

PHILADELPHIA ELECTRIC COMPANY

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JOHN S. KEMPER
VICE-PRESIDENT
ENGINEERING AND RESEARCH

JUL 20 1984

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Limerick Generating Station
Design Verification Program, Unit 1

Reference: J. S. Kemper to A. Schwencer letter,
dated June 20, 1984

File: GOVT 1-1 (NRC)

Dear Mr. Schwencer:

The reference letter transmitted information concerning the design experience of Torrey Pines Technology reviewers. Recently five additional personnel were assigned to assist in the independent design review effort; 15 copies of a completed experience form for each new reviewer are enclosed.

Also enclosed are 15 copies of the Experience Summary which has been revised to reflect the new reviewers and their task assignments.

Sincerely,

John S. Kemper

See Attached Service List

GJB/pd07098411

8407250371 840720
PDR ADOCK 05000352
A PDR

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cc: Judge Lawrence Brenner (w/o enclosure)
Judge Richard F. Cole (w/o enclosure)
Troy B. Conner, Jr., Esq. (w/o enclosure)
Ann P. Hodgdon, Esq. (w/o enclosure)
Mr. Frank R. Romano (w/o enclosure)
Mr. Robert L. Anthony (w/o enclosure)
Charles W. Elliot, Esq. (w/o enclosure)
Zori G. Ferkin, Esq. (w/o enclosure)
Mr. Thomas Gerusky (w/o enclosure)
Director, Penna. Emergency (w/o enclosure)
Management Agency
Angus R. Love, Esq. (w/o enclosure)
David Wersan, Esq. (w/o enclosure)
Robert J. Sugarman, Esq. (w/o enclosure)
Spence W. Perry, Esq. (w/o enclosure)
Jay M. Gutierrez, Esq. (w/o enclosure)
Atomic Safety & Licensing (w/o enclosure)
Appeal Board
Atomic Safety & Licensing (w/o enclosure)
Board Panel
Docket & Service Section (w/o enclosure)
Martha W. Bush, Esq. (w/o enclosure)
Mr. James Wiggins (w/o enclosure)
Mr. Timothy R. S. Campbell (w/o enclosure)
Ms. Phyllis Zitzer (w/o enclosure)
Judge Peter A. Morris (w/o enclosure)

LIMERICK INDEPENDENT DESIGN REVIEW
 TECHNICAL REVIEWERS - NUCLEAR PLANT DESIGN EXPERIENCE

EMPLOYMENT DATES	EMPLOYER	ACTIVITIES
8/71 - 6/82	CA - San Diego, CA Fuel and Component Quality Assurance	Senior Inspector in fuels and ASME Code component manufacturing facility including certifications per ASNT-TC-IA in the following NDE disciplines: Radiography Level II Ultrasonic " Magnetic Particle " Penetrant " Helium Leak Detection " Hydro/pneumatic Testing "
7/82 - 10/82	GA	At Shorham Nuclear Power Sta, N.Y., Ultrasonic - retesting of welds on the Auxiliary Feedwater and Residual Heat Removal Systems. Reviewed radiographs and NDE Reports for completeness and accuracy. Data package reviewed completeness and accuracy.
6/83 - 7/83	GA	At Marble Hill Nuclear Power Station, Indiana - Reviewed radiographs and reports on High Pressure Cooling Systems. Reviewer of Welder's Qualifications and Certifications.
5/84 - 6/84	GA	At Byron Nuclear Power Station, Illinois - Review of safety-related equipment documentation: Receiving Inspection Reports, Source Inspection Reports, and Audit reports for complete history and traceability of hardware.

TOTAL EXPERIENCE YEAR(S) 11 MONTH(S) 4

SIGNATURE David Aguirre per [Signature] DATE 6/18/84

LIMERICK INDEPENDENT DESIGN REVIEW
TECHNICAL REVIEWERS - NUCLEAR PLANT DESIGN EXPERIENCE

EMPLOYMENT DATES	EMPLOYER	ACTIVITIES
7/1964 7/1969	Atomic Energy Commission, India. (Bombay)	Nuclear Fuel Development & Nuclear Sys ^o Design
6/1974 to present	GA Technologies	<ul style="list-style-type: none"> • Nuclear Fuel Development. • Nuclear Systems Design • Nuclear System Design Verification/Testing. • Consultant to "Bechtel Power Corporation" (2/1981 thru 11/1981) on KNU 5 and 6 PWR Projects, as Nuclear Systems Engineer Edison Co. • Consultant to Southern California Edison Co. (Six months) on SONGAS units 1, 2, and 3 • Consultant to Bechtel (six months) on SONGAS 2 & 3 as Nuclear Licensing Engineer, Marble Hill NGAS. • Construction Design Review of Marble Hill NGAS Units 1 and 2 of Public Service of Indiana.

LIMERICK INDEPENDENT DESIGN REVIEW
TECHNICAL REVIEWERS - NUCLEAR PLANT DESIGN EXPERIENCE

EMPLOYMENT DATES	EMPLOYER	ACTIVITIES
2/1/71 to present	GA Technologies San Diego, CA	<p>Currently the cognizant engineer for several of the HTGR auxiliary systems including the Helium Purification, PCRV Service and PCRV Pressure Relief Systems. Have recently prepared, reviewed, and updated subsystem design descriptions (SDDs) for these systems. In the past year, jointly carried out a functional analysis for, and prepared a system description of, the Primary Coolant (Helium) System for the HTGR.</p> <p>Prepared a Test Specification for and followed the construction of, a large (1/6 scale) Lower Plenum Flow Distribution Rig which is currently being used for extensive DV&S testing. It simulates the lower plenum of the HTGR.</p> <p>Previously involved with thermochemical water splitting, nuclear heat source coal gasification plants, decontamination studies of Gas Turbine/HTGR Components and economic studies using discounted cash flow techniques.</p> <p>Was cognizant engineer for design of the refabrication section of an HTGR Recycle Facility in a conceptual engineering study by GA and the R. M. Parsons Company; generated basic process flow sheets and design philosophies for major parts of this plant section, including equipment selection and sizing.</p>
9/55 to 2/71	Atomics International (now Rockwell International)- Energy Systems Group Los Angeles, CA	<p>Carried out experimental R&D using high temperatures, high vacuum, refractory materials and powder metallurgy techniques. Designed equipment/hardware for remote operation, experimental R&D with radioactive material in a hot cell. Conducted process evaluations for preparing various LWR and FBR fuels and did economic analyses and tradeoff studies for preparing ground rules and design philosophies for a fuel manufacturing plant. Carried out shakedown of development facility to handle and fabricate plutonium containing fuel materials and performed glove-box experimental work in same.</p>
3/52 to 9/55	Oak Ridge National Laboratory (K-25 Plant) Oak Ridge, Tenn.	<p>Did general flowsheet and process development work, including pilot plant studies to optimize methods used in preparing "feedplant" materials for subsequent gaseous diffusion, enrichment operations.</p>

TOTAL EXPERIENCE YEAR(S) 32 MONTH(S) _____

SIGNATURE

E Sydney Straussberg DATE 6/28/84

LIMERICK INDEPENDENT DESIGN REVIEW
TECHNICAL REVIEWERS - NUCLEAR PLANT DESIGN EXPERIENCE

EMPLOYMENT DATES	EMPLOYER	ACTIVITIES
JAN. 1962 TO DEC. 1982 (RETIRED)	G.A. TECHNOLOGIES INC.	<p><u>SR. PROJECT ENGINEER, QA</u> - RESPONSIBLE FOR THE OVERALL ACTIVITIES ON THE DESIGN OF STEAM GENERATORS FOR HTGR PLANTS. THESE QA ACTIVITIES WERE BASED ON THE REQUIREMENTS OF 10CFR50, APPENDIX B, ANSI N45.2 AND THE ASME CODE.</p> <p><u>SITE QA MANAGER</u> AT FORT ST. VRAIN NUCLEAR POWER PLANT, RESPONSIBLE FOR OVERALL QA OF PLANT MODIFICATION AND WALKDOWN OF ALL CLASS 1 PIPING ROUTING, SUPPORTS AND AS-BUILT CONFIGURATION.</p> <p><u>SR. QUALITY ENGINEER</u> - PERFORMED DESIGN REVIEW TO THE QA REQUIREMENTS ON VARIOUS SYSTEMS OF THE HTGR REACTOR DESIGN.</p>
JAN. 1983 TO OCT. 1983	SELF-EMPLOYED (QA CONSULTANT)	<p>DID QA CONSULTING WORK FOR GRA POWER COOLING SYSTEMS, INC. ESTABLISHED A COMPLETE QA PROGRAM TO THE REQUIREMENTS OF 10CFR50, APPENDIX B, ANSI N45.2 AND THE ASME CODE. PERFORMED DESIGN REVIEW TO THE QA REQUIREMENTS ON THE DESIGN OF THE DRY COOLING TOWERS FOR WPPSS UNIT NO. 3.</p>

TOTAL EXPERIENCE YEAR(S) 21 MONTH(S) 10

SIGNATURE

John A. Treece DATE 6/20/84

Reviewer

A. R. VEGA

PROJECT 2524

LIMERICK INDEPENDENT DESIGN REVIEW
TECHNICAL REVIEWERS - NUCLEAR PLANT DESIGN EXPERIENCE

EMPLOYMENT DATES	EMPLOYER	ACTIVITIES
6/69 - 10/71	UNITED NUCLEAR CORP	DESIGN, ANALYSIS AND TESTING OF COMPONENTS FOR LWR RELOAD FUEL ASSEMBLIES
10/71 - 12/72	WESTINGHOUSE ELECTRIC CORP	DESIGN AND ANALYSIS OF FUEL AND CONTROL ASSEMBLIES OF THE FAST FLUX TEST FACILITIES
12/72 - PRESENT	UNITED NUCLEAR WATER GULF UNITED NUCLEAR LATER GENERAL ATOMIC	DESIGN, ANALYSIS, TESTING AND PROJECT MANAGEMENT OF COMPONENTS FOR VARIOUS REACTORS INCLUDING LIGHT WATER REACTORS, GAS COOLED FAST REACTOR, HIGH TEMPERATURE GAS COOLED REACTOR AND LIQUID METAL FAST BREEDER REACTOR

TOTAL EXPERIENCE

YEAR(S)

15

MONTH(S)

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SIGNATURE

A. R. Vega

DATE

6/22/84

EXPERIENCE SUMMARY

<u>Project Management</u>	<u>Years Experience</u>	<u>(Design)</u>	<u>Average</u>
F. D. Carpenter	33		
<u>PFR Committee - Task E</u>			27.8
S. L. Koutz	28		
F. O. Hall	29		
T. R. Colandrea	25		
A. M. Harris	25		
R. G. Wunderlich	32		
<u>Tasks A & B</u>			*15.3
S. D. Bresnick	18		
W. P. Malay	28		
R. B. Patten	1		
*J. A. Treese	22		
K. J. Baylor	12		
*D. Aguirre	11		
<u>Tasks C & D</u>			*18
		(Design-	*16.8
A. A. Schwartz	22	11	
J. D. Stanley	35	35	
W. R. Arnold	15	15	
L. E. Penzes	15	15	
E. P. Gagnon	15	15	
C. F. Dahms	5	3	
F. T. Lin	16	16	
P. K. Patel	13	13	
*A. R. Veca	15	15	
*O. P. Chawla	15	15	
*S. Strausberg	32	32	