Ole E. Haaland, P. E.
(+1) 410-703-9002
ole@annainc.com

SUMMARY

Mr. Haaland has thirty four years experience in power production, design, construction, and commissioning, with 27 years managing people and projects. He is a registered professional engineer in Maryland and held a Senior Reactor Operator's license at Indian Point #3 Nuclear Power Plant. Experience is in conventional, nuclear, and alternate fuel power plant mechanical and electrical systems management, design, construction, plant outage management, start-up, performance testing, and operation. He has performed as Project Manager, Construction Manager, and Commissioning Manager for several Greenfield power projects. He has successfully engineered, estimated, planned, executed work, and provided troubleshooting services for power plants of varied prime movers. His has been instrumental in meeting contractual and schedule requirements.

Vice President – Engineering and Project Management, ANNA, Inc
9/94 – present
Project Manager and coordinator for both single and multi-contractor projects. Supervise financial and business planning for firm.

- Provided expert witness testimony for power plant design and construction issues.
- Provided expert services for parties in several contract disputes.
- Performed failure analysis including steam turbine failures, electrical breaker failures, and operational failures.
- Provided troubleshooting services for multiple power projects.
- Provided training on equipment and troubleshooting processes for power plant operators and equipment manufacturers.
- Provided Project Management services for a major engine manufacturer for an engineering design troubleshooting program.
- Provided commissioning services for geothermal power projects in the USA and Turkey.
- Provided commissioning and startup services for various equipment manufacturers including Basler Electric, Hyundai, Caterpillar, Wartsilla, and Woodward.
- Provided engineering, commissioning, and troubleshooting services for a FPSO that produces 120,000 barrels Oil per day plus 100 MMscf per day of dry Gas in Singapore and Australia.
- Provided commissioning services for 7 deep water semi-submersible drilling rigs for the Gulf of Mexico
- Provided Design, coordination, and management services for several off-shore drilling rigs in Norway, Denmark, Australia, and US Gulf Coast.
- Construction and Commissioning Manager for 100MW reciprocating engine power plant in Dominican Republic
- Engineering design coordination in Gothenburg, Sweden for a reciprocating engine driven power project in the United States.
- Commissioning Manager and performance testing for Ten, 4.2 MW gas reciprocating engine generators in Mobile Bay, Alabama

- Design completion and commissioning management for 320 MW Gas turbine project, including 128kV substation in Columbia, South America
- Resolved shipboard electrical generation problems on several cargo, Coast Guard, MSC(Military Sealift Command), Oil exploration ships and drilling rigs in the US and in the North Sea.
- Performed site and financial analysis for simple cycle, co-generation, and alternate fuel power projects
- EPC Manager for automation system for a 9 MW cogeneration plant including absorption chillers, cooling towers, and 4 on site generators in Connecticut
- Design, construction project management, and startup services for two 7.5 MW reciprocating engines in Cayman Islands, BWI
- Performed electrical commissioning services for Power Plant number 9, in Saudi Arabia
- Performed engineering, engineering review, and startup services for gas turbine cogeneration plants
- Designed a recovery system to recapture diesel engine cooling water heat for efficiency improvements in a combined cycle power plant for a diesel engine manufacturer.
- Directed engineering proposal activities and engineering applications.

New York Power Authority Indian Point #3 Nuclear Power Plant

Field Engineering Supervisor, Site Engineering Department	*1992 – 8/94*
Construction Engineer, Construction Services Department	*1990 - 1992*
Senior Plant Engineer, Technical Services Department	*1989 - 1990*
Plant Engineer, Technical Services Department	*1980 - 1989*

Supervisor of a field engineering group consisting of eight engineers and five contractors. Created and implemented a new department.

- **Supervised** on-site coordination of modification design performed by others.
- **Developed** a modification testing and commissioning program to comply with NRC regulations.
- **Coordinated** outage and installation activities, including resolution of field problems.
- **Performed** modification troubleshooting, startup, testing and commissioning.
- **Reviewed** procedures as a member of the Plant Operation and Review Committee (PORC).

Supervised the Maintenance General Contractor including the Field Engineering, Planning, and Scheduling staff.

- **Management** of an outage work force in excess of 300.
- **Coordinated** all contractor activities with Power Authority Engineering Departments and outside AE's.
- **Supervised** job estimating, scheduling, planning, material procurement, installation, and closeout of installation work packages.

Ole E. Haaland, P. E.
(+1) 410-703-9002
ole@annainc.com

Ole E. Haaland, P. E.
(+1) 410-703-9002
ole@annainc.com

EDUCATION AND COMMITTIES

BSME, New York Institute of Technology, 1980
IEEE-45.1 Shipboard Power Systems – Design Committee

ASSOCIATIONS

Electrical Generating Systems Association

Instructor, EGSA On-Site Power School
Education committee member
On-Site Power Generation – Reference Book (4th edition)
– University Text Book (5th edition in development)
Chapter author, 4th edition
Chapter author and sub-committee member, 5th edition

LICENSES

- **Registered Professional Engineer** Maryland #22080
- **Senior Reactor Operator:** Indian Point Unit #3, 1025 MWe PWR

PUBLICATIONS

Haaland, O., 1996. "*Man Machine Interfaces and the Engineer"*

Haaland, O., "*Utility Interconnection by Non-Utility Generators"*, 1996 Presented at Power-Gen International, Orlando, FL

Haaland, O., 2002. "*Case History –Automation of an Existing Cogeneration Facility"*, Proceedings of IJPGC: International Joint Power Generation Conference, Phoenix, Arizona

Haaland, O., Electrical Generating Systems Association, "*Cooling Systems, Liquid" for* "On-Site Power Generation: A Reference Book," 4th Edition, 2002, Chapter 22,

Haaland, O., Electrical Generating Systems Association, "*Switchgear" for* "On-Site Power Generation: A Reference Book," 5th Edition, 2015, Chapter 22,