BALTIMORE GAS AND ELECTRIC COMPANY

GAS AND ELECTRIC BUILDING
BALTIMORE, MARYLAND 21203

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

September 5, 1979

Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attn: Mr. Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Subject: Calvert Cliffs Nuclear Power Plant
Units Nos. 1 & 2, Docket Nos. 50-317 & 50-318
Management and Technical Resources

Reference: a) NRC letter dated 6/29/79 from H. R. Denton to All Power Reactor Licensees.
b) BG&E letter dated 7/31/79 from A. E. Lundvall to R. W. Reid, same subject.

Gentlemen:

The attached charts and tables provide additional information relative to the technical human resources available to the management of Baltimore Gas and Electric Company in the event of a TMI-2 type of eve... This information supplements that previously submitted in Reference (b) in response to Reference (a). If you have any questions, please contact us.

Very truly yours,

Arthur E. Lundvall

cc: J. A. Biddison, Esquire
G. F. Trowbridge, Esquire
Mr. E. L. Conner, Jr. - NRC
Mr. W. P. Haass, - NRC

930205

7909100515

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT

ELECTRIC PRODUCTION DEPARTMENT

CHIEF ENGINEER-NUCLEAR PLANT

*1. L. B. Russell

NUCLEAR PLANT ENGINEER-OPERATIONS

*1. R. E. Denton

SHIFT SUPERVISORS

1. C. L. Dunkerly
2. J. R. Hill
3. J. F. Lohr
4. J. E. Rivera
5. D. F. Zyriek
6. J. E. Gilbert

PERFORMANCE ENGINEERS

1. R. P. Heibel
2. S. M. Davis

NUCLEAR PLANT ENGINEER-PERFORMANCE

*1. W. S. Gibson

ASSISTANT GENERAL FOREMEN-MAINTENANCE

1. R. G. Rizzo
2. E. R. Bauer

SUPERVISOR-TECHNICAL SUPPORT

1. J. T. Carroll

PERFORMANCE ENGINEERS

1. B. C. Rudell
2. T. L. Sydnor
3. R. L. Wenderlich
4. L. O. Wenger

TECHNICAL SPECIALIST

1. K. G. Tietjen

RADIATION SAFETY & CHEMISTRY ENGINEER

*1. A. J. Kaupa

PLANT HEALTH PHYSICIST

1. E. T. Reimer

PERFORMANCE ENGINEERS

1. P. T. Crinigan
2. R. F. Eherts

FOREMEN-RADIATION SAFETY & CHEMISTRY

1. J. R. Speciale
2. J. T. Carlson

ASSISTANT GENERAL SUPERVISOR-PLANT SERVICES

1. H. A. Eggleston

ASST. GEN. SUPERVISOR-NUCLEAR SECURITY

1. C. C. Woody

NUCLEAR ENGINEER-CALVERT CLIFFS

*1. W. J. Lippold

ENGINEERS

1. J. P. Steelman
2. J. A. Mihalcik

8203080

*Personal background data and job descriptions provided previously.

BALTIMORE GAS AND ELECTRIC COMPANY

PRODUCTION MAINTENANCE DEPARTMENT

CALVERT CLIFFS NUCLEAR POWER PLANT

SUPERVISOR, PLANT ENGINEERING - NUCLEAR

*1. D. W. Latham

ENGINEERS

1. S. E. Jones
2. K. W. Mauk
3. T. P. Schafer

PROFESSIONAL ASSOCIATES

1. R. H. Penny
2. R. T. Jennings

GENERAL FOREMAN - NUCLEAR

*1. J. R. Lemons

SENIOR ENGINEER

1. M. E. Roberson

ENGINEERS

1. K. M. Romney
2. M. J. Miernicki

ASSISTANT GENERAL FOREMEN

1. R. D. Sheranko
2. W. L. Whitaker
3. R. W. Talley

*Personal background data and job descriptions provided previously.

8303020

QUALITY ASSURANCE DEPARTMENT
OFF-SITE TECHNICAL STAFF

Total or Subtotal by subunit

	Engineering Quality Assurance	Quality Assurance	Quality Control	Mgr. QA
1. Total number (Managers, Engineers, and Professional Personnel)	9	3	1	1
2. By education background, e.g. -				
B.S. - Nuclear Engineering				
B.S. - Civil Engineering	1			
- Electrical Engineering	1			
- Business Management	1			1
- Mechanical Engineering	3			
- Metallurgical Engineering	1			
- Naval Science	1			
- Physics		1		
M.S. - (as indicated)				
Mgt. & related areas	3			
3. Technical Experience (in man-years)	Total Man-Years	Total Man-Years	Total Man-Years	Total Man-Years
a. Engineering				
(1) Nuclear Power Field	71	28	12	13
(2) Engineering Management	8	12		25
(3) Total Utility Experience	67	55	8	30
*b. Field (Discipline)	(F) (N)	(F) (N)	(F) (N)	(F) (N)
(1) Reactor Physics				
(2) Electrical Engineering				
(3) Mechanical Engineering	2 51			
(4) Civil Engineering	10			
(5) Health Physics	10			
(6) Quality Assurance	42 3	24	7	1
(7) Nuclear (oper. & Maint.)	23	4	5	12
(8) Metallurgy	13	10		
(9) Fossil Plant Engineer				17

*Specify how much experience is (F) - full time nuclear experience, (N) - non-nuclear experience.

8202080

ELECTRIC SYSTEMS OPERATIONS DEPARTMENT

TECHNICAL STAFF (OFFSITE)

Total or subtotal by subunit

	Dept. Manager & System Operations	Operations Eng.	Line & Substation Operations	Substation Maintenance
1. Total number (Managers, Engineers, and Professional Personnel)	22	10	5	4
2. By education background, e.g. -				
B.S. - Nuclear Engineering	0	0	0	0
B.S. - Electrical Engineering	4	8	1	2
- Engineering (general)	2	0	0	0
- Mechanical Engineering	0	0	0	1
3. Technical Experience (in man-years)	Total Man-Years	Total Man-Years	Total Man-Years	Total Man-Years
a. Engineering				
(1) Nuclear Power Field	0	0	0	0
(2) Engineering Management	0	0	0	0
(3) Total Utility Experience	86	91	29	42
b. Field (Discipline)	(F) (N)	(F) (N)	(F) (N)	(F) (N)
(1) Electrical Engineering	0 86	0 91	0 29	0 42

*Specify how much experience is (F) - full time nuclear experience, (N) - non-nuclear experience.

8203030

ELECTRIC TEST DEPARTMENT
OFF-SITE TECHNICAL STAFF

	Manager	Area Supply Planning	Bulk Power Planning	Special Studies Section	Electric System Analysis
1. Total Number	1	11	11	4	7
2. Educational					
B.S. - Elec. Engr.	1	11	11	3	7
- Mech. Engr.		1		1	
- Business		1			
- Inst. Engr.				1	
M.S. - Elec. Engr.			4		
- Finan. Mgmt.		1			
- Bus. Mgmt					1
- Mgmt. Sci.				1	
- Computer Sci.					2
Juris Doctor		1			
3. Technical Exp.			Total Man-Years		
a. Engineering					
(1) Nucl. Power Field					
(2) Engrg. Mgmt.	14	56	31	28	12
(3) Total Utility Exp.	23	167	125	83	69
b. Field (Discipline)	(F) (N)	(F) (N)	(F) (N)	(F) (N)	(F) (N)
(1) Elec. Engrg.		4	5 11		1 1

930240

Brandon Shores Project Department
Off-Site Technical Staff

1. Total Number 3

2. Educational Background

B.S. - Civil Engr	1
- Mech. Engr.	1
B.E.	1
M.S. - Mech. Engr.	1
- Nuclear Engr.	1

3. Technical Experience

a. Engineering

(1) Nuclear Power Field	40
(2) Engineering Mgmt.	34
(3) Total Utility Exper.	70

b. Field

	(F)	(N)
Construction Mgmt.	5	8
Mechanical Engrg.		17
Nuclear Engrg.	17	
Nuclear Quality Assurance	6	

930211

ELECTRIC PRODUCTION DEPARTMENT
OFF-SITE TECHNICAL STAFF

	Chemical Unit	Plant Installations Unit	Support Services Section	Performance Section	Generation Section
1. Total Number	4	8	1	17	14
2. Educational					
B.A. - Chemistry	1				
B.S. - Chem. Engr.	3			1	
- Elec. Engr.		1			
- Mech. Engr.		3		12	8
- Engineering		1	1	1	5
B.E.					1
M.S. - Environmental				1	
M.S. - Mech. Engrg.				1	
M.S. - Liberal Arts				1	
3. Technical Exp.					
a. (1) Nucl. Power Field	4	30	0	21	5
(2) Engrg. Mgmt.	18	20	9.5	40	127
(3) Total Utility Exp.	111	212	32	223	295
	(F) (N)	(F) (N)	(F) (N)	(F) (N)	(F) (N)
b. (1) Reactor Physics					
(2) Elec. Engrg.		1 34			
(3) Health Physics	4				
(4) Controls		3 52			
(5) Mech. Engrg.		13 111	13	12 164	12 96
(6) Environmental				8	
(7) Chem. Engrg.	83			1 7	
(8) Spectroscopy	30				
(9) Operations			10	7 23	148

930212

PMD TECHNICAL STAFF (OFF-SITE)

	Maintenance Engineering	Plant Engineering	Planning & Scheduling	Materials Analysis	General Supervision
1. Total Number (Managers, Engineers, and Professional Personnel)	8	7	2	9	5
2. By Education Background	4 - B.S. Mechanical Engineering 1 - B.S. Electrical Engineering 1 - B.S. Marine Engineering 1 - Doctorate-Law	5 - B.S. Mechanical Engineering 1 - B.S. Welding Engineering 1 - B.S. Electrical Engineering 1 - B.S. Ind.Engr.	2 - B.S. Mechanical Engineering 1 - Assoc. Mech. Design Engrg.	2 - B.S. Mechanical Engineering 1 - M.S. Metallurgy 1 - M.S. Industrial Administration	4 - B.S. Mechanical Engineering 1 - B.S. Chemical Engineering 1 - M.S. Environmental Health-Radiation Safety
3. Technical Experience	Total Man-Years	Total Man-Years	Total Man-Years	Total Man-Years	Total Man-Years
a. Engineering					
(1) Nuclear Power Field	10	9 1/2	1	14 1/2	13
(2) Engineering Management	36	13	0	21 1/2	53
(3) Total Utility Experience	130	59	15	96 1/2	99
b. Field (Discipline)	(F) / (N)	(F) / (N)	(F) / (N)	(F) / (N)	(F) / (N)
(1) Electrical Engineering	1 / 7	5			6
(2) Health Physics					4 / 3
(3) Mechanical Engr	8 / 67	4½ / 41½	1 / 14	14½ / 44½	3 / 9
(4) NDE & Metalrg	1 / 4	/ 5			
(5) Welding Engr.		/ 5			

Footnote: (F) - full time nuclear experience, (N) - non-nuclear experience.

POOR ORIGINAL

9302243

ELECTRIC ENGINEERING DEPARTMENT
OFF-SITE TECHNICAL STAFF

	Civil Engineering	Electrical* Engineering-Generation	Electrical Engineering Syst. Protection & Communications	Environmental Engineering	Mechanical Engineering	Mechanical Engineering I & C Group	Nuclear Engineering	Transmission Engrg.
1. Total Number	8	8	8	7	8	7	6	12
2. Educational Background								
B.S. - Civil Engrg.	5				2			3
- Mech. Engrg.	1			2	6	3	1	2
- Elec. Engrg.		7	8			4	1	7
- Chemistry				2				
- Geology				1				
- Zoology				1				
- Chem Engrg.				1				
- Nucl. Engrg.				1			3	
- Physics				1				
- Engineering							1	
B.A. - Science Education				1				
M.S. - Civil Engrg.	1				1			
- Mech. Engr.					1	1		
- Mgmt. Science	1		1					
- Nuclear Engrg.						1	1	
- Business Administration		1				1	1	
- Elec. Engr.			1					
- Biology				1				
- Radiation Chemistry				1				
- Chem. Engrg.				1				
- Environ. Engrg.				1				
- Meteorology				1				
- Structures							1	
Ph.D - Radiation Chemistry				1				
- Biological Studies				1				
3. Technical Experience								
a. Engineering								
(1) Nuclear Power Field	26	42		14	29	30	64	
(2) Engrg. Mgmt.	2	21	5	22	7	1	3	12
(3) Total Utility Exper.	154	130	67	64	114	64	49	203

b. Field	(F)	(N)	(F)	(N)	(F)	(N)	(F)	(N)	(F)	(N)	(F)	(N)	(F)	(N)	(F)	(N)
(1) Civil/Structural	19	57							2	12						40
(2) Mechanical/HVAC	2	4														
(3) Fire Protection	5	19														
(4) Elec. Engrg.			32	98		72					11	13				
(5) Environ. Engrg.							10	44								130
(6) Meteorology								4								
(7) Mech. Engrg.							4	8	27	73	33	11				33
(8) Nuclear Engrg.													49			

POOR ORIGINAL

8303234

Electric Production Department
On Site Technical Staff

	Nuclear-Plant Engineer-Operations	Nuclear-Plant Engineer-Performance	Nuclear Fuel Group	Radiation Safety & Chemistry
1. Total Number	9	9	3	6
2. Educational Bkgd.				
A.S. - Engineering	1	1		
A.A. - Business Mgmt.		1		
B.S. - Nucl. Engr.	1	1	1	
- Mech Engr.	1	1	1	
- Physics	1			
- Chemistry		1		1
- Biochemistry				1
- Naval Science		1		
- Mathematics		2		
- Engineering			1	
- Engineering Science			1	
M.S. - Nucl. Engr.			1	
3. Technical Experience				
A. Engineering				
(1) Nuclear Power Field	28 (98)*	87	31	57
(2) Engr. Mgmt.	2	6	5	6
(3) Total Util. Exp.	18 (58)*	49	20	64
B. Field	(F) (N)	(F) (N)	(F) (N)	(F) (N)
(1) Nucl. Engrg.	5	2		
(2) Mech. Engrg.	5	2		
(3) Operations	98 10	12		
(4) Maintenance Staff		21		
(5) Quality Assurance		7		
(6) Reactor Physics			17	
(7) Elec. Engrg.			6	
(8) Chemistry				27
(9) Health Physics/Rad Chem				55

* Denotes man-years of operators non-engineering background in nuclear power field and for utility.

8302150268

PRODUCTION MAINTENANCE DEPARTMENT
ON-SITE TECHNICAL STAFF

		Plant Engineering Staff	General Foreman Staff
1.	Total Number	6	7
2.	Educational Background		
	B.S. - Engineering	1	
	- Mechanical Engineer	2	2
	- Electrical Engineer	1	1
	- Civil Engineer	1	
	- Aero. Engineer		1
	A.S. - Engineer		1
	B.A. - Natural Sciences	1	
3.	Technical Experience		
	a. Engineering		
	(1) Nuclear Power Field	35	60
	(2) Engineering Management	2	4
	(3) Total Utility Experience	21	35
	b. Field		
	(1) Maintenance		28
	(2) Mechanical Engineer	2	8
	(3) Civil Engineer	2	
	(4) Electrical Engineer	2	4
	(5) Engineering	9	

930216