olin Chemical, and Dole Food Company.

Academic Credentials and Professional Honors

B.S., Electrical Engineering, Ain Shams University, Egypt, 1968

Recognition Award from New York City's Mayor Bloomberg for engineering efforts to support the World Trade Center rescue and recovery operations, 2001

Licenses and Certifications

Registered Professional Engineer, State of New York, # 054582-1
Certified Fire and Explosion Investigator (CFEI) in accordance with the National Association of Fire Investigators (NAFI)

Languages

Arabic (Native speaker: fluent in oral, written, and conversational)

Prior Experience

Vice President, Thornton Tomasetti, 2001–2010
Principal, Saleh Associates, 1989–2001
Engineer, Stone and Webster, 1982–1989
Product Manager, Flakt, Inc. / ABB, 1980–1982
Manager of Pre-Contract Engineering, Flakt, Inc., 1976–1980
Engineer, Gibbs and Hill, 1974–1976
Engineer, Burns and Roe, 1972–1974
Engineer, American Electrical Power, 1971–1972

Project Experience

Commercial and Residential

Performed detailed design and condition assessment surveys, as well as code reviews of electrical, fire alarm, lighting, lightning protection, controls, and data system installations. These engineering activities have included the environmental interface for fire protection, security, and mechanical systems for heating, ventilation, and air conditioning equipment in central plants. Produced probable cost analyses for real estate transactions and has provided expert analysis in litigation cases involving code compliance, condition assessment, and equipment failure events.

Aviation

Lead design responsibilities for several airport facilities including Newark International Airport, Stewart International Airport, and the corporate hanger for a major U.S. pharmaceutical company. Applied expertise to the design and development of air-side and land-side passenger terminals, maintenance hangers, movement facilitating equipment, 400 Hertz power supply systems, central cooling plants and tarmac lighting.

Power Generation and Distribution Industry

Lead design responsibilities for several coal and nuclear power plants. Co-authored code-compliance reports for presentation to the NRC on safety systems for the nuclear reactor. Applied expertise to the design and application of electrostatic precipitators in the power plant, pulp and paper, and copper mining industries.

Pharmaceutical and Health Care Industries

Lead design and construction administration responsibilities for the re-adaptive use of an existing campus for a leading pharmaceutical company in New Jersey. Provided engineering support for the expansion and renovation of patient facilities in hospitals, several new self-standing dialysis clinics in the Northeast, and construction-claim litigation involving a new MRI facility and an addition to an existing pharmaceutical plant.

Entertainment and Broadcasting Industry

Lead engineering design and construction administration responsibilities for the new and existing facilities located on the campus of a major sports broadcasting company in Connecticut. These responsibilities included new building construction, expansion of the existing electric power distribution network, addition of new data-center, chillers and chilled water loops, fire alarm systems, renovation of the broadcast studios and voice editing rooms, and expansion of the cafeteria and dining facility.

Investigation and Disaster Recovery

Managed investigation of losses in sugar mill, bakery plant, meat processing plant, acoustical insulation manufacturing plant, airport facilities, chemical and waste water treatment plants, high end residential and commercial buildings, chillers and boilers including controls, electrical transformers and switchgears, bus duct and related power distribution equipment, fire alarms and life-safety systems in hospitals and healthcare facilities, as well as errors and omissions related to the design and construction of pharmaceutical plant.