UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 14 1981

Docket No. 50-341

APPLICANT: Detroit Edison Company

FACILITY: Fermi 2

SUBJECT: SUMMARY OF APRIL 23, 1981 OL REVIEW MEETING REGARDING OPERATION AND OPEN REVIEW ITEMS

One purpose of the meeting was to hear a presentation by the applicant of its organization and plans for operation of Fermi 2. Another purpose was to discuss major open items in the operating license review and plans for providing information to close them. Enclosure 1 is a list of attendees. Also enclosed is a copy of slides used in the meeting.

Dr. W. H. Jens, Vice President, Nuclear Operations, provided an overview of the corporate organization of the Detroit Edison Company (Slide 1) and description of his organization for operation of Fermi 2 (Slide 2). Detroit Edison has approximately 11,000 employees, of which about 10% have professional degrees. The nuclear generating plant operating organization will be separate from the fossile generating plant operating organization.

Applicant plans to buy a simulator for operator training. The personnel in the quality assurance organization for construction will be involved in the quality assurance organization for operation.

Mr. E. P. Griffing, Fermi 2 Plant Superintendent, described the planned operating organization including background for key personnel (Slide 3). Senior Reactor Operator (SRO) training is being performed by General Physics, of Columbia, Md. Both SROs and reactor operators (ROs) will be a part of management and therefore non-union. Required shift personnel, current staffing, and those in training are shown in (Slide 4).

Procedures required are shown in (Slide 5). Sixty percent of the operating procedures are completed and 87% of the plant procesures are approved (Slide 6).

Mr. Eldon Alexanderson, Director of Nuclear Engineering, presented a description of his organization (Slide 7 through Slide 11). There are 65 people in his organization and an additional 125 engineers and scientists available to draw from for specific assignments.

Mr. Lawerence Kanous, Director of Nuclear Training, described the Detroit Edison training programs. Various organizations under his direction are shown in (Slide 12 through Slide 19).

Detroit Edison provided copies of revised chapter 13 in the FSAR which incorporates latest organization changes.

A

The status of review of major review items was discussed. Item II.B.2, Plant Shielding, provided in FSAR Appendix H, has been reviewed and found to be incomplete because shielding design and procedural changes resulting from TMI requirements have not been described. Radiation zone maps and a drawing showing the location of containment radiation monitors was requested.

The staff said that additional information was needed to reach a finding that the Mark I containment modifications were acceptable. Applicant provided some information during the meeting for our consideration.

Staff advised that the plant visit for fire protection review would not be made until more than 90% of the cable was pulled. Mr. Fahrner stated that this condition was met.

Staff requested that preservice inspection of ASME Class 2 components be provided. (This information was provided subsequent to the meeting).

Staff requested that applicants plan to submit the response to NUREG-0588 "Environmental Qualification of Safety Related Electrical Equipment as soon as possible so that it may be included in the Supplement to the SER (scheduled for issuance August 31, 1981). Applicant said it would reconsider its planned submittal date of July 1, 1982.

Staff provided draft requests for information regarding exemptions to Appendices G and H to 10 CFR 50.

Staff provided position from the Reactor Systems Branch, based on its review of the applicant's response to staff questions.

L. L. Kintner, Project Manager
Licensing Branch No. 1
Division of Licensing

Enclosure:
As stated

cc: See next page

Mr. Harry Tauber
Vice President
Engineering & Construction
Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

cc: Eugene B. Thomas, Jr., Esq.
LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, N. W.
Washington, D. C. 20036

Peter A. Marquardt, Esq.
Co-Counsel
The Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Mr. William J. Fahrner
Project Manager - Fermi 2
The Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Mr. Larry E. Schuerman
Detroit Edison Company
3331 West Big Beaver Road
Troy, Michigan 48084

David E. Howell, Esq.
21916 John R
Hazel Park, Michigan 48030

Mr. Bruce Little
U. S. Nuclear Regulatory Commission
Resident Inspector's Office
6450 W. Dixie Highway
Newport, Michigan 48166

Dr. Wayne Jens
Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Enclosure 1

Detroit Edison Co. - NRC
Meeting
April 23, 1981

NRC

E. S. Pedersen
D. Vassallo
J. O. Thoma
L. N. Rib
P. Boehnert
J. Youngblood
J. Nehemias
L. Kintner
F. Skopec
C. P. Tan
P T. Kuo
D. Jeng
W. Haas
R. Ferguson
R. Anand
G. Harrison
J. Mazetis
T. Collins
W. Hodges
C. Woodhead

KMC - LRG

R. S. Boyd

LeBeouf, LAMB

C. Landgraf

NUS

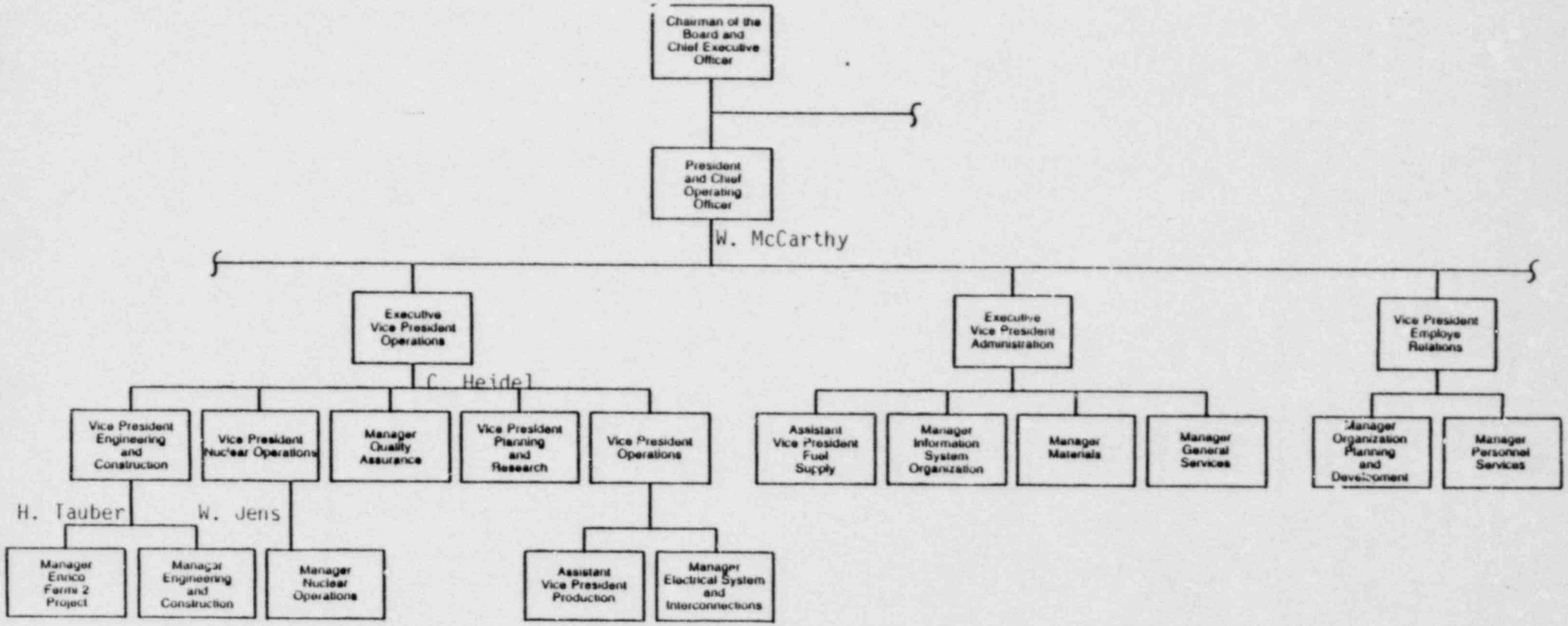
J. E. Slider
R. K. Mattu

Detroit Edison

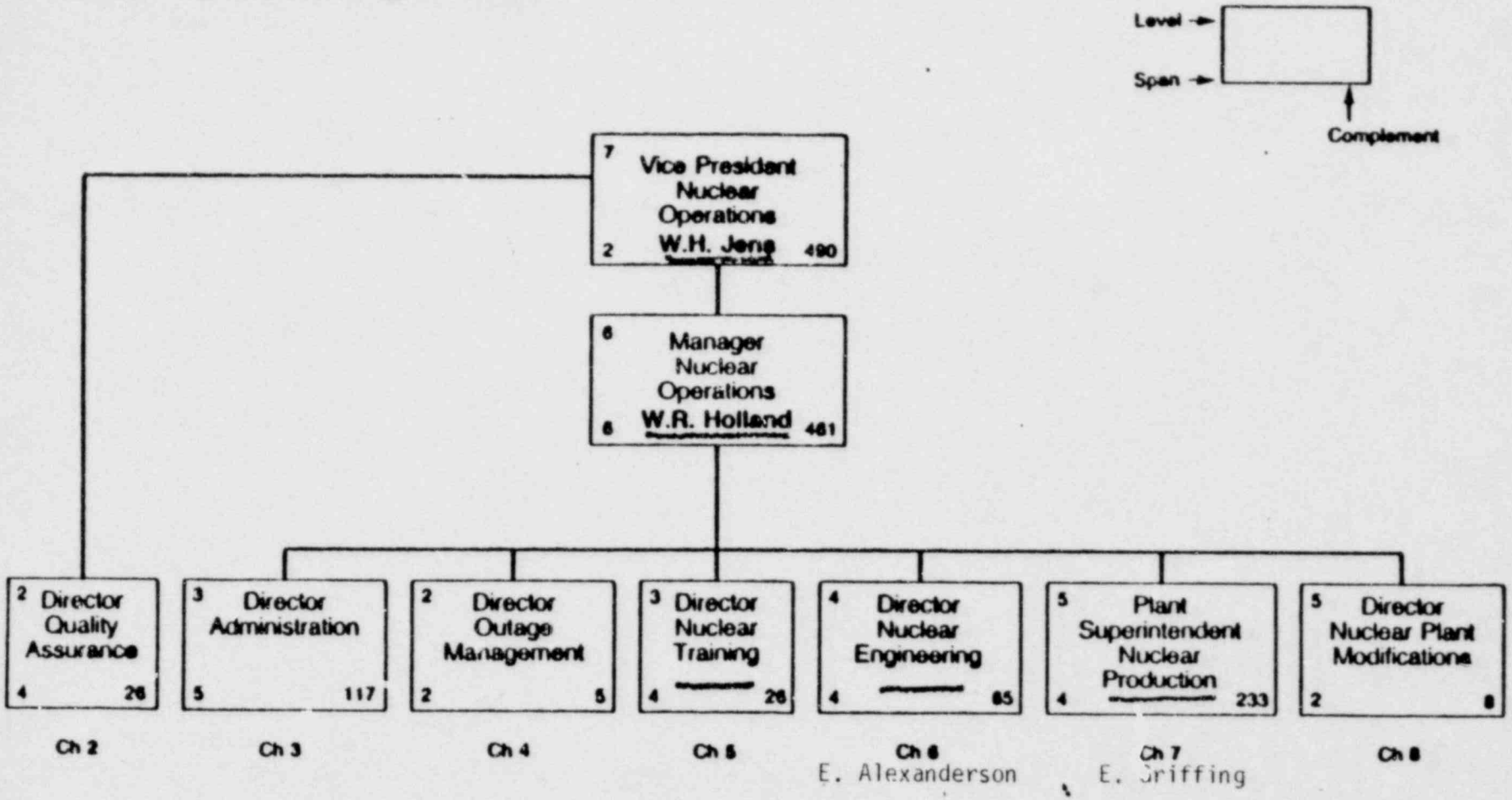
L. E. Schuerman
W. F. Colbert
E. V. Lusis
E. P. Griffing
H. Tauber
W. Holland
E. L. Alexanderson
L. E. Kanous
W. H. Jens
W. J. Fahrner
M. L. Batch
E. Madsen
A. E. Wegele
D. Wells
P. Marquardt
D. Lehnert
J. W. Honkala
R. C. Anderson
Q. H. Duong

Corporate Organization (Partial)

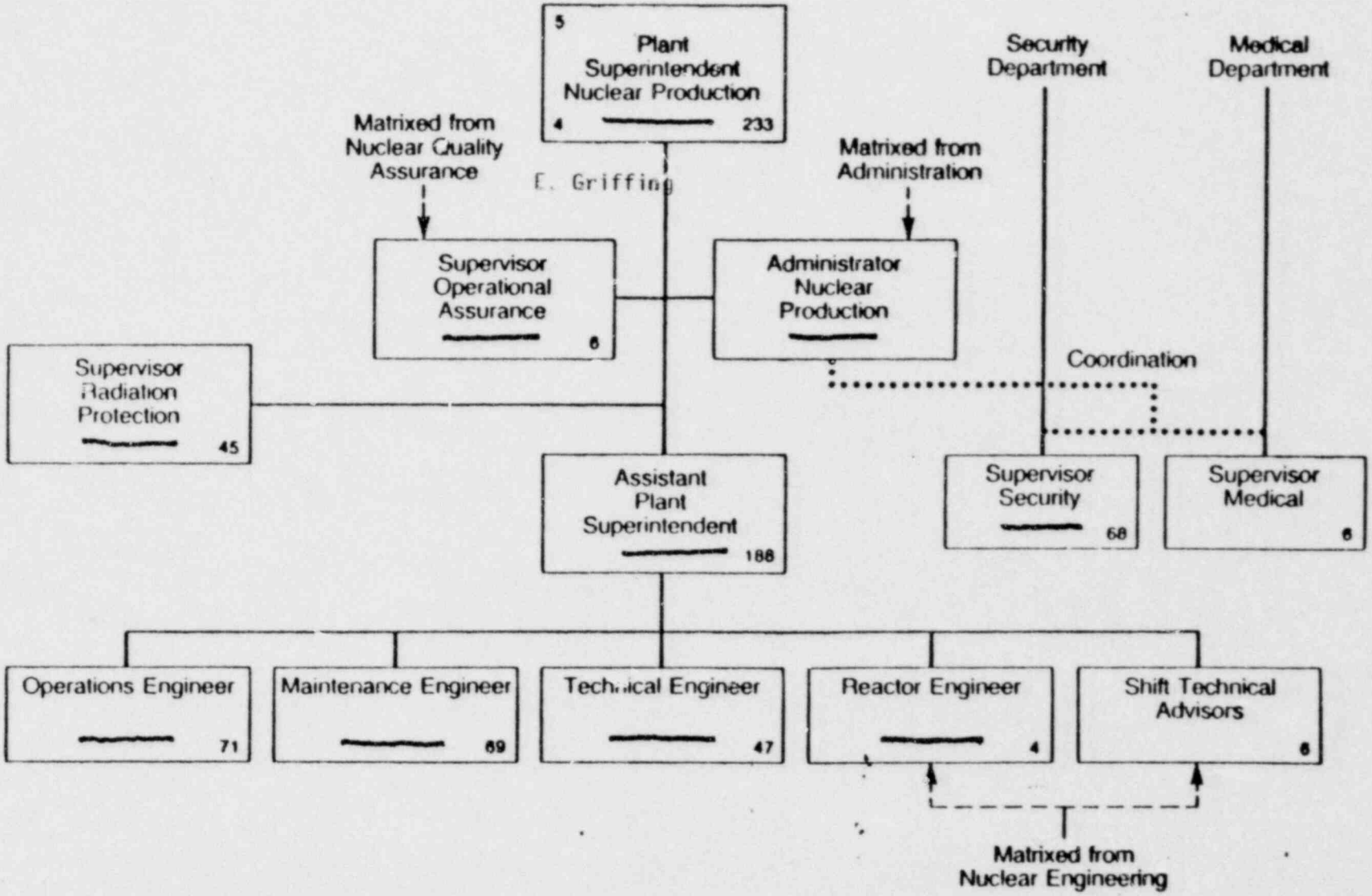
Relating to Fermi 2
Figure 13.1-1



Nuclear Operations Organization



*Not including 74 security and medical personnel


5
Plant
Superintendent
Nuclear Production
4
233
E. Griffing
Security
Department
Medical
Department
Matrixed from
Nuclear Quality
Assurance
Matrixed from
Administration
Supervisor
Operational
Assurance
6
Administrator
Nuclear
Production
Coordination
Supervisor
Radiation
Protection
45
Assistant
Plant
Superintendent
188
Supervisor
Security
68
Supervisor
Medical
6
Operations Engineer
71
Maintenance Engineer
69
Technical Engineer
47
Reactor Engineer
4
Shift Technical
Advisors
6
Matrixed from
Nuclear Engineering

Slide 3

OPERATIONS SECTION

Licensed Operator Requirement

Plan - Five shift schedule

Shift Complement

Nuclear Shift Supervisor (SRO)	1
Nuclear Assistant Shift Supervisor (SRO)	1
Nuclear Supervising Operators (RO)	2
Nuclear Power Plant Operators	3
Nuclear Assistant Power Plant Operators	2
Total Operators per Shift	9
Licensed Operators per Shift	4

Licensed Operator Candidate Resource - Objective

Number Operator Candidates needed for 5 shifts	20

Post fuel load objective - Six shift schedule

(4 Licensed Operators/Shift) (6 Shifts) =	24
Operations Training Coordinator	1
Fuel Handling Supervisor	1
Subtotal	26
Assume 30% NRC License Failure rate ×	1.3
Subtotal	34
Attrition	6
Required number of License Candidates	40

License Operator Candidate Resource - Actual

Number SRO Certified Candidates	15
Number RO Certified Candidates	3
Number Candidates in Certification Training	15
Total Operator Candidates	33
Number Operator Candidates to be hired	7
Required Number of License Candidates	40

JAN
4/21/81

As of MARCH 31, 1981

Procedure Categories	No. of Procedures to be written			Pink Draft			Yellow Draft			Green Draft			Blue Draft (Approved)			No. of Procedures Outstanding		
			OTHERS			OTHERS			OTHERS			OTHERS			OTHERS			OTHERS
	NUS	DECO	DECO	NUS	DECO	DECO	NUS	DECO	DECO	NUS	DECO	DECO	NUS	DECO	DECO	NUS	DECO	DECO
12.XXX.XX Administrative - General	28	4	5	2	0	1	2	0	0	4	0	0	20	2	0	0	2	4
20.XXX.XX Operating - Abnormal	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0
21.XXX.XX Operating - Administrative	6	0	5	0	0	0	0	0	0	0	0	0	5	0	0	1	0	5
22.XXX.XX Operating - General	8	1	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0
23.XXX.XX Operating - System	104	8	0	8	1	0	15	0	0	18	0	0	60	5	0	3	2	0
24.XXX.XX Operating - Surveillance	95	2	0	27	0	0	5	0	0	6	0	0	47	0	0	10	2	0
27.XXX.XX Operating - PEP's	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0
29.XXX.XX Operating - Emergency	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.XXX.XX Maintenance - Administrative	5	0	5	1	0	0	0	0	0	1	0	0	1	0	0	2	0	5
32.XXX.XX Maintenance - General	5	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0
34.XXX.XX Maintenance - Surveillance	12	2	0	5	1	0	2	0	0	0	0	0	1	0	0	4	1	0
35.XXX.XX Maintenance - Maintenance	56	3	0	13	2	0	7	0	0	2	0	0	24	0	0	0	1	0
36.XXX.XX Maintenance - Calibration	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
37.XXX.XX Maintenance - PEP's	4	3	0	1	0	0	1	0	0	0	0	0	2	0	0	0	3	0
41.XXX.XX I&C - Administrative	12	1	4	1	0	0	0	0	0	1	0	0	10	0	3	0	1	1
44.XXX.XX I&C - Surveillance	[illegible]	9	0	387	0	0	24	0	0	0	0	0	0	0	0	23	0	0
46.XXX.XX I&C - Generic Calibration	0	1	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0
47.XXX.XX I&C - PEP's	0	20	0	0	2	0	0	0	0	0	0	0	0	2	0	0	16	0
51.XXX.XX Reactor Eng. - Administrative	5	1	3	3	0	0	0	0	0	0	0	0	1	0	0	1	1	3
53.XXX.XX Reactor Eng. - System	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
54.XXX.XX Reactor Eng. - Surveillance	9	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
56.XXX.XX Reactor Eng. - Calibration	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
57.XXX.XX Reactor Eng. - PEP's	9	0	0	2	0	0	0	0	0	0	0	0	7	0	0	0	0	0
61.000.XX Health Physics - Administrative	1	18	0	1	0	0	0	0	0	0	0	0	0	16	0	0	2	0
62.001.XX Health Physics - Personnal Dosimetry	0	7	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0
62.002.XX Health Physics - Surveying & Analysis	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
62.003.XX Health Physics - Instrument Operation	0	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
62.004.XX Health Physics - Instrument Calibration	0	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
62.005.XX Health Physics - Calibration Devices	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
62.006.XX H.P. - Protective Clothing & Equipment	0	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
62.007.XX H.P. - Contamination Control & Decontamination	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
63.000.XX H.P. - Surveying & Analysis	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0
64.000.XX H.P. - Instrumentation	0	29	0	0	0	0	0	0	0	0	0	0	0	17	0	0	12	0
65.000.XX H.P. - Protective Clothing & Equipment	1	5	0	0	0	0	0	0	0	0	0	0	0	3	0	1	2	0
66.000.XX H.P. - Contamination Control	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0
67.000.XX H.P. - Radioactive Materials	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
71.001.XX Environmental - NPDES Fermi I	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
71.002.XX Environmental - NPDES Fermi II	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
71.003.XX Environmental - General	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
71.004.XX Environmental - Environmental Prog.	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
72.000.XX Waterchemistry - Potable Water	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
72.000.XX Environmental - Environmental	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
73.003.XX Chemistry - Chemistry	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2
73.004.XX Chemistry - Chemistry	0	85	0	0	0	0	0	0	0	0	0	0	0	44	0	0	41	0
73.006.XX Chemistry - Chemical Analysis	0	31	0	0	0	0	0	0	0	0	0	0	0	29	0	0	2	0
74.000.XX Chemistry - Chemistry	0	12	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0
74.001.XX Radiochemistry	0	6	1	0	0	0	0	0	0	0	4	0	0	0	0	0	2	1
74.008.XX Radiochemistry - Isotopic Analysis	1	17	0	0	0	0	0	0	0	0	0	0	0	1	0	1	16	0
74.040.XX Chemistry - Chemical Preparation	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
75.000.XX Chemistry - Equipment	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
76.000.XX Radiochemistry - Radiochemistry	0	5	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0
77.000.XX Chemistry - Sampling & Radwaste	0	15	1	0	0	0	0	0	0	0	0	0	0	14	0	0	1	1
78.000.XX Radiochemistry - Special Tests	1	11	0	1	0	0	0	0	0	0	0	0	0	2	0	0	9	0
82.000.XX Fuel Handling - General	10	0	0	1	0	0	2	0	0	2	0	0	1	0	0	4	6	0
84.000.XX Fuel Handling - Surveillance	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0
88.000.XX Radioactive Material Handling	3	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0
PQA's		16			0			2			0			8			6	
PQC's		16			3			6			0			0			7	
Totals	881	397	30	469	10	1	59	8	0	35	4	0	205	229	3	113	146	26

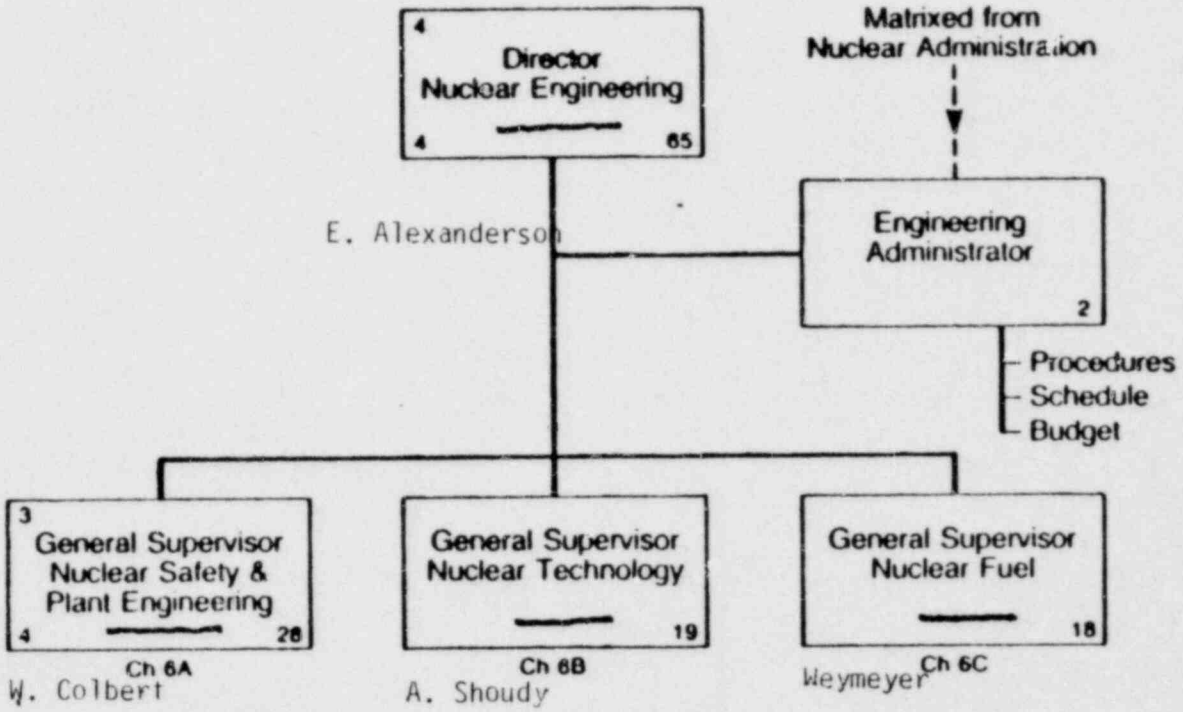
PROCEDURE STATUS*

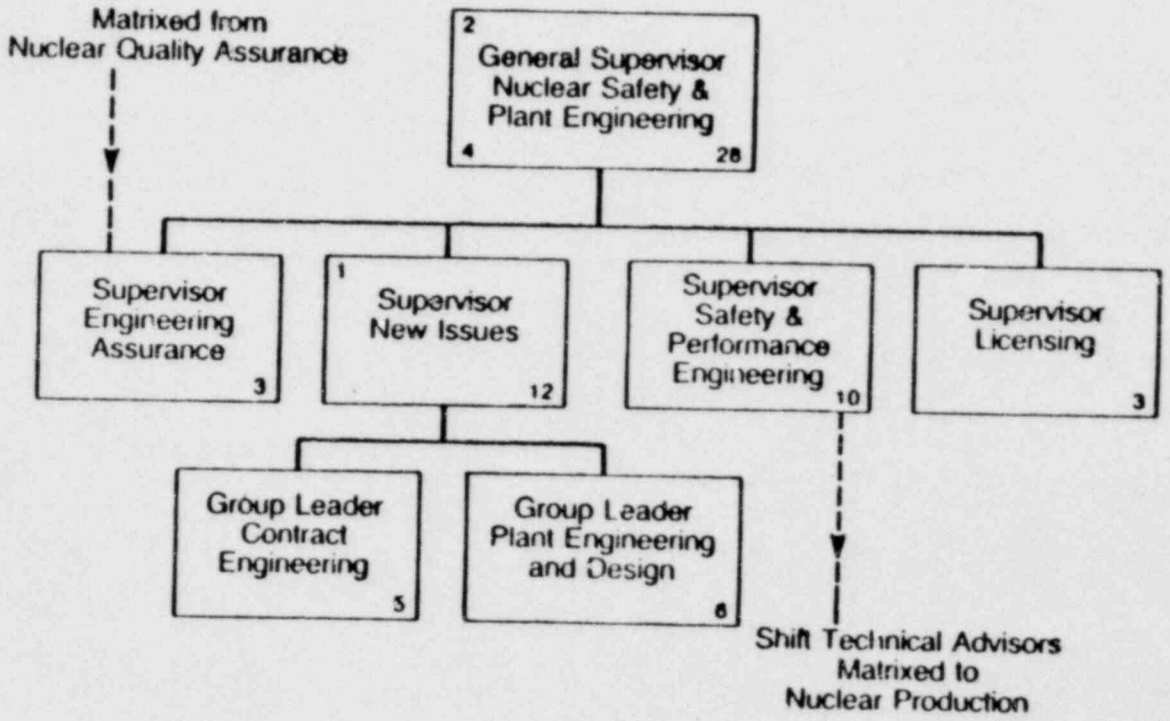
(AS OF MARCH 31, 1981)

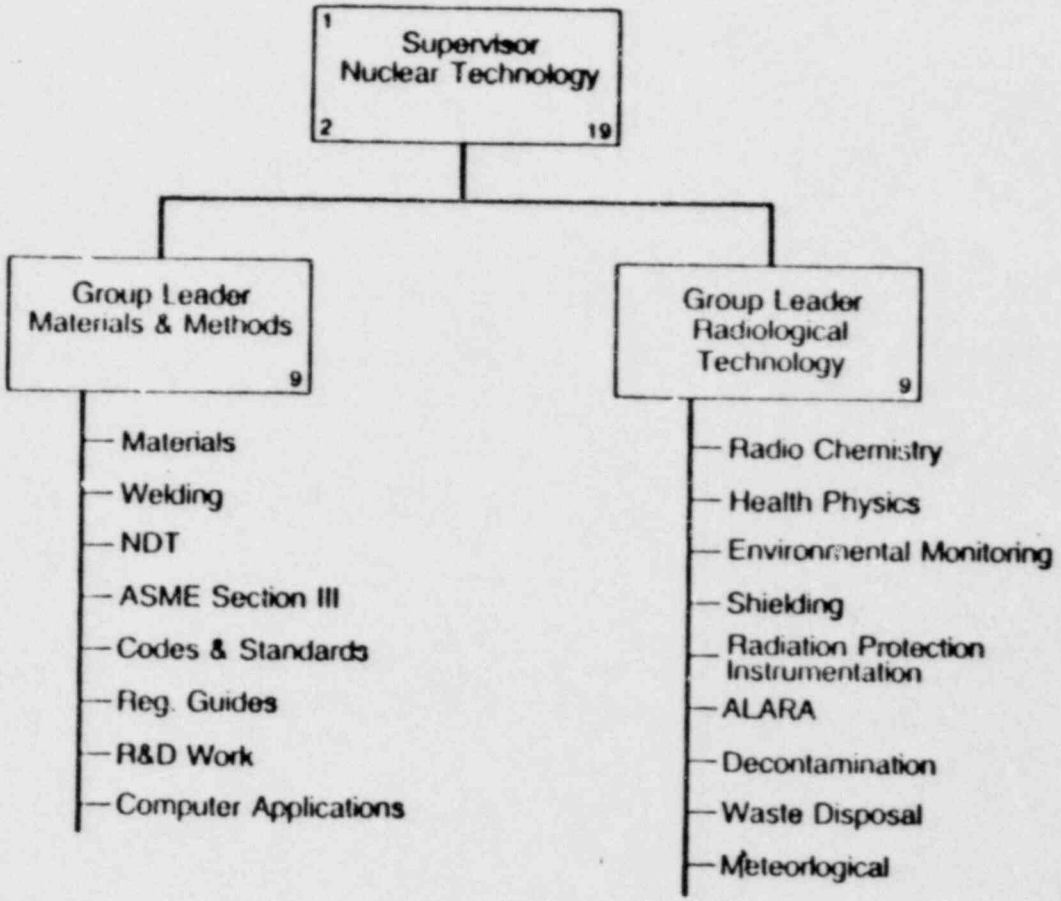
TYPE OF PROCEDURE	TOTAL	NUMBER APPROVED	PRELIMINARY DRAFT
CHECKOUT AND INITIAL OPERATION PROCEDURE (CAIO)	166	161	165
ACCEPTANCE TEST PROCEDURE (ACPT)	37	29	35
PREOPERATIONAL TEST PROCEDURE (PRET)	107	82	101
TOTAL**	310	272 (87.7%)	301 (97.1%)

* DOES NOT INCLUDE PROCEDURES NEEDED DURING STARTUP TEST PHASE, (I.E. LOADING FUEL TO COMMERCIAL OPERATION).

**38 PROCEDURES ARE IN VARIOUS STAGES OF APPROVAL, TESTING IS NOT HELD UP FOR LACK OF PROCEDURES.

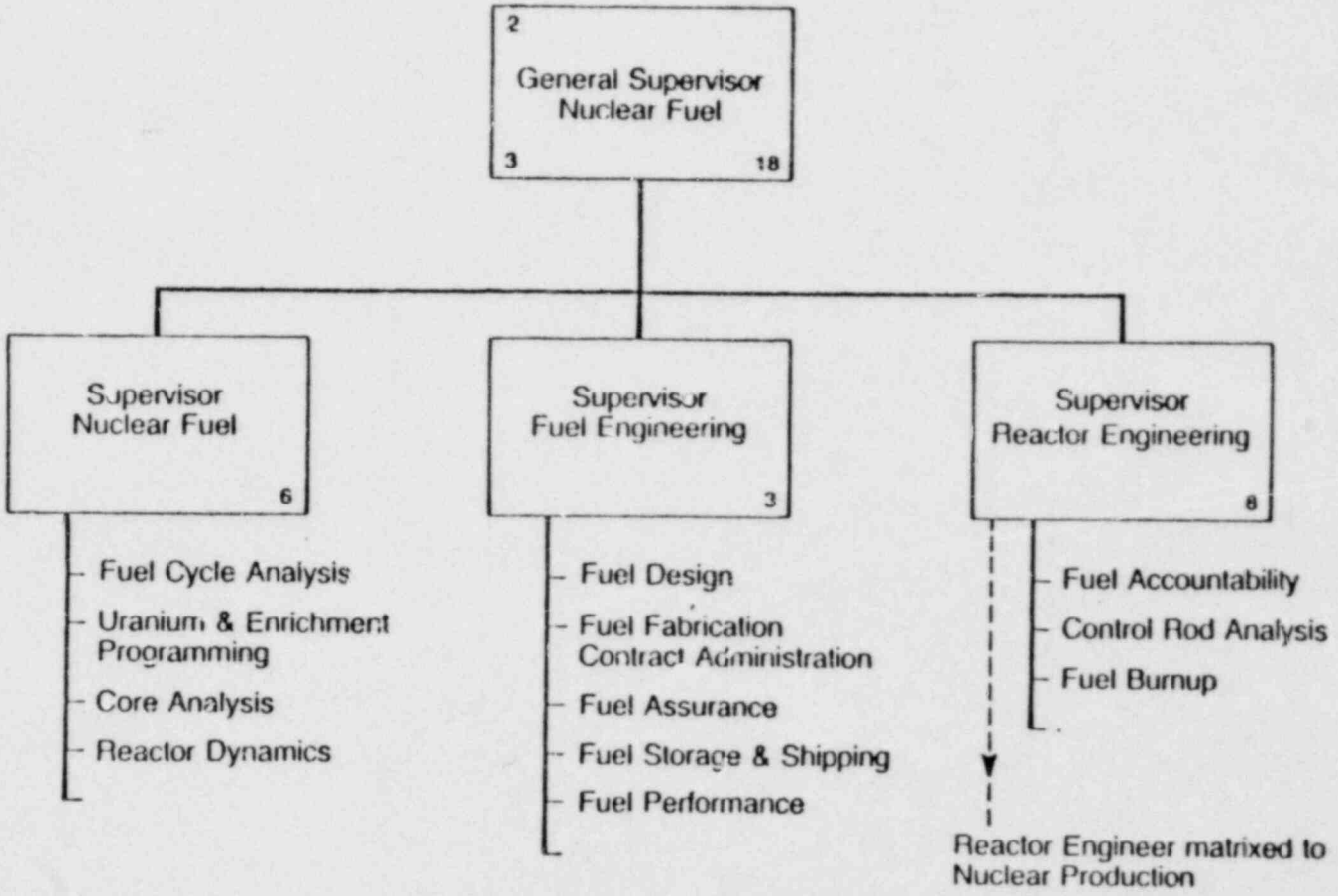

4
Director
Nuclear Engineering
4
65
E. Alexanderson
Matrixed from
Nuclear Administration
Engineering
Administrator
2
Procedures
Schedule
Budget
3
General Supervisor
Nuclear Safety &
Plant Engineering
4
28
Ch 6A
W. Colbert
General Supervisor
Nuclear Technology
19
Ch 6B
A. Shoudy
General Supervisor
Nuclear Fuel
18
Ch 6C
Weymeyer


Matrixed from
Nuclear Quality Assurance
2
General Supervisor
Nuclear Safety &
Plant Engineering
4
28
Supervisor
Engineering
Assurance
3
1
Supervisor
New Issues
12
Supervisor
Safety &
Performance
Engineering
10
Supervisor
Licensing
3
Group Leader
Contract
Engineering
5
Group Leader
Plant Engineering
and Design
6
Shift Technical Advisors
Matrixed to
Nuclear Production

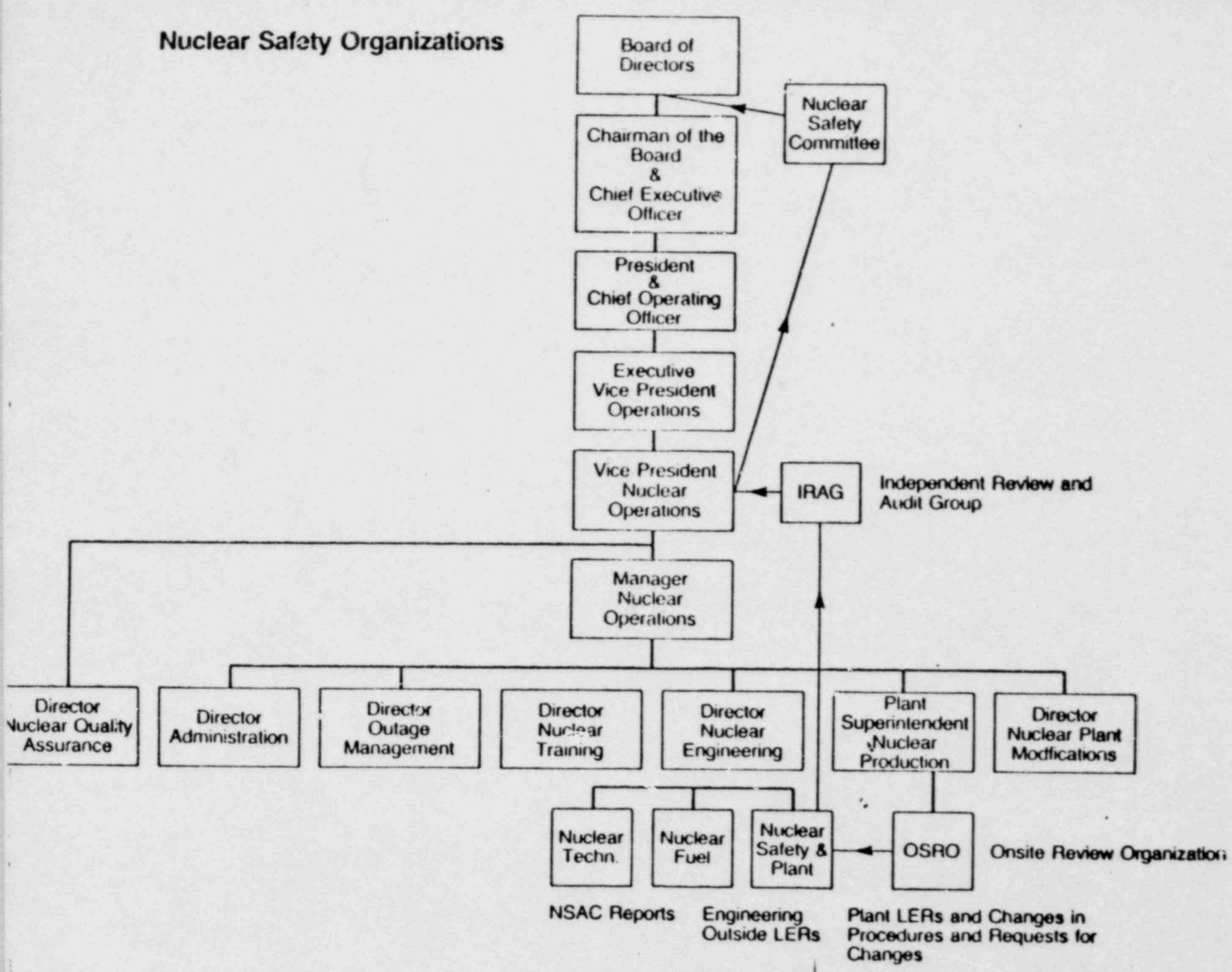

1
Supervisor
Nuclear Technology
2
19
Group Leader
Materials & Methods
9
Materials
Welding
NDT
ASME Section III
Codes & Standards
Reg. Guides
R&D Work
Computer Applications
Group Leader
Radiological
Technology
9
Radio Chemistry
Health Physics
Environmental Monitoring
Shielding
Radiation Protection
Instrumentation
ALARA
Decontamination
Waste Disposal
Meteorlogical

ERD

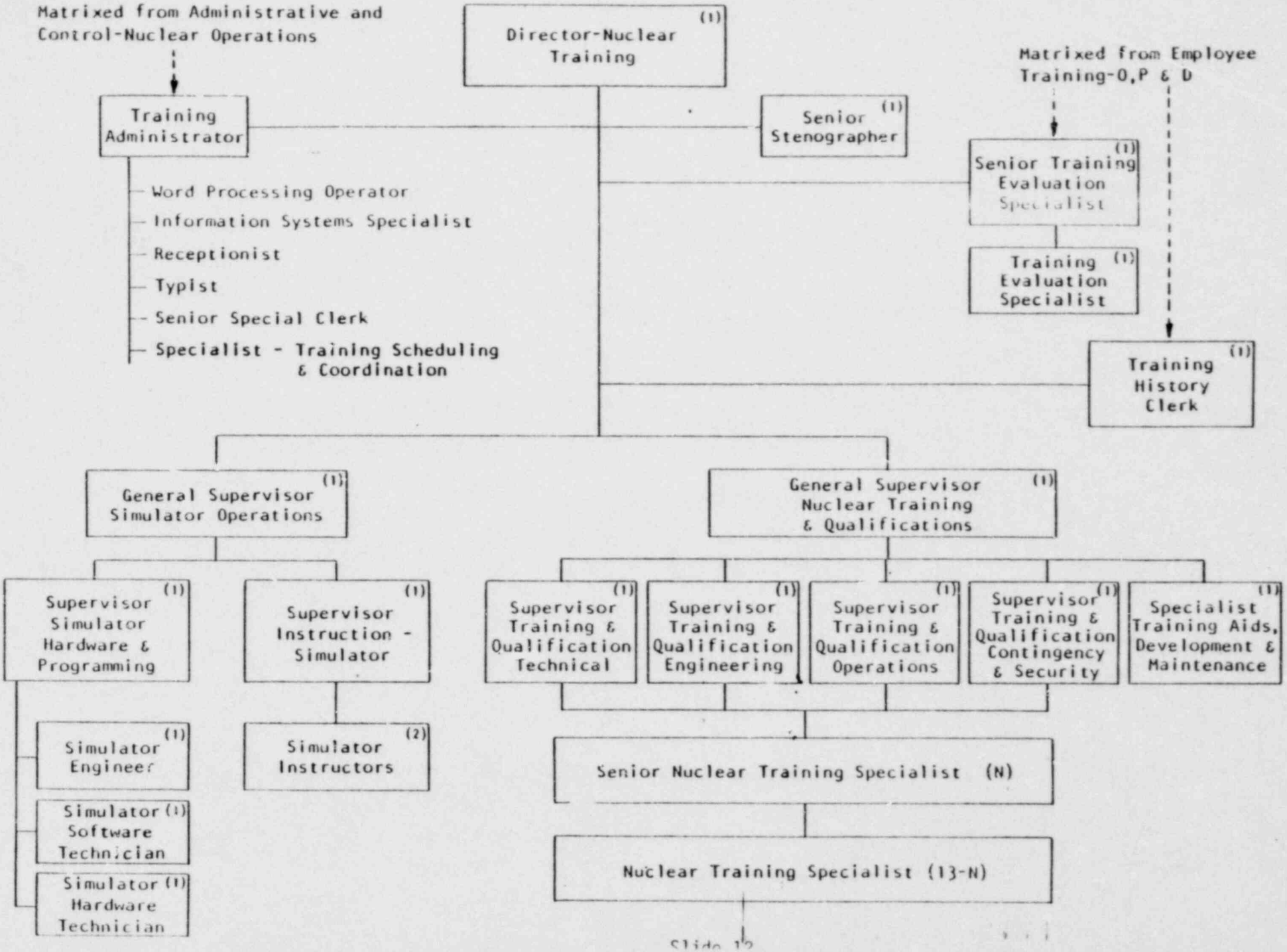
Slide 9


2
General Supervisor
Nuclear Fuel
3
18
Supervisor
Nuclear Fuel
6
Fuel Cycle Analysis
Uranium & Enrichment
Programming
Core Analysis
Reactor Dynamics
Supervisor
Fuel Engineering
3
Fuel Design
Fuel Fabrication
Contract Administration
Fuel Assurance
Fuel Storage & Shipping
Fuel Performance
Supervisor
Reactor Engineering
8
Fuel Accountability
Control Rod Analysis
Fuel Burnup
Reactor Engineer matrixed to
Nuclear Production

Nuclear Safety Organizations



ORGANIZATION – NUCLEAR TRAINING GROUP



ORIENTATION

INDUSTRY RELATED

DUTY RELATED

ORIENTATION

PROVIDES INFORMATION NEEDED BY NEW EMPLOYES IN ORDER TO PERFORM THEIR DUTIES IN THE PLANT SAFELY WITH A BASIC KNOWLEDGE OF THE CODES AND STANDARDS UNDER WHICH THE NUCLEAR PLANT OPERATES.

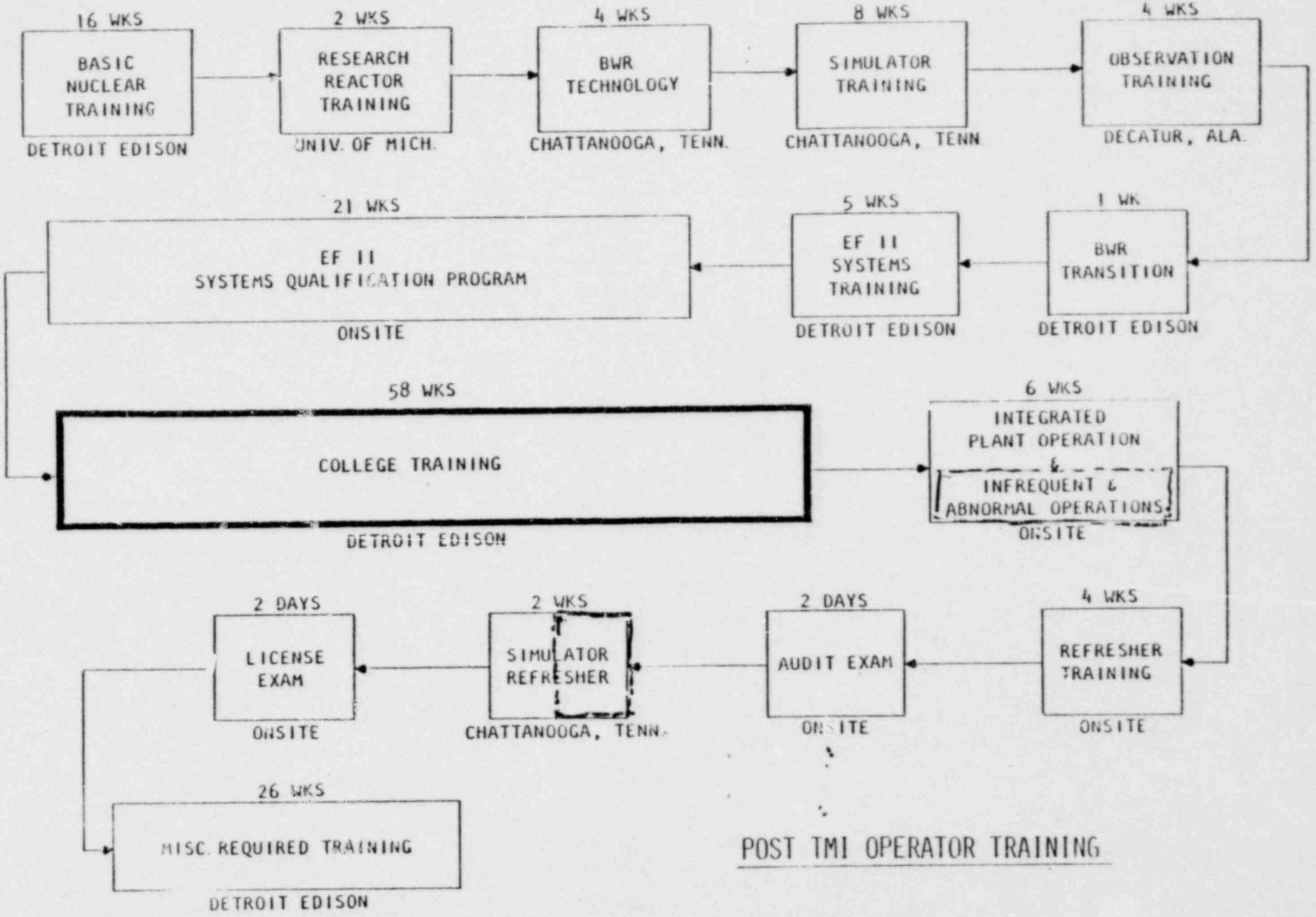
THE CONTENT IS MAINLY COGNITIVE WITH SKILL EXERCISES PROVIDED IN EACH CASE WHERE NEED IS SHOWN.

INDUSTRY RELATED

PROVIDES KNOWLEDGE AND SKILLS NEEDED BECAUSE THE TASKS ARE PERFORMED IN A NUCLEAR POWER PLANT - QA/QC, PROCEDURAL DISCIPLINE, RADIATION SAFETY, DOCUMENTATION REQUIREMENTS, ETC.

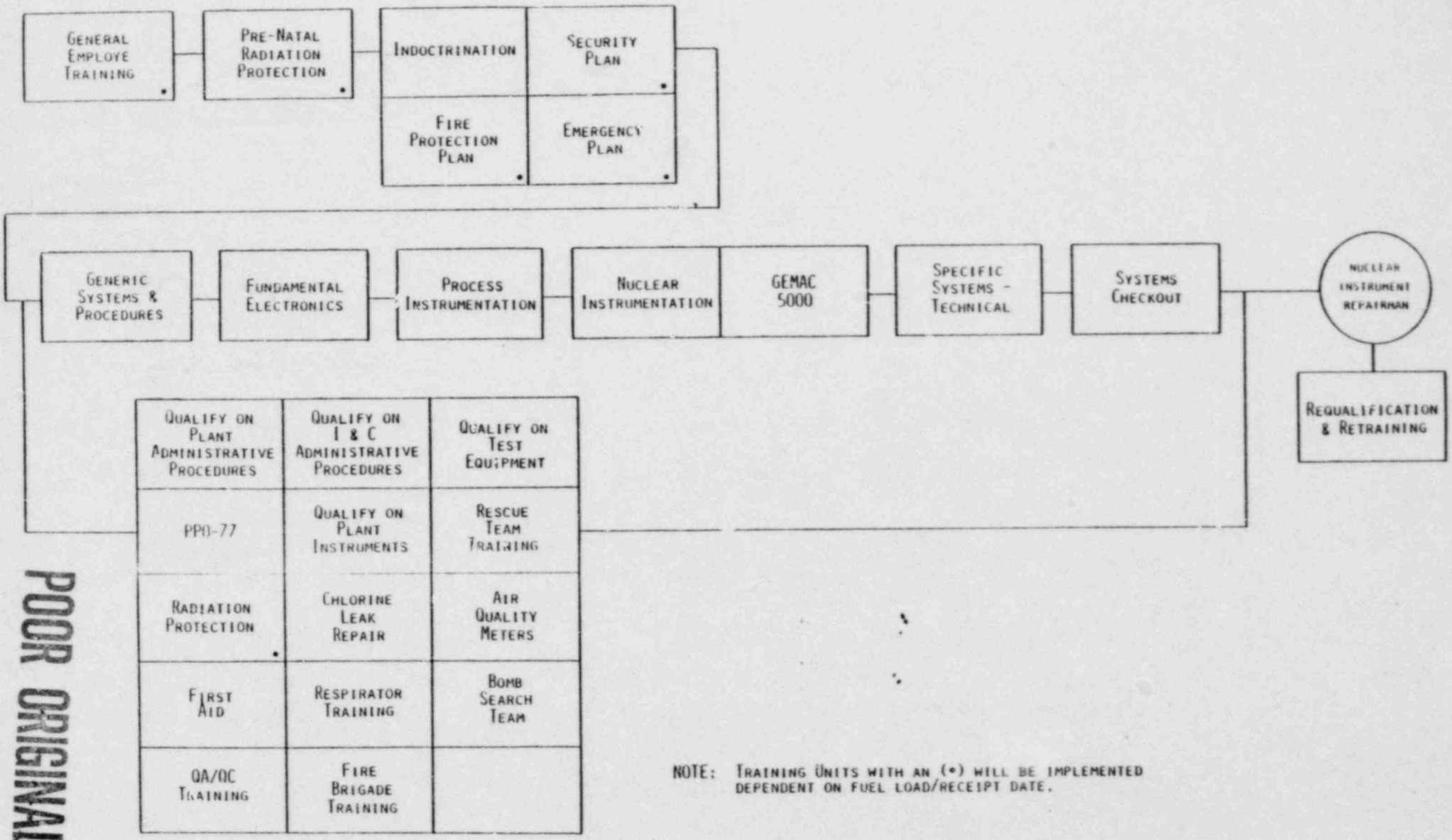
DUTY RELATED

PROVIDES KNOWLEDGE AND SKILLS REQUIRED TO PERFORM SPECIFIC TASKS AND DUTIES OF THE JOB TO WHICH THE EMPLOYE IS ASSIGNED. PROGRAMS INCLUDE COGNITIVE MATERIALS, HANDS-ON EXERCISES AND A REQUIRED CERTIFICATION OF DEMONSTRATED PERFORMANCE.



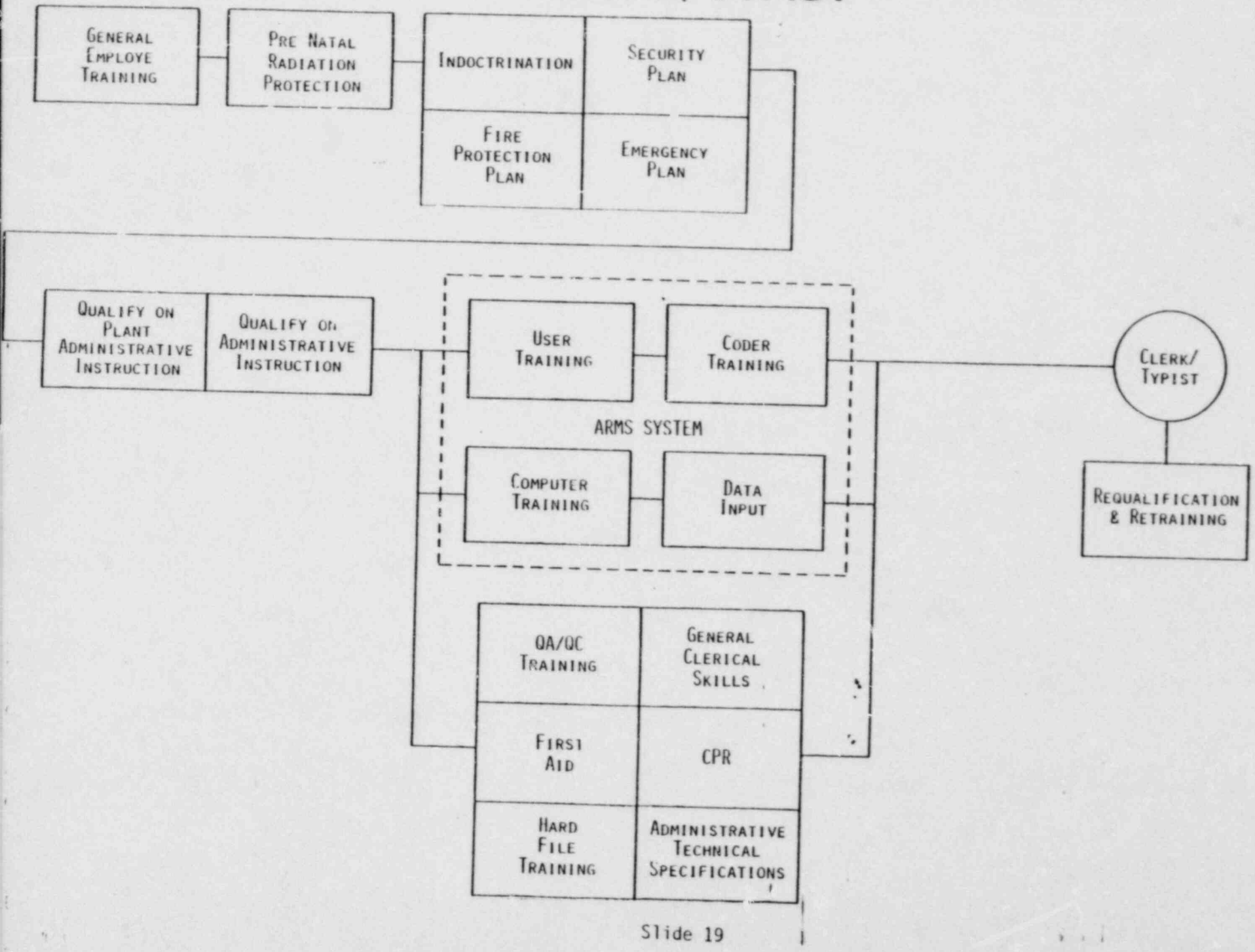
POST TMI OPERATOR TRAINING

NUCLEAR INSTRUMENT REPAIRMAN



NOTE: TRAINING UNITS WITH AN (•) WILL BE IMPLEMENTED DEPENDENT ON FUEL LOAD/RECEIPT DATE.

CLERK/TYPIST



MEETING SUMMARY DISTRIBUTION

MAY 14 1981

Docket File
NRC PDR
Local PDR
TIC/NSIC/Tera
N. Hughes
LB#1 Reading
H. Denton
E. Case
D. Eisenhut
R. Purple
B. J. Youngblood
A. Schwencer
F. Miraglia
J. Miller
G. Lainas
R. Vollmer
J. P. Knight
R. Bosnak
F. Schauer
R. E. Jackson
Project Manager LKintner
Attorney, OELD
M. Rushbrook
OIE (3)
ACRS (16)
R. Tedesco

NRC Participants:

ESPedersen, DVassallo, JOThoma, LRib,
PBoehnert, JYoungblood, JNehemias,
LKintner, FSkipec, CPTan, PTKuo, DJeng,
WHaas, RFerguson, RAnand, GHarrison, JMazet[illegible]
TCollins, WHodges, CWoodhead

G. Lear
V. Noonan
S. Pawlicki
V. Benaroya
Z. Rosztoczy
W. Haass
D. Muller
R. Ballard
W. Regan
D. Ross
P. Check
Chief, Power Systems Branch
O. Parr
F. Rosa
W. Butler
W. Kreger
R. Houston
Chief, Radiological Assessment Branch
L. Rubenstein
T. Speis
W. Johnston
J. Stolz
S. Hanauer
W. Gammill
T. Murley
F. Schroeder
D. Skovholt
M. Ernst
R. Baer
C. Berlinger
K. [illegible]
G. [illegible]
A. [illegible]
B. [illegible]
J. [illegible]amer
D. Vassallo
P. Collins
D. Ziemann

bcc: Applicant & Service List