Resume

NAME YANG, WEIN JOE (楊文宙)

EDUCATION

1990 University of Washington, Seattle - M.S.E Mechanical Engineering
1984 National Taiwan University - B.S., Naval Architecture

TRAINING

1992 Chinese Commission on Radiological Protection - 42-hours on nuclear basics training program.
1991 Sargent & Lundy Engineers - 1-week training program in nuclear equipment seismic and environmental qualification.

EXPERIENCE

2017-Date Owner, JiaKai Energy Tech. Co. Ltd.

Participated in Taiwan Power Company Dah-Tarn CCPP Unit #5 & 6 hydro-ammonia SCR system adding work as a consulting company to provide service including overall planning, soil improvement and piling design, foundation and civil design, tank area building structure design, 1st power supply design, utility piping system and detailed design, HRSG outside supporting structure design, I&C for utility system, etc. for local Contractor. The performance NOx abatement efficienct is more than 80%; emission level around 4ppm @CEMS, which is better than specified guaranteed of 5.5ppm.

2019-2021 Owner, JiaKai Energy Tech. Co. Ltd.;
Part time Consultant to United Fuel Treatment Inc.

Participated in Taiwan Power Company Dah-Tarn CCPP Unit #5 & 6 hydro-ammonia SCR system adding work as a consulting company.

Participated in Ho-Ping Power Company coal firing unit AQCS modification project bidding policy work as a consulting company.

Participated in Fong-Der existing power plant for SCR system adding work as a consulting company.

2017-2019 Owner, JiaKai Energy Tech. Co. Ltd.;
Part time Consultant to GIBSIN

2013-2017 Assistant Manager, Mechanical Department, GIBSIN

Participated in Taiwan Power Company Tunghsiao Power Plant Renewal Project (2,880 MW ±10%, gas fired) as a job engineer to provide the AE service, including planning, engineering study, turn-key specification preparation, BOP system design and equipment specification, EPC turn-key specification clarification, proposal review and evaluation, process review, vendor

document/drawings review, testing, and other engineering services. Specific work as follows:

- Site survey and overall plant layout configuration
- Existing plant terminal condition review
- Gas turbine model and unit combination study for Siemens H type, MHI F type & J type, GE 7 series in terms of output, heat rate, and start-up time.
- Natural gas specification and plant terminal pressure requirement study
- Site design condition determination study
- Circulating water suction pit sizing and system review
- Economic analysis and setting-up of heat rate evaluation criteria
- Combined cycle unit output range criteria analysis
- Output and heat rate guarantee verification and penalty rule study
- Elaboration of performance testing scheme of CCGT
- Rules of application of correction curves study
- EPC specification elaboration
- Comparison study of anhydrous ammonia and hydroammonia SCR system for CCPP
- BOP system design and equipment specification elaboration, such as circulating water system, natural gas supply system, demin. water system, service gas system, make-up water sysem. etc.
- Negotiation and technical discussion with potential Vendor's (GE, MHI & Siemens)
- Vendor's Proposals(MHI & Siemens) review/evaluation and report elaboration
- Vendor's drawing review

Participated in Taiwan Power Company Dah-Tarn CCPP Extension Project Feasibility Study (2,800 MW, gas fired) as a job engineer for planning and feasibility of the project. Specific work as follows:

Participated in Formosa Heavy Industry ANDA Cogeneration Plant Project(82MW, 300Ton/h) in Philippine as a supervising engineer to provide system design, engineering lists, vendor document/drawings review, interface check and numbering unification.

Participated in Taiwan Power Company Hot Gas Path Parts Evaluation Study Project as a job engineer as well as project manager to provide Study Report, including setting up the evaluation criteria for HGPP cost together with EPC work, the procedure and sequence of bidding and contractual execution schedule, and verification of actual expenditure of HGPP for Combined Cycle Units.

2004-2013 Senior Supervising Mechanical Engineer, GIBSIN

Participated in Taiwan Power Company Tunghsiao Power Plant Renewal Project (2,880 MW ± 10%, gas fired) as a job engineer to provide the AE service, including planning, engineering study, turn-key specification preparation, BOP system design and equipment specification, EPC turn-key specification clarification, proposal review and evaluation, process review, vendor document/drawings review, testing, and other engineering services. Specific work as follows:

Participated in Taiwan Power Company Dah-Tarn CCPP Extension Project Feasibility Study (2,800 MW, gas fired) as a job engineer for planning and feasibility of the project.

Participated in Taiwan Power Company Dah-Tarn Combined Cycle Power Plant Project (4,000 MW, gas-fired) as a job engineer, including planning, turn-key specification preparation, proposal

evaluation, process review, vendor drawings review, testing, and other engineering services.

1999-2004 Supervising Mechanical Engineer, GIBSIN

Participated in Taiwan Power Company Dah-Tarn Combined Cycle Power Plant Project (4,000 MW, gas-fired) as a job engineer, including planning, turn-key specification preparation, proposal evaluation, process review, vendor drawings review, testing, and other engineering services.

1997-1999 Senior Mechanical Engineer, GIBSIN

Participated in FPCC FP-1 Units 1-5 (5×600 MW, coal-fired, Supercritical) & UP-1 Units A&B (2×600 MW, coal-fired, Supercritical) Power Plant Project, as a job engineer for preboiler island, including specification preparation, process design, and vendor drawing review.

1995-1997 Senior Specialist, Technical Department, TUNTEX GROUP

- Participated in power plant and co-gen, plant investment evaluation, including engineering planning, power purchase agreement, and financial analysis.
- Participated in Taiwan Power Company's IPP project bidding.

1990-1995 Mechanical Engineer (III, II, I) GIBSIN

- Participated in Taiwan Power Company's Gas Turbine Relocation Project from Tunghsiao Power Plant to Penhu Island.
- Participated in feasibility study and conceptual design of DeNOx and DeSOx system retrofit on Taiwan Power Company's eighteen existing fossil power plant units.
- Participated in Talin Unit No. 6 Power Plant Project and Taichung Units No. 5-8 Power Plant Project, including system flow diagram design, specification preparation, bid evaluation and drawing review for equipment (such as boiler feed pumps, boiler feed pump driving turbine, main condenser, and HP/HT piping)
- Participated in the boiler performance testing of Taiwan Power Company's Taichung Units No. 1-4.

1988-1989 Research Assistant, Department of Mechanical Engineering
University of Washington

Participated in the joint project of mechanical engineering department and environment science department to establish a new ventilation system laboratory and computer data acquisition system.

1986-1988 Foreman, Billet Mill, China Steel Company

- Supervised a group of technicians on detecting/conditioning of defects on billet surface to ensure the milling quality of steel bar and steel coil
- Modified production line equipment

- Performed quality control activity

1984-1986 2nd Lieutenant of artillery, ROCA(Republic of China Army)

PUBLICATION

1. "SEM Quantification of Transgranular vs Intergranular fracture", Journal of the American Ceramic Society, Vol. 74, No.2, February 1991

2. "複循環發電機組之沿革及其發展", 台電工程月刊, Vol.804 August 2015