



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

JAMES P. McGAUGHY, JR.
VICE PRESIDENT

October , 1983

U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly, Regional Administrator

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
License No. NPF-13
Docket No. 50-416
Applications for Operators
and Senior Operators License
AECM-83/

Mississippi Power & Light Company notified you by letter, AECM-83/0629, dated September 30, 1983, of errors made in previously submitted applications for Operator's and Senior Reactor Operator's Licenses. This subject was also discussed with you in your Atlanta office on October 12, 1983. This letter summarizes the problems discussed and our proposed actions to resolve this matter.

MP&L performed a complete review of training records for all currently licensed Reactor Operators and Senior Reactor Operators at Grand Gulf, and identified discrepancies between the license application and the training records. A complete list of identified problems associated with each application is enclosed (Enclosure 1). The discrepancies can be categorized into three general problem areas:

(1) Training duration (length of course) was not as long as indicated on the application. The following discrepancies were identified in this area:

(a) Several applications listed one week of Mitigation of Core Damage which was actually only four days long. Letter AECM-81/330, dated August 28, 1981, from MP&L to Harold Denton, committed to 80 hours of Mitigation of Core Damage. Although only thirty-two hours of documented training was given in this module, much of the material normally covered in the Mitigation of Core

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Damage Course is taught in other courses. The eight week Grand Gulf Technology or Systems Course includes modules on fuel, neutron monitoring and vessel instrumentation. Individual courses in Heat Transfer and Fluid Flow, Emergency Procedures, and Chapter 15 of the FSAR are taught in individual course and are major topics in the Mitigation of Core Damage Course. After completing the above noted courses, a major portion of the Mitigation of Core Damage Course is a repeat and can be covered in a short time span. A review was conducted of the course material and exams for this four-day course and substantiated that the material was adequately covered. No further action is deemed necessary for this discrepancy. The present course is given over a two week period.

- (b) Several applications listed a thirteen day Plant Operations Course addressing the FSAR, IOI's and EPP's and a seven day Plant Operation's Course addressing Technical Specifications which was given as a combined fifteen day course. The thirteen days specified were actually taught in ten days and the seven day course was taught in five days. The course was placed in the Training Records as a fifteen day course. The duration of these courses were adequate and the required material was covered in the shorter courses. No further action is deemed necessary for these courses.
- (c) Several applications listed a twelve day simulator refresher, but was accomplished in ten days. The dates that the training was to be accomplished was shown on the application as 11/12-11/23/82. These applications were submitted in October 1982, indicating this was scheduled training to be completed. Only ten days of training was performed. The two week simulator refresher was of adequate length, thus no further action is proposed on this issued.
- (d) Several applications listed a 13 day Plant Operations Course which was actually 12 days. The twelve day course adequately covered the required material thus no action for this item is deemed necessary.
- (e) One application listed a fourteen day simulator refresher training course which the records indicate was thirteen days. The course was satisfactorily completed and the application should have indicated thirteen days. No further action is deemed necessary for this item. This application also noted a one week Mitigation of Core Damage (Brunswick, CP&L), but the training records indicate 32 hours of training was received. No further action is required for this item as justified in Item (1a) above. The material covered nor the exam was reviewed as this course was at CP&L.

- (f) One application listed a one day QA Indoctrination Course which only lasted one hour. This was an error in the application as the training records clearly indicate the one hour course. This material can be satisfactorily addressed in this time frame; thus, no additional actions are deemed necessary.
 - (g) Three applications listed a six week Heat Transfer and Fluid Flow Course. A three week course was entered twice in these applicants training records, and when the application was prepared, the duplicate courses were shown on the application as six weeks. The Training Records for these individuals have been corrected. The three week course adequately address this material, and no further action is deemed necessary for this item.
- (2) Documentation does not exist to substantiate certain training listed on the applications. The following discrepancies were identified in this area:
- (a) Several applications listed a six day Reactor Physics, Core Thermo and Radcon Course. There are no records that document this course. Each of these applicants had other training in each of these subjects. Both the MP&L and NRC exams test this area. Due to these two factors, no additional training is deemed necessary to address this training.
 - (b) Several applications listed a three day Heat Transfer and Fluid Flow Course, yet documentation does not substantiate this training. Each of these applicants had other training which adequately addresses this material. This material is also well-covered on MP&L and NRC exams: thus, no further training is deemed necessary.
 - (c) One applicant listed a five day Mitigation of Core Damage Course. His training records indicate he attended a total of four days but did not take the exam. This applicant will be required to review the material and pass an exam covering the course material.
 - (d) One applicant listed a twelve week Cold License Training Course/Grand Gulf Technology on three different applications. The training records indicate that he did not obtain a passing grade on week 10 of this course. Prior to his third application, he did satisfactorily complete a twenty-one week License Operator Exam Preparation Course which covered this material. No further training is deemed necessary.
 - (e) One applicant listed a seven day Plant Operations Course covering Technical Specifications and a five day Plant

Operations Course covering Technical Specification on his original application in September 1981. He did not pass the exam on the seven day course and there is no record of attendance for the five day course. He did not pass his NRC exam, and submitted another application in October 1982, which eliminated the seven day and five day courses. There is no record of this applicant being trained in the Tech Specs. He will be required to review this material and satisfactorily pass an exam.

- (f) One application listed a twelve week Grand Gulf Technology - Cold License Training Course. There are no records to verify week 11 or 12, and week 9 is incomplete. This same application listed a three week Heat Transfer and Fluid Flow Course, but there are no records to verify this. This training material was covered in a later twenty-one week License Operator Exam Preparation Course, which he satisfactorily completed. No further action is deemed necessary for this discrepancy.
- (g) One application listed a two week pre-simulator course, but there is no record to verify this. This applicant failed the NRC exam. Another application has been submitted for this applicant to take the NRC exam in December 1983. He has successfully passed a two and one-half week simulator refresher course since the first application. No further action is deemed necessary for this discrepancy.
- (h) Several applications listed self study retraining or reviews. This self study retraining was performed after the individuals had failed the NRC exam. These individuals had already completed all required training to take the NRC exam thus, no further training was required. This study was to meet the individuals needs. No records are maintained for this type study. This is considered satisfactory but is documented in this report due to the entry on the application.
- (i) One applicant listed several courses on his application that he was given credit for teaching rather than taking. There was no notation on the application to this fact. His training records will be updated to indicate this. Credit for teaching is considered adequate, and no further action is deemed necessary.
- (j) One application that was submitted in 1982 had several problem areas. MP&L withdrew this application at that time due to the individual's training not being complete, and he was not given a NRC exam. No further action is deemed necessary for this item.

- (3) For the majority of licensed personnel, Qualification Cards were not completed, or cannot be located, as required by the FSAR and as indicated on the license applications. In addition, the Qualification Cards that were completed during this time frame did not include a Practical Factors sections as required by the FSAR.

The Practical Factors Section portion of the Qual Card has been established for each licensed operator. Records of completed surveillances were reviewed and for those surveillances that had been performed by, or under the direction of a licensed operator, that operator's Qual Card was signed off as satisfactorily completing that practical factor. The Operation's Superintendent has authorized specific Senior Reactor Operators to sign off the additional practical factors. This authorization was based on the SRO's past experience and/or exposure to the surveillance procedure. Each licensed operator is in the process of completing this practical factors section prior to full power licensing.

The Knowledge Factors portion of the Qual Card is presently being reviewed. Where documented training exists to substantiate the Knowledge Factor has been previously reviewed in other training, his Qual Card will be updated and credit taken for this previous training. Where areas exist that training cannot be substantiated, then the Knowledge Factor portion will be satisfactorily completed.

The majority of the problems noted in this report are the result of training record problems that occurred prior to and during 1981. There has been a vast improvement in the training records since that time. The NRC application form has helped to eliminate application errors. For future applications, the preparer will sign a cover sheet stating that the records have been reviewed to substantiate the training listed on the application. The Operation's Training Supervisor or Training Superintendent will independently verify the information and sign a similar statement.

The investigation and identification of these problems was performed by our Training Department. I have requested our Quality Assurance organization perform a completely independent review of these records for added assurance that every problem has been identified. This audit is in progress and should be completed during the week of October 24, 1983.

I hope that this information will resolve your concerns of this problem.

Yours truly,

J. P. O'Reilly

MISSISSIPPI POWER & LIGHT COMPANY

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AECM-83/

cc: Mr. J. B. Richard
Mr. R. B. McGhee
Mr. T. B. Conner

Mr. Richard C. DeYoung, Director
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. G. B. Taylor
South Miss. Electric Power Assn.
P. O. Box 1589
Hattiesburg, MS 39401

B7

bcc: Middle South Nuclear Activities (w/a)

- A. Zaccaria
- R. S. Trickovic
- C. D. Wood
- J. F. Hudson, Jr.
- M. D. Archdeacon
- J. P. McGaughy, Jr.
- T. H. Cloninger
- T. E. Reaves, Jr.
- J. F. Pinto
- C. K. McCoy
- S. M. Feith
- A. R. Smith
- R. F. Phares
- A. G. Wagner
- M. D. Houston
- C. C. Hayes
- Project File
- Plant File
- File



Problems on Application

App. #1

1. 1 week MCD at CP&L - record shows 32 hours
2. 14 day Simulator Refresher Training - 13 day in records
3. Did not complete qual card - but was not on application

App. #2

1. No documentation in records for 9 week upgrade training
2. Did not complete qual card - but was not on application

[REDACTED]

First Application Submitted

May, 1982

7. Formal Training:

6 Week	Grand Gulf Technology (GGNS)
1 Day	Radiation Worker II Course (GGNS)
1 Day	Emergency Preparedness Training (GGNS)
2 Day	HPCS Diesel Generator Course (GGNS)
14 Day	Simulator Refresher Training at Tulsa, OK
1 Week	Mitigation Core Damage (Brunswick, CP&L)
1 Week	Analytical Trouble Shooting (CP&L)
5 Day	Admin. Requirements Course (GGNS)
7 Day	Plant Operations Course (GGNS)
2 Day	Fire Brigade Training (GGNS)
5 Day	RO Re-training (CP&L)
2 Day	Mitigation of Core Damage Course (GGNS)

[REDACTED]

Second Application Submitted

Oct. 1982

7. Formal Training:

8 Week	Grand Gulf Technology (GGNS) (CBE)
1 Day	Radiation Worker II Course (GGNS)
1 Day	Emergency Preparedness Training (GGNS)
2 Day	HPCS Diesel Generator Course (GGNS)
1 Week	Mitigation of Core Damage (CP&L)
1 Week	Analytical Trouble Shooting (CP&L)
5 Day	Administrative Requirements Course (GGNS) (CBE)
7 Day	Plant Operations and Casualty Response Course (GGNS) (CBE)
2 Day	Delaval Diesel Generator Course (GGNS)
5 Day	R.O. Re-training (CP&L)
2 Day	Fire Brigade Training (CP&L)
13 Day	Simulator Refresher Training at Tulsa, OK (GE)
2 Day	Mitigation of Core Damage (GGNS) (CBE)
1 Week	Heat Transfer & Fluid Flow (CBE)
3 Day	Situational Leadership Course (GGNS)
9 Week	Operator Upgrade Training (GGNS) (10/4/82 - 12/3/82)



Problems on Application

App. #1

1. 7 day Plant Operations Course and 13 day Plant Operations Course - was actually a 15 day course
2. 1 week MCD was 4 days
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. 6 day Rx Physics, Thermo, and Radcon - no record of attendance
5. Qual Card was not completed

App. #2

1. Qual Card complete except for Practical Factors and one blank in Knowledge/Skills area
2. No other problems noted.



Application Submitted

Sept, 1981


7. Formal Training:

Certified Senior Reactor Operator Dresden Simulator (GE) 12 weeks
17 weeks of 20 week Basic Reactor Fundamentals (Memphis State Univ)
5 week Special Basic Reactor Fundamentals to complete course
(Memphis State Univ)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination
½ day Fire Brigade Training
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
5 day Fire Brigade Training (Texas A&M)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
2½ day Allis Chalmers Turbine Operation (AC)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
1 week Mitigation of Core Damage Sept 1981
3 day Heat Transfer - Fluid Flow (MSU) Sept 1981
6 day Rx Physics, Core Thermo, Radcon Sept 1981
Cold License Operator Qualification Card



Problems on Application

1. 7 day Plant Operation Course — 15 days in record
13 day Plant Operation Course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. 1 week MGD - only 4 days in record
5. Qual card completed except for Practical Factors



Application Submitted

Sept, 1981

7. Formal Training:

- Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
 - 2 week Presimulator Training (GGNS)
 - 8 week Grand Gulf Technology (GGNS)
 - Reactor Startup Experience Course (Memphis State Univ.)
 - 1/2 day Fire Brigade Training
 - 8 day Refresher Training for Operators Perry Simulator (GE)
 - 1 day Quality Assurance Indoctrination (GGNS)
 - 5 day Fire Brigade Training (Miss. State Fire Academy)
 - 1 week Refresher Training Perry Simulator
 - 7 day Plant Operations Course (Tech Specs)
 - 5 day Plant Operations Course (Admin Req's)
 - 13 day Plant Operations (FSAR, IOI's, EPP's)
 - 6 day RX Physics, Core Thermo, Radcon
 - 3 day Heat Transfer - Fluid Flow (MSU)
 - 1 week Mitigation of Core Damage (GP) Sept 1981
 - Cold License Operator Qualification Card
- o US Navy SIW Prototype Training 1975
 - o US Navy Nuclear Power School 1974
 - o US Navy Electrician Mate "A" School 1972



PROBLEMS ON 1ST APPLICATION


May 1982

1. 2 week Pre-Simulator Course - no record of attendance

PROBLEMS ON 2ND APPLICATION

May 1983

1. No problems noted
2. Qual card completed
3. Has reapplied for 12/83 exam (3rd application)



Application Submitted

May 1982

7. FORMAL TRAINING

Certified Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State University)
2 week Presimulator Training (GGNS)
8 week Grand Gulf Technology (GGNS)
Reactor Startup Experience Course (Memphis State University)
(10 Reactor Startups)
4 week Observation Training (GE)
1 week Reactor Physics and Thermo Review (GGNS)
1 week Fire Brigade Training (Mississippi State Fire Academy)
1 week ACPSI - Turbine Generator Systems (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
3 day Bechtel Print Reading Course (GGNS)
1 day Radiation Worker Training (GGNS)
5 week Grand Gulf System Review Course (GGNS)
2 week Plant Operations Course (GGNS)
3 week Simulator Refresher Training (GE - Perry Simulator)
1 day Emergency Preparedness Training (GGNS)
2 day Mitigation of Core Damage Course (GGNS)



PROBLEMS ON APPLICATION

1. 12 week GGT - Cold License Training - no records indicating completion for weeks 9, 11, 12.
2. 3 week Heat Transfer and Fluid Flow - no record indicating attendance
3. Did not complete qual card

Application Submitted

May 1982

7. FORMAL TRAINING

Certified Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
7 week Power Principles and Systems Familiarization (GGNS)
7 week Reactor Fundamentals Review and Grand Gulf Systems
(GGNS)
5 week Dresden Technology (GGNS)
5 week Simulator Retraining (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination (GGNS)
12 Week Grand Gulf Technology (Cold License Training Course)
(GGNS)
1 week Fire Brigade Training (Texas A&M)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
3 day Blue Print Reading (GGNS)
2 day Donkey Boiler Training (GGNS)
1 day Radiation Worker Training (GGNS)
1 day Emergency Preparedness Training (GGNS)
2 day HPCS Diesel Training (GGNS)
1 day Gantry Crane Operator Training (GGNS)
5 week Grand Gulf Systems Review (GGNS)
3 week Plant Operations Course (GGNS)
3 week Simulator Refresher Training (GE - Perry Simulator)
1 week Memphis State Reactor Startup - (10 Reactor Startups
MSU)
3 week Reactor Physics, Thermal Hydraulic and Heat Transfer
Review (GGNS)
2 day Mitigation of Core Damage Course (GGNS)

Application Submitted

May 1982

7. FORMAL TRAINING

Certified Reactor Operator Perry Simulator (13 weeks) (GE) May 30, 1982
7 day Boiling Water Reactor Introduction (GGNS)
14 week Assistant Operator Systems Training (GGNS)
3 week Heat Transfer & Fluid Flow I - (GGNS)
1 day Donkey Boiler Training (GGNS)
3 week Presimulator Training (GGNS)
1 day General Employee Training/Radworker I (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
7 day Plant Operations Course (GGNS) (TECH SPECS)
1 week Fire Brigade Training (Mississippi State Fire Academy)
1 week Administrative Requirements Course (GGNS)
2 week Plant Operations Course (Procedures) (GGNS)
1 day Radiation Worker II Course (GGNS)
4 week Observation Training (Vermont Yankee)
1 day Emergency Preparedness Training (GGNS)
5 day Reactor Startup - Experience Training (Memphis State University) (10 Startups)
5 week Grand Gulf System Review Course (GGNS)
3 week Reactor Physics, Thermal Hydraulics & Heat Transfer Review (GGNS)
2 week Administrative Requirements Course (GGNS) (Procedures)
3 week Simulator Refresher Training Perry Simulator (GE)
2 day Mitigation of Core Damage Course (GGNS)



PROBLEMS ON 1ST APPLICATION

May 1982

1. Certified RO Perry Simulator - did not certify, did not take NRC exam because training was incomplete
2. 3 week HT & FF - records show "incomplete"
3. 5 day Rx Startup experience - actually only 3 days and had only 6 startups
4. 5 week GG Systems Review
3 week Rx Physics, Thermo & Heat Transfer
2 week Admin Requirements
2 day MCD

} did not complete

NOTE: [redacted] was not allowed to take exam due to not completing required training.

PROBLEMS ON 2ND APPLICATION

December 1983

1. Reapplication for December 1983 exam
2. No problems identified

Application Submitted

Oct, 1982


7. Formal Training:

14 Week	Reactor Operator Certification on Perry Simulator (GE)
7 Week	Grand Gulf Technology (GGNS)
13 Week	Assistant Operator Fundamentals Training (GGNS)
7 Week	N.O.B. Systems Course (GGNS)
1 Week	Fire Brigade Training (Mississippi State Fire Academy)
2 Week	Pre-Simulator Training (GGNS)
1 Week	Reactor Startup Experience (10 Startups) (Memphis State University)
2 Day	Donkey Boiler Training (GGNS)
2 Day	Fire Brigade Training (GGNS)
1 Day	Quality Assurance Indoctrination (GGNS)
1 Day	Gantry Crane Operator Training (GGNS)
1 Day	Emergency Preparedness Training (GGNS)
2 Day	Delaval Diesel Generator Course (GGNS)
2 Week	Operator Practices Training (GGNS)
1 Week	BWR Introduction (GGNS)
12 Day	Simulator Refresher Training at Tulsa, OK (G.E.) (11/12-11/23/82) June 6 through September 3, 1982 On-Shift Training
2 Week	Operational Theory Review (GGNS)
1 Week	Mitigation of Core Damage (GGNS)
5 Week	Supervised Self Study and Practice Walkthroughs (GGNS) (9/27/82 - 10/29/82)



PROBLEMS ON 1ST APPLICATION

1. 12 day Simulator Refresher was actually 10 days accomplished between 11/12/82 and 11/23/82.
2. No documentation in records for 5 week self study.



PROBLEMS ON 1ST APPLICATION

September 1981

1. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
2. 7 day POC (Tech Spec) - failed final, no evidence of makeup
3. 5 day Plant Operation Course (Tech Specs) - no evidence of taking course in records.
4. Completed qual card but did not have practical factors

PROBLEMS ON 2ND APPLICATION

October 1982

1. Same as items 1 on 1st application
2. 6 week HT & FF - was actually a 3 week course
3. Completed qual card but did not have practical factors
4. No entry in records for 5 weeks self study

[REDACTED]

1st Application Submitted

Sept. 1, 1981

7. FORMAL TRAINING

Certified Senior Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
7 week Power Principles and Systems Familiarization (GGNS)
7 week Reactor Fundamentals, Review and Grand Gulf Systems (GGNS)
5 week Dresden Technology (GGNS)
5 week Simulator Retraining (GE)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination (GGNS)
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
1 week Fire Brigade Training (Texas A&M)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
3 day Blue Print Reading (GGNS)
2 1/2 day Allis Chalmer Turbine Operations (AC)
7 day Plant Operations Course (Tech Specs) (GGNS)
2 week Refresher Training Perry Simulator
5 day Plant Operations Course (Tech Specs)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card

2nd Application Submitted

October 1982

7. FORMAL TRAINING

12 week Senior Reactor Operator Certification on Dresden Simulator (GE)
20 week Basic Reactor Fundamentals (Memphis State Univ)
7 week Power Principles and System Familiarization (GGNS)
7 week Reactor Fundamentals, Review and Grand Gulf Systems (GGNS)
5 week Dresden Technology (GGNS)
5 week Simulator Retraining (GGNS)
4 week Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week ACPSI - Turbine Generator Systems (AC-GGNS)
12 week Cold License Training Course (GGNS)
1 week Fire Brigade Training (Texas A&M)
6 week Heat Transfer - Fluid Flow (Memphis State Univ)
12 day Simulator Refresher Training at Tulsa, OK (G.E.)
1 week Administrative requirements Course (GGNS)
1 week Mitigation of Core Damage (GP-GGNS)
12 day Plant Operation Course (GGNS)
6 day Reactor Physics, Core Thermohydraulics, Radcon (GGNS)
2 day HPCS Diesel Generator Course (GGNS)
2 day Delaval Diesel Generator Course (GGNS)
3 day Blue Print Reading (GGNS)
2 week Operational Theory Review (GGNS)
1 week Mitigation of Core Damage (GGNS)
5 week Supervised Self Study and Practice Walkthroughs (GGNS)
(9/27/82 - 10/29)



PROBLEMS ON APPLICATION


1. 7 day POC and 13 day POC - was actually 15 days
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day HT & FF - no record of attendance
4. 1 week MCD - actually 4 days
5. Qual card - no practical factors
- one signature missing on knowledge skills area of qual card

Application Submitted

Sept. 1, 1981

7. FORMAL TRAINING

Certified Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ) + 10
startups
7 week Power Principles and Systems Familiarization (GGNS)
7 week Reactor Fundamentals and Grand Gulf System (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination
1/2 day Fire Brigade Training
12 week Grand Gulf Technology (Cold License Training Course)
(GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
1 week Fire Brigade Training
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (SU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card



PROBLEMS ON 1ST APPLICATION

September 1981

1. 7 day POC and 13 day POC - was actually a 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day HT & FF - no record of attendance
4. Partial qual card only

PROBLEMS ON 2ND APPLICATION

May 1982

1. Same problems as on original application 1 thru 3

PROBLEMS ON 3RD APPLICATION

October 1982

1. 6 weeks HT & FF was actually only 3 weeks
2. No documentation in records for 9 week review.

1st Application Submitted

Sept. 1, 1981

7. FORMAL TRAINING

Certified Reactor Operation Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
5 week Power Principles and Systems Familiarization (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
12 week Grand Gulf Technology (Cold License Training Course)
(GGNS)
1 day Quality Assurance Indoctrination (GGNS)
4 day Bechtel Reading (GGNS)
1/2 day Fire Brigade Training (GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
1 week Fire Brigade Training (GGNS)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin's Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card

2nd Application Submitted

May 1982

7. FORMAL TRAINING


Certified Reactor Operation Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ) (10
Reactor Startups)
5 week Power Principles and Systems Familiarization (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
12 week Grand Gulf Technology (Cold License Training Course)
(GGNS)
1 day Quality Assurance Indoctrination (GGNS)
4 day Bechtel Reading (GGNS)
1/2 day Fire Brigade Training (GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
1 week Fire Brigade Training (GGNS)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card
5 week Grand Gulf Systems Review (GGNS)
3 week Reactor Physics, Thermal Hydraulics and Heat Transfer
Review (GGNS)
2 week Administrative Requirements Course (Procedures) (GGNS)
2 week Simulator Refresher Training Perry Simulator (GE)

3rd Application Submitted

October 1982

7. FORMAL TRAINING

12 week Reactor Operation Certification on Dresden Simulator (GE)
20 week Basic Reactor Fundamentals (Memphis State Univ)
5 week Power Plant Principles and System Familiarization (GGNS)
5 week Dresden Technology (GGNS)
4 week Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
12 week Cold License Training (GGNS)
6 week Heat Transfer - Fluid Flow (Memphis State Univ)
1 week Fire Brigade Training (Mississippi State Fire Academy)
12 day Simulator Refresher Training at Tulsa, OK (GE)
6 day Administrative Requirements Course (GGNS)
15 day Plant Operations Course (GGNS)
5 day Mitigation of Core Damage (GGNS)
21 week License Operator Exam Preparation Course (GGNS)
2 day HPCS Diesel Generator Course (GGNS)
2 day Delaval Diesel Generator Course (GGNS)
3 day Fire Brigade Training (GGNS)
4 day Bechtel Print Reading (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
9 week Operator Upgrade Training (GGNS) (10/4/82 - 12/3/82)



PROBLEMS ON APPLICATION

1. 13 day POC was actually 12
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day HT & FF - no record of attendance
4. Partially completed qual card in records

Sept. 1, 1981

7. FORMAL TRAINING

Certified Senior Reactor Operator Dresden Simulator (GE) 12 weeks
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
5 day Fire Brigade Training (Texas A&M)
1 day Fire Brigade Training (GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
2 1/2 day Allis Chalmers Turbine Operations (AC)
7 day Plant Operations Course (Tech Specs) (GGNS)
2 week Refresher Training Perry Simulator
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card

US Navy Slw Prototype Training 1975
US Navy Nuclear Power School 1974
US Navy Electronics Technician "A" School 1973



PROBLEMS ON APPLICATION

1. 12 day Simulator Refresher Training at Tulsa - was actually a 10 day course
2. No qual card

Application Submitted

October 1982

7. FORMAL TRAINING

7 day BWR Introduction (GGNS)
13 week Assistant Operator Fundamentals Training (GGNS)
3 day Fire Brigade Training (GGNS)
7 week NOB Systems Course (GGNS)
1 day Donkey Boiler Training (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
5 day Fire Brigade Training (M.S. Fire Academy)
2 Pre-Simulator Training (GGNS)
1 day Gantry Crane Operator Training (GGNS)
14 Week Reactor Operator Certification at Perry Simulator
(GE)
7 week Grand Gulf Technology (GGNS)
2 day Delaval Diesel Generator (GGNS)
2 week Operator Practices Training
5 day Reactor Startup Experience (MSU)
12 day Simulator Refresher Training at Tulsa, OK (GE)
(11/12-11/23/82) June 6 through September 3, 1982 On-Shift
Training
2 week Operational Theory Review (GGNS)
1 week Mitigation of Core Damage (GGNS)
5 week Supervised Self Study and Practice Walkthroughs (GGNS)
(9/27/82 - 10/29/82)



Problems on Application

1. 7 day Plant Operations Course (Tech Specs) and 13 day Plant Operations Course (FSAR, IOI's, EPP's) - was actually a 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. Qual Card complete except Practical Factors.

[REDACTED]

Application Submitted

Sept, 1981

7. Formal Training:

Certified Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
5 week Power Principles and Systems Familiarization (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination
12 week Grand Gulf Technology (Cold License Training)
1 day Fire Brigade Training
1 week Fire Brigade Training
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
2½ day Allis Chalmer Turbine Operations (AC)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card



Problems on Application

1. 13 day POC - was actually 12 days
2. 6 day Rx physics, Core Thermo, Radcon
No record of attendance
3. 1 wk MCD - actually 4 days
4. No qual card

Application submitted

Sept. 3, 1981

7. Formal Training:

Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
8 week Grand Gulf Technology (GGNS)
2½ day Allis Chalmers Turbine Operations (AC)
8 day Refresher Training for Operations Perry Simulator (GE)
1 week Fire Brigade Training (GGNS)
2 day Fire Brigade Training (GGNS)
2 week Presimulator Training (GGNS)
1 day Quality Assurance Indoctrination (GGNS)
7 day Plant Operations Course (Tech Specs)
1 week Refresher Training Perry Simulator
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (CP) Sept 1981
Cold License Operator Qualification Card

- o US Navy S1W Prototype Training 1977
- o US Navy Nuclear Power School 1976



Problems on Application

App. #1

1. 7 day Plant Operations Course and 13 day Plant Operations Course - was actually a 15 day course
2. 6 day Rx Physics Thermo, Radcon ~ no record of attendance
3. Did not complete qual card
4. Failed week 10 of 12 week Cold License Training Program - no evidence of makeup exam.

App. #2

1. Repeat of same problems 1. through 4. on original application

App. #3

1. 6 week WT and FF was actually 3 weeks
2. No documentation in records for 5 week upgrade training

First Application Submitted

Sept, 1981

7. Formal Training:

Certified Reactor Operator Dresden Simulator (CE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
5 week Power Principles and Systems Familiarization (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination (GGNS)
5 day Fire Brigade Training (Texas A&M)
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
3 day Fire Brigade Training (GGNS)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card

Second Application Submitted

May, 1982

7. Formal Training:

Certified Reactor Operator Dresden Simulator (CE) 12 weeks
20 Weeks Basic Reactor Fundamentals (Memphis State Univ)(10 Reactor Startups)
5 Week Power Principles and Systems Familiarization (GGNS)
5 Week Dresden Technology (GGNS)
4 Week BWR Observation Training (GE)
1 Week Reactor Physics and Thermodynamics (GGNS)
8 Week Grand Gulf Technology (GGNS)
1 Week Allis Chalmers T/G System (AC)
1 Day Quality Assurance Indoctrination (GGNS)
5 Day Fire Brigade Training (Texas A&M)
12 Week Grand Gulf Technology (Cold License Training Course (GGNS)
3 Week Heat Transfer - Fluid Flow (Memphis State Univ)
3 Day Fire Brigade Training. (GGNS)
2 Week Refresher Training Perry Simulator
7 Day Plant Operations Course (Tech Specs)
5 Day Plant Operations Course (Admin Req's)
13 Day Plant Operations Course (FSAR, IOI's, EPP's)
6 Day Rx Physics, Core Thermo, Radcon
3 Day Heat Transfer - Fluid Flow (MSU)
1 Week Mitigation of Core Damage (GP) Sept. 1981
Cold License Operator Qualification Card
5 Week Grand Gulf Systems Review (GGNS)
3 Week Reactor Physics and Thermal Hydraulic Review (GGNS)
2 Week Administrative Procedure and Plant Operating Procedure Review (GGNS)
2 Week Simulator Refresher Training Perry Simulator (GE)

Third Application Submitted

Oct, 1982

7. Formal Training:

12 Week Reactor Operator Certification at Dresden Simulator (GE)
20 Week Basic Reactor Fundamentals (Memphis State Univ.) (10 Reactor
Startups
5 Week Power Plant Principles and System Familiarization (GGNS)
5 Week Dresden Technology (GGNS)
4 Week BWR Observation Training (GE)
1 Week Reactor Physics and Thermodynamics (GGNS)
8 Week Grand Gulf Technology (GGNS)
1 Week ACPST Turbine Generator Systems (AC-GGNS)
12 Week Cold License Training Course (GGNS)
6 Week Heat Transfer and Fluid Flow (Memphis State Univ.)
21 Week License Operator Exam Preparation Course (GGNS)
5 Day Fire Brigade Training (Texas A&M)
1 Day Quality Assurance Indoctrination (GGNS)
3 Day Fire Brigade Training (GGNS)
13 Day Simulator Refresher Training at Tulsa, OK (GE)
3 Day Heat Transfer and Fluid Flow (Memphis State Univ.)
5 Day Mitigation of Core Damage (GP-GGNS)
2 Day RPCS Diesel Generator (GGNS)
2 Day Delaval Diesel Generator (GGNS)
5 Week Operator Upgrade Training (GGNS) (11/1/82 - 12/3/82)



Problems on Application

1. 1 day Q. A. Indoctrination - actually a 1 hour course
2. 13 day Plant Operations Course (FSAR, IOI, EPP) - actually 12 days
in records
3. No qual card

[REDACTED]

Application Submitted

Sept, 1981

7. Formal Training:

- Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
- 8 week Grand Gulf Technology (GGNS)
- 2 week Presimulator Training Course (GGNS)
- 1 week Fire Brigade Training (GGNS)
- 1 day Fire Brigade Training (GGNS)
- 1 day Quality Assurance Indoctrination
- 7 day Plant Operations Course (Tech Specs)
- 1 week Refresher Training Perry Simulator
- 5 day Plant Operations Course (Admin Req's)
- 13 day Plant Operations Course (FSAR, IOI's, EPP's)
- 6 day Rx Physics, Core Thermo, Radcon
- 3 day Heat Transfer - Fluid Flow (MSU)
- 1 week Mitigation of Core Damage (GP) Sept 1981
- Cold License Operator Qualification Card

- o US Navy S5G Prototype Training 1968
- o US Navy Nuclear Power School 1968
- o US Navy Electronics Technician "A" School 1967
- o US Navy Nuclear Power Instructor School 1975
- o US S8G Reactor Plant Design Course 1978



PROBLEMS ON APPLICATION

1. 13 day Plant Operation Course - was actually a 12 day course
2. 1 week MCD - was actually a 4 day course
3. Practical Factors section not completed on Qual Card

Application Submitted

Sept. 1, 1981

7. FORMAL TRAINING

Certified Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
7 week Power Principles and System Familiarization (GGNS)
7 week Reactor Fundamentals Review and Grand Gulf Systems
(GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training (GE)
1 week Reactor Physics and Thermodynamics (GGNS)
8 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination
12 week Grand Gulf Technology (Cold License Training Course)
(GGNS)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
2 1/2 day Allis Chalmers Turbine Operation (AC)
1/2 day Fire Brigade Training (GGNS)
7 day Plant Operations Course (GGNS) (Admin. Req's)
2 week Refresher Training Perry Simulator
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card



PROBLEMS ON 1ST APPLICATION

September 1981

1. 7 day POC and 13 day POC - was actually a 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day HT & FF - no record of attendance
4. Practical factors portion of qual card not completed - 1 signature missing from knowledge/skills area of qual card.

PROBLEMS ON 2ND APPLICATION

August 1983

1. No documentation in records for 3 weeks review.
2. No other problems identified.

Applications Submitted

Sept. 1, 1981

7. FORMAL TRAINING

Certified Senior Reactor Operation Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ)
7 week Power Principles and Systems Familiarization Course (GGNS)
7 week Reactor Fundamentals Review and Grand Gulf Technology (GGNS)
5 week Dresden Technology (GGNS)
4 week BWR Observation Training Course (GE) (GGNS)
1 week Reactor Physics and Thermodynamics (GGNS)
7 week Grand Gulf Technology (GGNS)
1 week Allis Chalmers T/G System (AC)
1 day Quality Assurance Indoctrination (GGNS)
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
5 day Brigade Training (Texas A&M)
3 week Heat Transfer - Fluid Flow (Memphis State Univ)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs) (GGNS)
5 day Plant Operations Course (Tech Specs)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card



Problems on Application

App. #1

1. 12 day Simulator Refresher at Tulsa, OK (GE) - actually 10 days in records

App. #2

No problems found

Application Submitted

Oct, 1982

7. Formal Training:

1 Day	Quality Assurance Indoctrination (GGNS)
7 Day	BWR Introduction (GGNS)
13 Week	Assistant Operator Fundamentals (GGNS)
2 Day	Fire Brigade Training (GGNS)
7 Week	NOB Systems Course (GGNS)
2 Day	Donkey Boiler Training (GGNS)
5 Day	Fire Brigade Training (M.S. Fire Academy)
2 Week	Pre-Simulator Training (GGNS)
1 Day	Gantry Crane Operator Training (GGNS)
7 Week	Grand Gulf Technology (GGNS)
2 Day	Delaval Diesel Generator (GGNS)
2 Week	Operator Practices Training (GGNS)
5 Day	Reactor Startup Experience (M.S.U.)
1 Day	Emergency Preparedness Training (GGNS)
14 Week	Reactor Operator Certification at Tulsa, OK (G.E.)
12 Day	Simulator Refresher Training at Tulsa, OK (G.E.) (11/12-11/23/82)
45 Day	June 25 through September 4, 1982 On-Shift Training (GGNS)
2 Week	Operational Theory Review (GGNS)
1 Week	Mitigation of Core Damage (GGNS)
5 Week	Supervised Self Study and Practice Walkthroughs (GGNS) 9/27/82 - 10/29/82)



Problems on Application


1. 7 Day Plant Operation Course (Tech Spec)
13 Day Plant Operation Course (FSAR, IOI, EPP) — actually 15 days
one course
2. 1 week MCD course (GP) Sept. 1981 - never completed
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. Cold License Qual Card - Did not complete

Application Submitted

Sept, 1981

7. Formal Training:

Certified Senior Reactor Operation Dresden Simulator (GE) 12 weeks
7 day BWR Introduction (GGNS)
14 week Assistant Operator Systems Training (GGNS)
2 week Presimulator Reactor Physics (GGNS)
12 week Grand Gulf Technology (Cold License Training Course) (GGNS)
3 week Heat Transfer - Fluid Flow Course (Memphis State Univ)
1 week Fire Brigade Training
Reactor Startup Experience Course (Memphis State Univ)
1 day Quality Assurance Indoctrination
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card



PROBLEMS ON APPLICATION

1. 7 day POC and 13 day POC - was actually 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day HT & FF - no record of attendance
4. No qual card

7. FORMAL TRAINING

Certified Senior Reactor Operator Dresden Simulator (GE) 12 weeks
20 week Basic Reactor Fundamentals (Memphis State Univ) 10
criticals
4 week Observation Training Course (GE)
5 week Dresden Technology Course (GE)
1 day Quality Assurance Indoctrination (GGNS)
5 week Grand Gulf Technology Course (GE)
5 week Station Nuclear Engineering Course (GE)
1 day Indoctrination on Procurement of Material (GGNS)
1 week Allis Chalmers T/G System Course (AC)
5 day Fire Brigade Training Course (Texas A&M)
12 week Grand Gulf Technology (Cold License Training Course)
(GGNS)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) September 1981
Cold License Operator Qualification Card

Application Submitted

Sept. 3, 1981


7. FORMAL TRAINING

Certified Senior Reactor Operator Dresden Simulator (GE)
12 Week Grand Gulf Technology Course (Cold License Training)
1/2 day Fire Brigade Training (GGNS)
4 week BWR Observation Course (GE)
1 week Allis Chalmers Turbine Course (AC)
5 week Station Nuclear Engineer Course (GE)
5 week Grand Gulf Technology Course (GE)
Quality Assurance Indoctrination (GGNS)
5 week Dresden Technology Course (G)
20 week Basic Reactor Fundamentals (Memphis State Univ)
5 month Introduction to Nuclear Power (NUS)
2 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) September 1981
Cold License Operator Qualification Card



PROBLEMS ON APPLICATION

1. 7 day POC and 13 day POC - was actually a 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - No record of attendance
3. No qual card.



PROBLEMS ON APPLICATION

1. 7 day POC and 13 day POC - actually 15 days
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. No qual card

Application Submitted

Sept. 1981

7. FORMAL TRAINING

Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
8 week Grand Gulf Technology Course (GGNS)
7 day BWR Introduction (GGNS)
5 day Fire Brigade Training (Texas A&M)
Quality Assurance Indoctrination (GGNS)
14 week Assistant Operator System Course (GGNS)
1/2 day Fire Brigade Training (GGNS)
3 day Blue Print Reading Course (GGNS)
1 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card
US Navy SIC Prototype Training 1962
US Navy Nuclear Power School 1962
US Navy Electronics Technician "A" School 1960
US Navy Electronics Technician "B" School 1960



Problems on Application

- * 1. 7 day POC and 13 day POC - was actually a 15 day course
- * 2. 5 day POC on Tech Specs
- 3. 6 day Rx physics core thermo and Radcon - no record of attendance
- 4. No qual card

* [Shelly] did not formally sit for these courses. As an operations instructor he participated in teaching these courses - this should have been noted on the application.



Application Submitted

Sept, 1981

7. Formal Training:

Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
2 week Presimulator Training Course (GGNS)
1 week Fire Brigade Training
3 day Blue Print Reading
1 day Quality Assurance Indoctrination
1 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GF) Sept 1981
Cold License Operator Qualification Card
US Navy DIG Prototype Training 1973
US Navy Nuclear Power School 1973
US Navy Electronics Technician "A" School 1972




Problems on Application

1st Application

1. 7 day POC and 13 day POC - was actually a 15 day course
2. 6 day Rx physics, core thermo and radcon - no record of attendance
3. No qual card

2nd Application

1. No documentation in records for 4 week upgrade training
2. Did not complete qual card but was not on application



First Application Submitted

Sept, 1981

7. Formal Training:

Certified Senior Reactor Operator Perry Simulator (GE) 13 weeks
8 week Grand Gulf Technology Course (GGNS)
Met.phis State University Reactor Startup Experience Course (10
Reactor Startups)
8 day Refresher Training Course Perry Simulator (GE)
2 week Presimulator Training Course (GGNS)
Quality Assurance Indoctrination (GGNS)
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card
US Navy S3G Prototype Training 1973
US Navy Nuclear Power School 1972
US Navy Machinist Mate "A" School 1972

Second Application Submitted


Oct, 1982

7. Formal Training:

13 Week	Senior Reactor Operator Certification at Perry Simulator (GE)
8 Week	Grand Gulf Technology (GGNS)
1 Week	Reactor Startup Experience (Memphis State Univ.)
8 Day	Simulator Refresher Training at Tulsa, OK (GE)
2 Week	Pre-Simulator Training (GGNS)
1 Day	Quality Assurance Indoctrination (GGNS)
5 Day	Fire Brigade Training (Mississippi State Fire Academy)
6 Day	Administrative Requirement Course (GGNS)
3 Day	Heat Transfer & Fluid Flow (Memphis State Univ.)
15 Day	Plant Operations Course (GGNS)
5 Day	Mitigation of Core Damage (GP-GGNS)
9 Day	Supervisory Training Program (GGNS)
2 Day	HPCS Diesel Generator Training (GGNS)
2 Day	Delaval Generator Training (GGNS)

UPGRADE TRAINING:

Supervised study for four (4) week period in: Reactor Physics, Theory of Power Plant Operation; Heat Transfer & Fluid Flows, Core Thermal Hydraulic; Plant Systems including design, control and instrumentation; Administrative Procedures, Normal and Abnormal Operating Procedures including Technical Specifications.




Problems on Application

App. #1

1. 7 day Plant Operations Course and 13 day Plant Operation Course - was actually a 15 day course
2. 6 day Rx Physics, Core Thermo, Radcon - no record of attendance
3. 3 day Heat Transfer and Fluid Flow - no record of attendance
4. Qual Card not completed at time of application

App. #2

1. Similar problems to 1st application 1, 2, 3
2. Qual card completed except for practical factors
3. No documentation in records for 10 week retraining



First Application Submitted

Sept, 1981

7. Formal Training:

Certified Senior Reactor Operator Perry Simulator 13 weeks
Completed Memphis State University Reactor Startup
Experience Course (10 Reactor Startups)
Completed 8 week Grand Gulf Technology Course
Fire Brigade Training (4/1/81)
Allis Chalmers Turbine Operations Course (2.5 days) (4/15/81)
GGNS Quality Assurance Indoctrination (6/4/81)
1 week Refresher Training Perry Simulator
7 day Plant Operations Course (Tech Specs)
5 day Plant Operations Course (Admin Req's)
13 day Plant Operations Course (FSAR, IOI's, EPP's)
6 day Rx Physics, Core Thermo, Radcon
3 day Heat Transfer - Fluid Flow (MSU)
1 week Mitigation of Core Damage (GP) Sept 1981
Cold License Operator Qualification Card
US Navy SIC Prototype Training 1974
US Navy Nuclear Power School 1973
US Navy Machinist Mate "A" School 1973

Second Application Submitted

May, 1982

7. Formal Training:

Certified Senior Reactor Operator Perry Simulator 13 weeks
Completed Memphis State University Reactor Startup
Experience Course (10 Reactor Startups)
Completed 8 week Grand Gulf Technology Course
Fire Brigade Training (4/1/81)
Allis Chalmers Turbine Operations Course (2.5 days) (4/15/81)
GCNS Quality Assurance Indoctrination (6/4/81)
1 Week Refresher Training Perry Simulator
7 Day Plant Operations Course (Tech Specs)
5 Day Plant Operations Course (Admin Req's)
13 Day Plant Operations Course (FSAR, IOI's, EPP's)
6 Day Rx Physics, Core Thermo, Radcon
3 Day Heat Transfer - Fluid Flow (MSU)
1 Week Mitigation of Core Damage (GP) Sept. 1981
Cold License Operator Qualification Card
US Navy SIC Prototype Training 1974
US Navy Nuclear Power School 1973
US Navy Machinist Mate "A" School 1973
Re-training - 10 weeks supervised self study on Reactor Theory
and Reactor Behavior; Heat Transfer, Fluid Flow and Thermodynamics;
Safety Related Systems and systems designed to prevent uncontrolled
radioactive releases; Instrument and Control Functions & Systems;
Normal, Off-Normal and Emergency Operating Procedures.

ADULT CHECKLIST

MAP REF.	COURSE CONTENT	METHOD OF VERIFICATION	VITRUMS/STIPULATIONS	CLASSIF. CODE
	<p>Verify the training and qualification of licensed operator candidates to RP/MS ^{RP/MS} 18.1.4, 18.1.5, 18.1.6, 18.1.18, and 18.1.21/MSW Pages 13.2-6 (441.4), 13.2-7 (441.5), Amend. 28, 3/19.</p>	<p>Review training records</p>	<p>See attachment to Checklist.</p>	<p>C, N</p>

COMPLETED BY: McEwen
 DATE: 11/13/13
 CHECKLIST NUMBER: MRB3-161-01

PERSONS CONTACTED:
Paul H. ...
...

Classification Code:
 C-Conformance
 N-Nonconformance
 MC-Nonconformance Corrected during audit
 MU-Nonconformance Documented by audited organization
 NTU-Nonconformance Previously Documented by audited organization
 V-Verified Corrective Action
 A-Not Audited (None than see classification may be used.)

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- (1) HAS NO LICENSE
- (2) TECH SPECS ARE NOT COVERED BY THE REGULAR EXAM FOR SRO'S. (ADDRESSED IN SECTION 8 OK)
- (3) LICENSE ISSUANCE ON 10/14/83
- (4) DO NOT HOLD A SRO LICENSE TOOK THE RO EXAM. (HOLDS RO LICENSE)
- (5) PLANT DESIGN/CONTROL/INSTRUMENTATION WERE WRITTEN AND GRADED BY THE NRC, ADEQUATE DOCUMENTATION IS NOT AVAILABLE FOR THIS. TECH SPECS ARE NOT COVERED AT ALL. (Tech Specs OK)
- (6) LICENSE ISSUANCE ON 8/24/83.
- (7) SECTION 3 WAS WRITTEN AND GRADED BY THE NRC. ADEQUATE INFORMATION WAS NOT AVAILABLE TO DETERMINE RO (Applications) THE SUBJECT MATTER OF THIS TEST SECTION.

IF THE EVALUATOR WOULD PREFER TO OBTAIN A CANDIDATE IN THE TRAINING PROGRAM, HE SHALL BE GIVEN PRIORITY, INCLUDING NO MORE THAN ONE YEAR TO TAKE A COURSE IN HIS WORK AREA PRIOR TO RE-EVALUATION 13, 2, 2, 5 (1-9)

IF THE EVALUATOR WOULD PREFER TO OBTAIN A CANDIDATE IN THE TRAINING PROGRAM, HE SHALL BE GIVEN PRIORITY, INCLUDING NO MORE THAN ONE YEAR TO TAKE A COURSE IN HIS WORK AREA PRIOR TO RE-EVALUATION 13, 2, 2, 5 (1-9)

IF THE EVALUATOR WOULD PREFER TO OBTAIN A CANDIDATE IN THE TRAINING PROGRAM, HE SHALL BE GIVEN PRIORITY, INCLUDING NO MORE THAN ONE YEAR TO TAKE A COURSE IN HIS WORK AREA PRIOR TO RE-EVALUATION 13, 2, 2, 5 (1-9)

IF THE EVALUATOR WOULD PREFER TO OBTAIN A CANDIDATE IN THE TRAINING PROGRAM, HE SHALL BE GIVEN PRIORITY, INCLUDING NO MORE THAN ONE YEAR TO TAKE A COURSE IN HIS WORK AREA PRIOR TO RE-EVALUATION 13, 2, 2, 5 (1-9)

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1.	A	A	(1)	NA	A	A	A
2.			(1)	NA			A
3.			(2)	NA			A
4.			(1)	NA			A
5.			(1)	NA			A
6.			(1)	NA			A
7.			(1)	NA			A
8.			(1)	NA			A
9.			(1)	NA			A
10.			(1)	NA			A
11.			(1)	NA			A
12.			(1)	NA			A
13.			(1)	NA			A
14.	A	A	(1)	NA	A	A	A

SRO (Applications)

1.	A	A	NA	(2)	A	A	A
2.			NA	(1)			A
3.			NA	(1)			A
4.			NA	(2)			A
5.			NA	(2)			A
6.			NA	(4)			A
7.			NA	(2)			A
8.			NA	(4)			A
9.			NA	(3)			A
10.			NA	(6)			A
11.			NA	(5)			A
12.			NA	(4)			A
13.			NA	(4)			A
14.			NA	(2)			A
15.			NA	(14)			A
16.			NA	(2)			A
17.			NA	(2)			A
18.			NA	(2)			A
19.			INSTRUCTOR				A
20.			NA	(2)			A

10/11/83

- 1) Has no license
 - 2) License decision on 10/19/83
 - 3) License decision on 8/24/83
 - 4) Has no SRD license took the RD exam & passed
 - 5) All of the 6 items listed in FSAR 13.2.2.1.2 have been returned within a 1 year period.
- 2) Received license 2/82 didn't begin to perform manipulations until 4/83. Deigned all 6 items listed in FSAR 13.2.2.1.2 with E3.
- 3) FEN "C" WAS NOT PERFORMED WITH 1 YEAR OF LICENSE RD (applications)

2005 ALL LISTED CONDITIONS SHALL PARTICIPATE IN A SIMILAR PROGRAM, INCLUDING PARTICIPATING IN A SIMILAR PROGRAM, IF WILL TOOK AS A MINIMUM THREE ITEMS LISTED IN FSAR 13.2.2.1.1.

2004 IF AN UNLICENSED PERSON WHO WILL PARTICIPATE IN THE PROGRAM SHALL PARTICIPATE IN THE PROGRAM FOR 13.2.2.1.1. IF AN UNLICENSED PERSON WHO WILL PARTICIPATE IN THE PROGRAM SHALL PARTICIPATE IN THE PROGRAM FOR 13.2.2.1.1.

2003 THE PROGRAM PARTICIPATION SHALL BE IN THE FORM OF A 2-YEAR PERIOD FOR 13.2.

2002 PARTICIPATION IN THE PROGRAM SHALL BE LIMITED TO APPROPRIATE PROGRAMS WHICH ARE LISTED IN THE PROGRAM FOR 13.2.2.1.1. IF AN UNLICENSED PERSON WHO WILL PARTICIPATE IN THE PROGRAM SHALL PARTICIPATE IN THE PROGRAM FOR 13.2.2.1.1.

2001 A LICENSEE SHALL BE PROHIBITED FROM PARTICIPATING IN THE PROGRAM FOR 13.2.2.1.1. IF AN UNLICENSED PERSON WHO WILL PARTICIPATE IN THE PROGRAM SHALL PARTICIPATE IN THE PROGRAM FOR 13.2.2.1.1.

2000 PARTICIPATION IN THE PROGRAM SHALL BE LIMITED TO APPROPRIATE PROGRAMS WHICH ARE LISTED IN THE PROGRAM FOR 13.2.2.1.1. IF AN UNLICENSED PERSON WHO WILL PARTICIPATE IN THE PROGRAM SHALL PARTICIPATE IN THE PROGRAM FOR 13.2.2.1.1.

B8

1.	A	(1)	(1)	A	NA	A	(1)
2.		(1)	(1)		NA		(1)
3.		yes	10/19/83		NA		yes
4.		yes	08-24/83		NA		(7)
5.		(1)	(1)		NA		(1)
6.		(1)	(1)		NA		(1)
7.		yes	02/82		NA		yes
8.		yes	02/82		NA		yes
9.		(1)	(1)		NA		(1)
10.		yes	02/82		NA		yes
11.		yes	02/82		NA		yes
12.		yes	02/82		NA		yes
13.		(1)	(1)		NA		(1)
14.	A	yes	02/82	A	NA	A	yes

(1) Manipulations were not completed (applications) with a 1 year period.

(2) Has not completed any manipulations

(9) Exemption from - justification was instructor.

L. C. Burgess 10/11/83

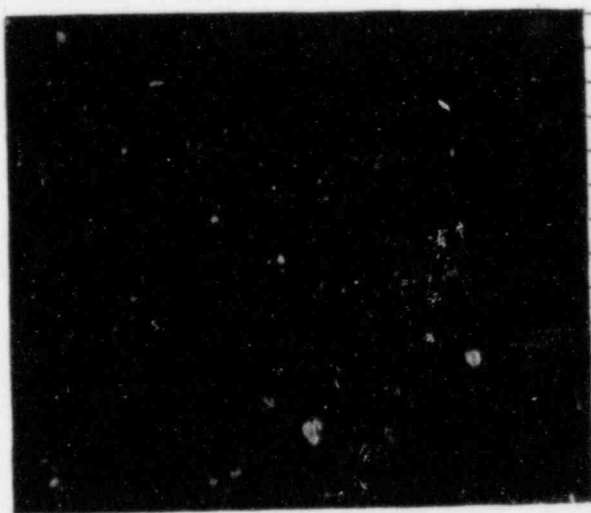
1.	A	yes	10/19/83	A	NA	A	(1)
2.		(1)	(1)		NA		(1)
3.		YES	10/19/83		NA		(7)
4.		YES	08-24/83		NA		(7)
5.		(2)	(2)		NA		(2)
6.		YES	02/82		NA		(5)
7.		YES	02/82		NA		(7)
8.		YES	02/82		NA		(6)
9.		(3)	(3)		NA		(3)
10.		YES	02/82		NA		(6)
11.		YES	02/82		NA		(7)
12.		(1)	(1)		NA		(1)
13.		YES	02/82		NA		(6)
14.		YES	02/82		NA		(7)
15.		YES	02/82		NA		(8)
16.		YES	02/82		NA		(7)
17.		YES	02/82		NA		(9)
18.		YES	02/82		NA		(5)

B8

- (1) No evidence of rescheduling
- (2) Appears that this is not allowed.
- (3) Holds no license
- (4) License on 10/14/83 has not begun program
- (5) License on 8/24/83 has not take LCRPT Exam
- (6) Exempted because we write the exam

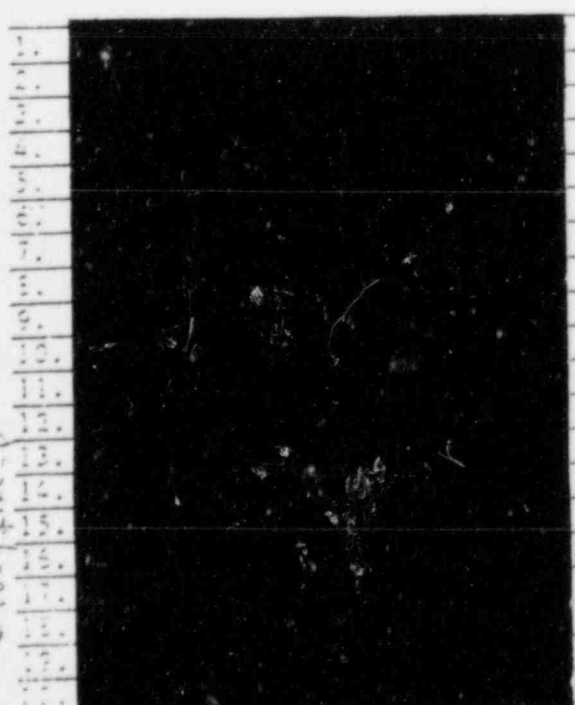
RD (Applications)

2074. WITHIN FIVE (5) YEARS FROM THE DATE OF THE EXAMINATION, THE CANDIDATE SHALL BE GIVEN AN ANNUAL RE-EXAMINATION TO DETERMINE IF HE OR SHE IS STILL QUALIFIED TO TAKE THE EXAMINATION. IF THE CANDIDATE FAILS TO TAKE THE EXAMINATION FOR TWO (2) CONSECUTIVE YEARS, HE OR SHE SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN. IF THE CANDIDATE FAILS TO TAKE THE EXAMINATION FOR THREE (3) CONSECUTIVE YEARS, HE OR SHE SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN AND SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN FOR TWO (2) CONSECUTIVE YEARS. IF THE CANDIDATE FAILS TO TAKE THE EXAMINATION FOR FOUR (4) CONSECUTIVE YEARS, HE OR SHE SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN AND SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN FOR TWO (2) CONSECUTIVE YEARS. IF THE CANDIDATE FAILS TO TAKE THE EXAMINATION FOR FIVE (5) CONSECUTIVE YEARS, HE OR SHE SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN AND SHALL BE REQUIRED TO TAKE THE EXAMINATION AGAIN FOR TWO (2) CONSECUTIVE YEARS.



(3)	(3)	A	A	A	A	N/A
(3)	(3)					N/A
10/14/83	780%					N/A
8/24/83	780%					N/A
(3)	(3)					N/A
(3)	(3)					N/A
3/20/83	780%					N/A
1/15/83	780%					N/A
(3)	(3)					N/A
7/15/83	780%					N/A
1/15/83	780%					N/A
(3)	(3)					N/A
3/20/83	780%	A	A	A	A	N/A
1/15/83	780%					N/A

ERC (Applications)



(2)	780%	A	A	A	A	N/A
(2)	(3)					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	(4)					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	(5)					N/A
(2)	780%					N/A
(2)	(3)					N/A
(2)	(3)					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	780%					N/A
(2)	(16)					N/A
(2)	780%					N/A

12/19/83

(1) Unable to determine
 Memphis state app. for exam plan.

NOTE: [redacted] scored below 80%
 on 2 exams (Quizzes 4 & 8)
 in M.C. Fundamentals

(2) By review of exams (blank)
 for the Top 13 exams given.
 See pages 10 & 11 of checklist
 statement.

(3) [redacted] grades under 80%
 included 72.4, 68.8, 71.1,
 71.0, 75.7, 71.2 (Final);
 AVE 80%

(4) [redacted] grades under 80%
 included 71.5, 72.5, 71.2 (Final);
 AVE 84.1

SO (Applications)

1.	[redacted]	(2)	74.7, 74.5	A	X	A	A	A	(14)
2.	[redacted]	6	(6)		K				(14)
3.	[redacted]	(6)	(7)		K				(14)
4.	[redacted]	(2)	>80%		D				(14)
5.	[redacted]	(13)	>80%		V				(14)
6.	[redacted]	(6)	(12)		V				(14)
7.	[redacted]	(6)	(11)		D				(14)
8.	[redacted]	(6)	(9)		K				(14)
9.	[redacted]	(12)	(12)		V				(14)
10.	[redacted]	(2)	>80%		D				(14)
11.	[redacted]	(6)	(6)		K				(14)
12.	[redacted]	(2)	>80%		D				(14)
13.	[redacted]	CIE	CIE		D				(14)
14.	[redacted]	VIE	VIE	A	V	A	A	A	(14)

(1) [redacted] grades included 72.4, 71.1 (Final) ave 79.6
 grades included 71.2, 71.6, 75.3, 78.7, 72.2 (Final) AVE 78.0
 grades included 76.8, 75.6, 66.3, 70.2, 78.5, 75.8, 77.6, 74.3 (Final); 78.9 AVE.

SRO (Applications)

1.	[redacted]	CIE		A	CIE	A	A	A	(14)
2.	[redacted]	(6)	(15)		D				(14)
3.	[redacted]	(4)			K				(14)
4.	[redacted]	CPE NAVY			D				(14)
5.	[redacted]	CPE BS			D				(14)
6.	[redacted]	(16)			D				(14)
7.	[redacted]	CPE NAVY			K				(14)
8.	[redacted]	(6)	(11)		D				(14)
9.	[redacted]	CPE NAVY			D				(14)
10.	[redacted]	CPE NAVY			D				(14)
11.	[redacted]	CPE NAVY			D				(14)
12.	[redacted]	(6)	(5)		D				(14)
13.	[redacted]	(12)	(15)		D				(14)
14.	[redacted]	(14)			D				(14)
15.	[redacted]	(6)	(3)		D				(14)
16.	[redacted]	(6)	>80%		D				(14)
17.	[redacted]	(6)	>80%		D				(14)
18.	[redacted]	CPE NAVY			D				(14)
19.	[redacted]	CPE NAVY			D				(14)
20.	[redacted]	CPE NAVY			D				(14)

J.C. August 14/17/03

NOTES: CONTINUED

(10) [redacted] attended 2 separate Sys. Op. Trng. courses

810130/8086 and 810612/8086-1

wk #1 (86)
wk #2 (87)
wk #3 (82)
wk #4 (87)

wk #1 (93.9)
wk #2 (93.8)
wk #3 (92.3)
wk #4 (95.4)
Final 93.8

(11) [redacted] ATTENDED BRFI (BASIS Rf FUND) ON 01/21/77 FOR 1 WEEK. (CLASS NO. 7601), ALSO ALSO ATTENDED NUCLEAR Rf. FUNDAMENTALS ON 11/12/80 (NO CLASS NO. OR LENGTH OF TIME) WITH A GRADE OF 83.8.

(12) [redacted] FULFILLED THE FUNDAMENTALS REQUIREMENT BY ATTENDING 4 WEEKS OF THE 12 WEEK COURSE, AND TAKING 7 MAKE-UP TESTS, 5 OF WHICH WERE TAKEN 12/4/80, # 8095 AND 2 WERE TAKEN ON 10/10/81, # 81132. (CREDIT BY EXAMINATION?)

A.C. Gungor 12/19/83
w/parent

- (1) NO LICENSE
- (2) LICENSE ISSUED ON 10/14/83
- (3) " " " " 8/24/83

6003 LICENSEE PURCHASE, OPERATING OR PERFORMING PULP-MAKING OPS. FSW 13.2.1.1
 WILL RECEIVE TRAINING ON THE USE OF THE EQUIPMENT & FACILITIES
 PRIOR TO PERFORMING PULP-MAKING OPS.

6004 WILL SIGNATURE REFER OVER TRAINING CODES. 1-2 WEEKS, 9002 FSW 13.2.1.1
 BE PROVIDED FOR ALL LICENSEE CANDIDATES AT MAINTAINED
 PRIOR TO LICENSEE EXAM.

6005 OTHER TRAINING PROGRAMS OR EXPERIENCE THAT SATISFY INTENT OF FSW 13.2.1.1
 PROVIDED IN FSW 13.2.1.1.1 MAY BE SUBSTITUTED INSTEAD
 OF PORTION OF TRAINING PROVIDED FOR MAINTAINED CANDIDATES.

6007 IF TRAINING WILL AS A MINIMUM BE REQUIRED IN THE FSW 13.2.2
 IDENTIFIED AREAS OF FSW 13.2.2.

6008 MASTER EXAM WILL BE GIVEN COVERING WHOLE 16 HOUR
 EXAM AND WILL BE PERFORMED AND EVALUATED BY MEMBERS OF THE
 TRAINING SECTION. FSW 13.2.1.3

6009 REVISION AND RETESTS A. RETEST PRIOR TO HIS RECEIVING FSW 13.2.1.3
 LICENSED PRIOR. FSW 13.2.1.3

6010 RE-EVALUATION PERMITTED PROVIDED TO CANDIDATE IN A PERIOD OF 30
 DAYS. AS STATED BY THE BOARD IN CASE OF SUBSEQUENT NON-PASSING OF EXAM
 FOR SAME SECTION.

RO (Applications)

1.		A	A	A	A	YES	A	A
2.						(1)		
3.						YES		
4.						YES		
5.						(1)		
6.						(1)		
7.						YES		
8.						YES		
9.						(1)		
10.						YES		
11.						YES		
12.						YES		
13.						(1)		
14.		A	A	A	A	YES	A	A

SRO (Applications)

1.		A	A	A	A	YES	A	A
2.						(1)		
3.						YES		
4.						YES		
5.						(2)		
6.						YES		
7.						YES		
8.						YES		
9.						YES		
10.						(3)		
11.						YES		
12.						YES		
13.						(1)		
14.						YES		
15.						YES		
16.						YES		
17.						YES		
18.						YES		
19.						YES		
20.						YES		

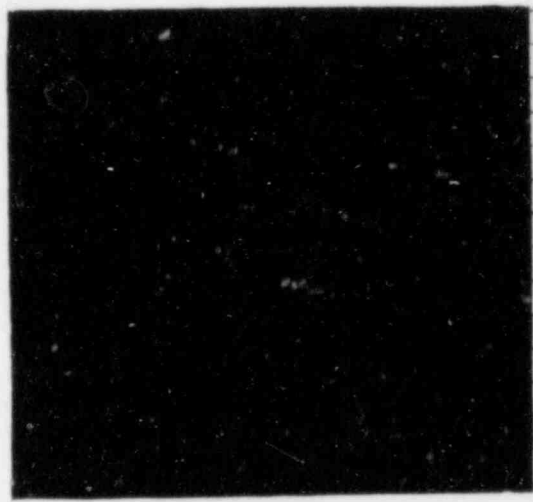
T.C. Dwyer 141703
 (10/23/83)

Notes: (1) Negatives provided by
 Memphis State Univ.
 (2) Some written exam
 grades less than 80%.

FO (Instructors)

FUNDAMENTALS LESS THAN 80

- 6001 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6002 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6003 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6004 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6005 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6006 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6007 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6008 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6009 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6010 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6011 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6012 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6013 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6014 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6015 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6016 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6017 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6018 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6019 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1
- 6020 PERSONNEL AND THEIR FUNCTIONS ASSIGNED TO THE MATHS... FSR 13.1.1



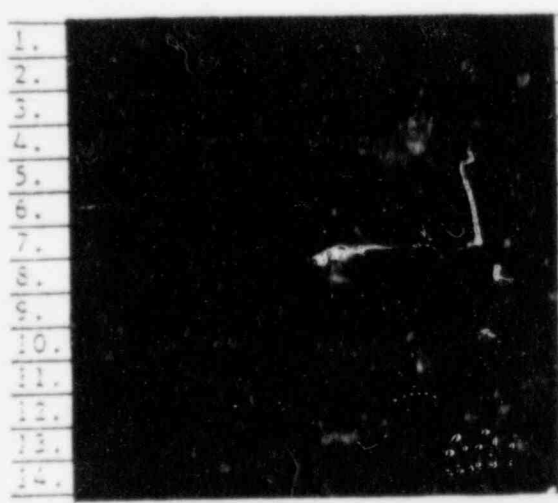
A	A	NA	NA	Gr 182 13th	A	A	A
		NA		Gr 179 20th	A		
		NA		Gr 183 13th	A		
		NA		Gr 185 20th	A		
		NA		(U)	A		
		NA		Gr 181 13th	A		
		NA		Gr 178 20th	A		
		NA		(U)	A		
		NA		Gr 98 13th	A		
		NA		Gr 178 20th	A		
		NA		Gr 94 13th	A		
		NA		Gr 93 13th	A		
A	A	NA	NA	Gr 93 13th	A	A	A

SRD (Instructors)

A	A	NA	NA	Gr 182 13th	A	A	A
		NA		Gr 183 13th	A		
		NA		Gr 185 20th	A		
		NA		Gr 181 13th	A		
		NA		Gr 178 20th	A		
		NA		Gr 98 13th	A		
		NA		Gr 178 20th	A		
		NA		Gr 94 13th	A		
		NA		Gr 93 13th	A		
A	A	NA	NA	Gr 93 13th	A	A	A

14/11/53

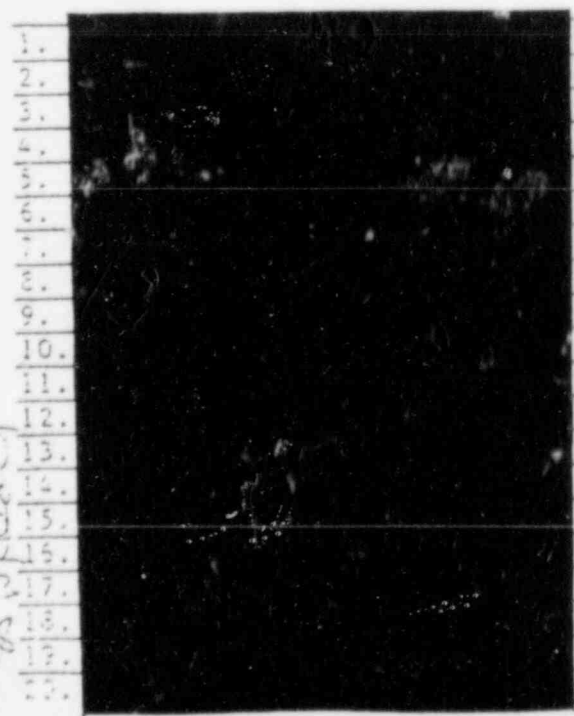
80 (Applications)



1.	NA	A	A	A	A	A	A
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							

81 TRAINING CENTER & FACILITY INSTRUCTIONS AND TEACH SYS. INCREASE REC-000074
 82 ATTENTION FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 83 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 84 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 85 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 86 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 87 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 88 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 89 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 90 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074

820 (Applications)



1.	NA	A	A	A	A	A	A
2.	NA						
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.	NA						
19.	USO						
20.	NA						

91 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 92 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 93 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 94 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 95 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 96 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 97 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 98 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 99 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074
 100 INSTRUCTIONS FOR REVIEW OF A PROPOSAL FROM OF CIVIL WORK 3 MO OF REC-000074

1. C. Burgess 10/17/85

NOTE: (1) Unable to determine due to amount of detail in course outline.
 (2) Amount of detail in description is sufficient to verify. Where entry by auditor shall be 760710/7814, Bick.

7/23

RO (Applications)

1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							

SYS. ORS. TAG. (OPERATIONS) ORS. SYS. 2
 ALL LITRUP ENGINEERS SHALL RECEIVE MATH 3 & 4 AS DETAILED FOR 13.1.1.1
 (C) FOR THE COURSE IN THE COURSE SYSTEMS FOR WHICH
 LISTED OR BY THE COURSE OR OTHERWISE. THIS INCLUDES SO
 STATEMENT FOR COURSE ITEMS, IN CASE 13.1.1.1.3. (See 7/23/83)

1321 COURSE APPROPRIATE TRAINING OF APPLICANT EMPLOYED BY THE USE OF... SEC 812/2015
 1322 IF APPLICANT EMPLOYED TO INVESTIGATION OF THE USE... SEC 812/2015

1323 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 WITH WITH IN WITHIN 30 DAYS

1324 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1325 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1326 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1327 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1328 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1329 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

1330 COURSE SHOULD BE ISSUED TO APPLICANT EMPLOYED... SEC 812/2015
 IDENTIFIED TO START WITHIN 30 DAYS

ERO (Applications)

1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							

071078
72814-8W

16/83
19/83

BB

11/11/83

- Notes: (1) By review of blank exams for Teams the following were addressed.
 (2) Missile Toxicity - Memphis State Univ. lesson plan.
 (3) H.S. College Transcript Memphis State Univ.

13.2.1.1.2 Nuclear Fundamentals Training

RO (Applications)

	A. Mathematics	B. Classical Physics	C. Atomic and Nuclear Physics	D. Reactor Theory	E. Chemistry	F. Heat Transfer, Thermodynamics, and Fluid Flow	G. Plant Materials
1.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
2.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.							
4.	(5)	(3)	(3)	(3)	(2)	(3)	(3)
5.	(3)	(2)	(2)	(2)	(2)	(2)	(2)
6.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
7.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
8.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
9.							
10.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
11.							
12.							
13.							
14.							

SRO (Applications)

1.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
2.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.							
4.							
5.							
6.							
7.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
8.							
9.							
10.							
11.							
12.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
13.							
14.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
15.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
16.	(2)	(2)	(2)	(2)	(2)	(2)	(2)
17.							
18.							
19.							
20.							

14/11/13

NOTES: J.P. review of blank exams for 7 exams the following were addressed.

- (3) unable to verify - Memphis state Univ. lesson plan.
- (7) Low college Transcript Memphis state Univ.

Nuclear Fundamentals Training

RO (7 factors)

	h. Radiation Detection	i. Radiation Protection	j. Basic Electronics and Electricity	k. Instrumentation and Controls
1.	NO	NO	NO	NO
2.	(2)	(2)	(2)	(2)
3.	(2)	(2)	(2)	(2)
4.	NO	NO	NO	NO
5.	(5)	(3)	(3)	(3)
6.	(5)	(2)	(2)	(2)
7.	(2)	(2)	(2)	(2)
8.	(2)	(2)	(2)	(2)
9.	(2)	(2)	(2)	(2)
10.	NO	NO	NO	NO
11.	(2)	(2)	(2)	(2)
12.	NO	NO	NO	NO
13.	CPE US NAVY			
14.	CPE US NAVY			

SRO (7 factors)

1.	CPE US NAVY			
2.	(2)	(2)	(2)	(2)
3.	(2)	(2)	(2)	(2)
4.	CPE US NAVY			
5.	CPE BS PHYSICS			
6.	SEE PAGE 50			
7.	CPE US NAVY			
8.	(2)	(2)	(2)	(2)
9.	CPE US NAVY			
10.	CPE US NAVY			
11.	CPE US NAVY			
12.	(2)	(2)	(2)	(2)
13.	CPE BS ENGR.			
14.	SEE PAGE 50			
15.	(2)	(2)	(2)	(2)
16.	(2)	(2)	(2)	(2)
17.	(2)	(2)	(2)	(2)
18.	CPE US NAVY			
19.	CPE US NAVY			
20.	CPE US NAVY			

J.C. Douglas 11/11/22

GG FSAR Para. 13.2.2.1.3 does not seem to apply. This checklist was completed to 13.2.1.1.5.3.

Note that 13.2.1.1.5.3 does not seem to address what to first do to those who have held an NRC Lic or Qual Nuc. Navy (para. a says what all others must do then next para. says we shall also gain ...).

401.2
(13.2.2)

What facility or facilities will be used for the SWR Observation Training described in Paragraph 13.2.2.1.5? Describe the supervision that the trainees will receive during this phase of training.

RESPONSE

The SWR Observation Course, conducted under the guidance of a General Electric Training Engineer, consists of four weeks of guided observation of an operational SWR. The Brunswick Nuclear Station and/or Millstone Unit 1 will be used for this observation training. The course provides exposure to plant operating and maintenance evolutions, station record keeping, and station procedures.

GG 13.2-6

Amend. 28 3/78

30 (Apprentices)

See attached for notes.

1.	[Redacted]	No ①	No ①	No ①	No	No
2.	[Redacted]	Unk ②④	Yes ①⑤	Unk ③⑥	No	No
3.	[Redacted]	Unk ②	Yes ①	Unk ③	No	No
4.	[Redacted]	No ⑤	No ⑤	No ⑥	No	No
5.	[Redacted]	No ⑥	Yes ④	No ⑥	No	No
6.	[Redacted]	No ⑥	No ⑥	No ⑥	No	No
7.	[Redacted]	Unk ③	Yes ⑤	Unk ③	No	No
8.	[Redacted]	Unk ③	Yes ⑤	Unk ③	No	No
9.	[Redacted]	No ②	No ②	No ④	No	No
10.	[Redacted]	No	No	No	No	No
11.	[Redacted]	No	No	No	No	No
12.	[Redacted]	No	No	No	No	No
13.	[Redacted]	N/A ⑦	N/A ⑦	N/A ⑦	No	Yes ⑧
14.	[Redacted]	N/A	N/A	N/A	Yes ⑧	No

Under GE Training Engr?	4 weeks	Brunswick or Millstone unit 1	Prev. Lic. ?	Navy Nuclear Program Qual ?
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330 (Apprentices)

1.	[Redacted]	N/A	N/A	N/A	As Yes ⑨	N/A
2.	[Redacted]	No ②	No ②	No ②	No	No
3.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
4.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
5.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
6.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
7.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
8.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
9.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
10.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
11.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
12.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
13.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
14.	[Redacted]	No ⑥	Yes ④	No ⑥	No	No
15.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
16.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
17.	[Redacted]	Unk ③	Yes ③	Unk ③	No	No
18.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
19.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩
20.	[Redacted]	N/A	N/A	N/A	No	Yes ⑩

L.C. Douglas 12/1/82

Notes:

- ① Only evidence of BWR observation training outside of MP&L is a 12 day (4/4/83-4/15/83) course at Browns Ferry Nuclear Power Plant under TVA supervision.
- ② Only evidence of BWR observation training outside of MP&L is a 10 day course of at Vermont Yankee. Note that this was only found in the summary section of training record and no backup evidence could be found.
- ③ Letter CRD-78-16 dated 2/7/78 (C.R. Ditz, GE to L. Nail MP&L) indicates that several people attended various 4 week courses - BWR Observation Training - . Could not verify that this was at either of the required plants or that it was under a G.E. Training engineer. Indications are that it was under G.E. supervision.
- ④ Attended Observer training at Browns Ferry 4/4/83-4/15/83
Per letter in file (5/20/83)
- ⑤ No evidence of BWR Observer Training
- ⑥ Application dtd 5/14/82 shows 4 week Observation Training (Vermont Yankee)
- ⑦ Application indicates EOOW/PPWB 9/72-9/82 60 months
- ⑧ Letter CRD-77-123 dated 10/6/77 (C.R. Ditz, GE to L. Nail MP&L) indicates that several people attended a 4 week course - BWR Observation Training - could not verify that this was at either of the required plants or that it was under a G.E. Training Engineer. Indications are that it was under G.E. supervision.

5/14/82
 L. Nail
 MP&L

- ⑨ Letter CRD-78-19 dtd 2/13/78 (CR. Ditz GE to L. Nail MPCL) indicates that several people attended a 4 week course - BWR Observation Training - could not verify that this was at either of the required plants or that it was under a GE Training Engineer. Indications are that it was under GE supervision.
- ⑩ Lic. Application indicates U.S. Navy Apr 1972-Apr 1973
Qual. Reactor Operator:
- ⑪ Application indicates US Navy Oct 1975-May 1980
Qual E OOW.
- ⑫ Application indicates US Navy Nov. 1974 - Feb 1976
Qual E OOW/PPWO 11/76-2/78, EWS-PPWS 12/75-8/74 & 7/75-2/78 and SMAW 11/71-11/74
- ⑬ Application indicates U.S. Navy Nuclear Pwr School 1975-1977 as an instructor
- ⑭ Application indicates U.S. Navy 10/78-11/81 E OOW/PPWO
- ⑮ Taken from resume - indicates completion of Navy Nuc. Pwr school and DIG School
- ⑯ Taken from a 01-9-04-1 Rev. 8 Form - 1/4/81-1/31/81 Vermont Yankee - Observation Training Checkoff Card signed by G.A. Johnson
- ⑰ Application shows Navy 11/59-5/79 and indicates Navy Nuclear Power Program.
- ⑱ Application shows Navy Sept 1978 - 12/79 and indicates Navy Nuclear Power Program.

CR/MPCL
12/15/83
3

- ① Applications indicates US Navy May 1971- May 1980 and indicates Navy Nuclear Power Program
- ② OP-4921 4/27/79 SOP-3483 4/27/81
- ③ Application indicates 6/74-5/79 US Navy also indicates Navy Nuclear Power Program.

Overall Note:

On another checklist, we could not verify NAVY experience on but 3 individuals and could not verify nuclear program on one of those.

S. W. G. / 12/1/81

13.2.5
(13.2.2)

Does the applicant have any alternative plans for simulator refresher training as described in Paragraph 13.2.2.1.6 if the GE BWR-6 simulator is not operational. We believe it to be highly desirable that individuals who will sit for a license examination prior to criticality participate in a short simulator course immediately prior to the examination. In addition, for scheduling purposes, the applicant should understand that license examinations are administered within two months of fuel loading, not 3 or 6 months prior as shown on Figure 13.2-1.

NOTE: PERRY IS A BWR-6 SIMULATOR.

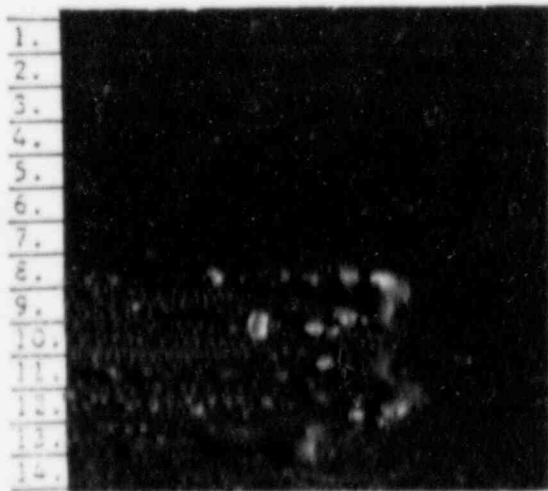
RESPONSE

If the BWR-6 simulator is not available, GDS will use either the Dresden simulator or the Browns Ferry simulator to conduct the simulator refresher training prior to criticality.

Q&A 13.2-7

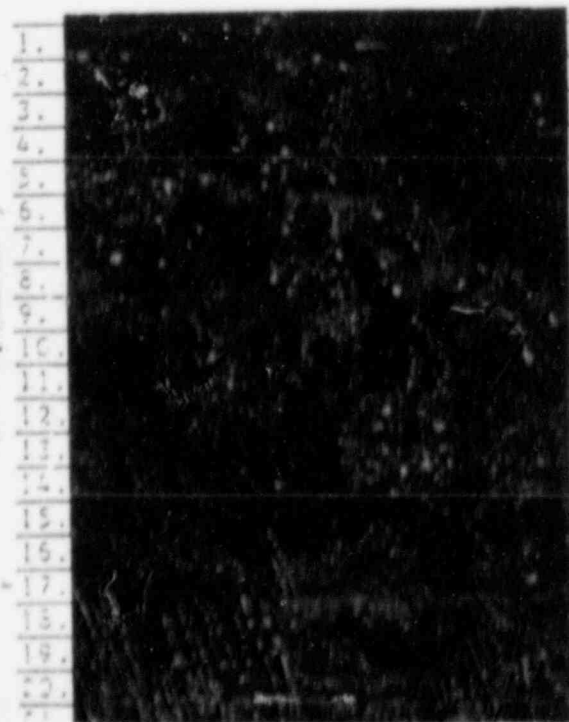
Append. 28 3/79

RO (Applications)



	APPL. MADE Prior To 8/1/81	Simulator Refresher Training	Place	Dates	Length
1.	No	N/A	N/A	N/A	N/A
2.	Yes	Yes	Dresden	4/20-21/81	12 h
3.	Yes	Yes	Dresden	4/20-21/81	12 h
4.	No	N/A	N/A	N/A	N/A
5.	Yes	Yes	Dresden	4/20-21/81	12 h
6.	No	N/A	N/A	N/A	N/A
7.	Yes	Yes	Dresden	4/20-21/81	12 h
8.	Yes	Yes	Dresden	4/20-21/81	12 h
9.	No	N/A	N/A	N/A	N/A
10.	No	N/A	N/A	N/A	N/A
11.	Yes	Yes	Dresden	4/20-21/81	12 h
12.	No	N/A	N/A	N/A	N/A
13.	No	N/A	N/A	N/A	N/A
14.	Yes	Yes	Dresden	4/20-21/81	12 h

SRO (Applications)



1.	Yes	Yes	Dresden	4/20-21/81	12 h
2.	No	N/A	N/A	N/A	N/A
3.	Yes	Yes	Dresden	4/20-21/81	12 h
4.	Yes	Yes	Dresden	4/20-21/81	12 h
5.	No	N/A	N/A	N/A	N/A
6.	Yes	Yes	Dresden	4/20-21/81	12 h
7.	Yes	Yes	Dresden	4/20-21/81	12 h
8.	Yes	Yes	Dresden	4/20-21/81	12 h
9.	Yes	Yes	Dresden	4/20-21/81	12 h
10.	Yes	Yes	Dresden	4/20-21/81	12 h
11.	Yes	Yes	Dresden	4/20-21/81	12 h
12.	Yes	Yes	Dresden	4/20-21/81	12 h
13.	No	N/A	N/A	N/A	N/A
14.	Yes	Yes	Dresden	4/20-21/81	12 h
15.	Yes	Yes	Dresden	4/20-21/81	12 h
16.	Yes	Yes	Dresden	4/20-21/81	12 h
17.	Yes	Yes	Dresden	4/20-21/81	12 h
18.	Yes	Yes	Dresden	4/20-21/81	12 h
19.	Yes	Yes	Dresden	4/20-21/81	12 h
20.	Yes	Yes	Dresden	4/20-21/81	12 h

A. L. ...

REQUIREMENT

Applicants for Senior Reactor Operator (SRO) license shall have 4 years of responsible power plant experience, of which at least 2 years shall be nuclear power plant experience (including 6 months at specific plant) and no more than 2 years shall be academic or related technical training. After fuel loading, applicants shall have 1 year of experience as a licensed operator or equivalent.

Certification that operator license applicants have learned to operate the controls shall be signed by the highest level of corporate management for plant operation.

Applicants must revise training programs to include training in heat transfer, fluid flow, thermodynamics, and plant transients.

RESPONSE

Applicants for a Senior Reactor Operator license at the Grand Gulf Nuclear Station have at least four years of power plant experience. Prior to initial plant criticality, at least one year of this power plant experience shall be nuclear power plant experience. After initial plant criticality, each senior licensed operator candidate shall have at least two

years of nuclear power plant experience. A maximum of two years of power plant experience may be fulfilled by academic or related technical training on a one-for-one time basis.

Prior to initial plant criticality, the applicant shall possess six months of nuclear power plant experience at the Grand Gulf Nuclear Station. This experience may include participation in system acceptance, preoperational testing, and/or writing/verifying plant operating procedures.

After initial plant criticality, the applicant shall possess at least six months of nuclear power plant experience at the Grand Gulf Nuclear Station. The applicant's onsite experience shall include either:

- a. If the applicant does not hold or has not held an NRC Operator License on GONS, the individual shall spend three months on shift carrying out the duties of the Control Room Operator while under the direct supervision of the Licensed Control Room Operator. The applicant shall also spend an additional three months on shift carrying out the duties of the Shift Supervisor while under the direct supervision of the Licensed Shift Supervisor.
- b. If the applicant holds or has held an NRC Operator License on GONS, the individual shall spend three months on shift carrying out the duties of the Shift Supervisor while under the direct supervision of the Licensed Shift Supervisor.

Additionally, after initial plant criticality, senior licensed operator applicants shall have held an NRC Operator License for a period of one year.

RO

Amend. 49 7/81

109

All data taken from latest Application except for some RO, i.e. dates and column 8 & 9
 Criticality 8/18/82
 Page 14 of 18
 SKU (Applications)

- ① Could not verify
- ② Showed 520 hrs acting as SRO under shift Supv/supt - none under LRRO
- ③ Showed 520 hrs acting as SRO.
- ④ Was not RO previously
- ⑤ Showed 520 hrs acting as shift supervisor
- ⑥ Took credit for BS. Biology. The met requirements
- ⑦ Took credit for A.A. Bus. Admin plus 2 yrs S.W. MS. Junior College.
- ⑧ Held RO for 4 1/2 months

Application Date	At least 4 years Power Plant Experience	Prior to 8/18/82 at least 1 yr shall be nuclear P. Plant	Written 8/18/82 at least 1 yr shall be nuclear P. Plant	Max of 2 yrs AD experience can be substituted for P. Plant	Prior to 8/18/82 at least 6 months must be under GONS	After 8/18/82 6 months under GONS	IC 7. Yes	IC 7. No	IC 7. No
10/8/82	Yes	N/A	Yes	N/A	N/A	Yes	N/A	N/A	N/A
9/1/83	Yes	N/A	Yes	N/A	N/A	No	N/A	N/A	N/A
9/1/83	Yes	N/A	Yes	N/A	N/A	Yes	No	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/1/83	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
5/25/83	Yes	N/A	Yes	N/A	N/A	No	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/1/83	Yes	N/A	Yes	N/A	N/A	Yes	Yes	N/A	N/A
9/1/83	Yes	N/A	Yes	N/A	N/A	No	N/A	N/A	N/A
9/3/81	No	Yes	N/A	Yes	Yes	N/A	N/A	N/A	N/A
5/14/82	No	Yes	N/A	Yes	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
9/3/81	Yes	Yes	N/A	N/A	Yes	N/A	N/A	N/A	N/A
10/8/82	Yes	N/A	Yes	N/A	N/A	No	N/A	N/A	N/A

BB

Other Nuclear Training Programs or tasks... satisfy the intent of the program outlined in subsection 1.3. It may be substituted in lieu of portions of the training... for reactor operator and senior reactor operator candidates. Examples of such training programs or experience that would be permissible for substitution instead of portions of the training as described in subsection 1.2.1.1 are: attainment of a baccalaureate or higher degree in the fields of nuclear engineering or nuclear sciences, extensive participation in the design or design review of the station in nuclear-related areas, holding or having held a reactor operator's or senior reactor operator's license at a comparable reactor facility not subject to NRC licensing, or a reactor facility operated by the military services of Department of Energy.

Credit Taken for any Nuclear Experience
 Yes or No or NA
 If Yes is any documentation available?
 If yes, what documentation?
 Is documentation adequate?
 Application transmitted letter # and date

1.	NA				REC-83/0493
2.	NA				REC-83/0493 10/24
3.	NA				REC-83/215 5/2
4.	NA				REC-82/467 10/8
5.	NA				REC-83/0493 10/24
6.	NA				REC-83/0493 10/24
7.	NA				REC-82/467 10/8
8.	NA				REC-82/467 10/8
9.	NA				REC-83/0493 5/25
10.	NA				REC-82/467 10/8
11.	NA				REC-82/467 10/8
12.	NA				REC-83/0493 3/3
13.	Yes	Yes	DDZ14N	No	REC-87/0108 5/8
14.	Yes	No			REC-82/215 5/4
15.	NA				REC-83/0493 10/24
16.	NA				REC-83/0493 10/24
17.	NA				REC-83/0493 10/24
SRO	Yes	Terminated			REC-91/002 9/3
18.	Yes	Yes	DDZ14N	Yes	REC-82/467 10/8
19.	NA				REC-83/0493 10/24
20.	NA				REC-83/0493 10/24
21.	Yes	No			REC-83/0493 10/24
22.	Yes	No			REC-83/0493 10/24
23.	Yes	No			REC-83/0493 10/24
24.	NA				REC-83/0493 10/24
25.	Yes	Yes	DDZ14N	Yes	REC-81/002 9/3
26.	NA				REC-81/002 9/3
27.	Yes	No			REC-81/002 9/3
28.	Yes	No			REC-81/002 9/3
29.	Yes	No			REC-82/467 10/8
30.	NA				REC-83/0493 10/24
31.	NA				REC-81/002 9/3
32.	Yes	No	Terminated		REC-81/002 9/3
33.	NA				REC-81/002 9/3
34.	Yes	No			REC-81/002 9/3
35.	NA				REC-81/002 9/3
36.	Yes	No			REC-81/002 9/3
37.	NA				REC-81/002 9/3
38.	Yes	Terminated			REC-81/002 9/3
39.	Yes	Terminated			REC-81/002 9/3

SLO changes 12/19/83 to W Name

M-3854 and that by SROUS OCUISZ [EMC] No other appl.

Page 2 of 2 ACB
3/19/85

SRO

32.



NA

~~Terminated~~

AECM-82/215 5/14

33.

NA

AECM-82/215 5/14

34.

NA

AECM-81/002 9/3

20



Yes -

Terminated

AECM-81/002 9/3

19.

NA

AECM-82/467 10/3

20

WJH

② 00214N was not located in individual training record.
It was attached to a memo (asn-formal) S. Oswald to D. Hun-

"18.1.6 Revise Scope and Criteria for Licensing Examinations (I.A.3.1) The requalification program at Grand Gulf Nuclear Station require specific reactivity control manipulation in accordance with Enclosure 4 to H. Denton's letter of March 28, 1980. ~~to~~ ^{FCB} 12/14/83"

PAP 01-5-04-2, Rev. 2, Licensed Operator Requalification Training, section 6.5.4 was compared with Enclosure 4 to H. Denton's letter of March 28, 1980. PAP 01-5-04-2, Rev. 2 appears to adequately address Enclosure 4 to H. Denton's letter.

J. C. Burgers
12/14/83

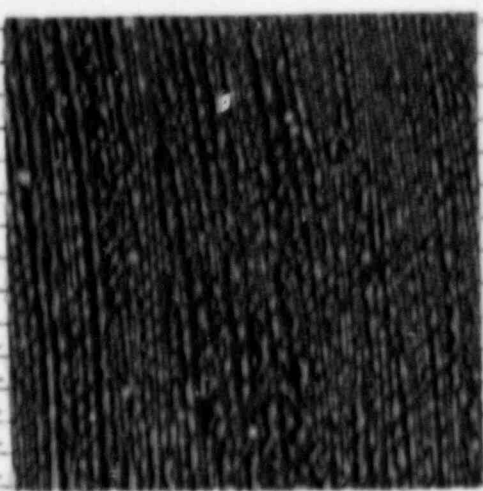
esw/ncw-1

A review of the following license candidates applications
~~was~~ was performed for the listed applicants either during
 this audit or

<u>LETTER NO</u>	<u>DATE</u>	<u>LETTER NO</u>	<u>DATE</u>	
AECM-82/002	9/3/81	AECM-83/0305	5/25/83	MAR-83/1
AECM-82/120	3/30/82	AECM-83/0403	8/10/83	The applicant agreed with the individual try records except as identified in reports dated 11/1/83.
AECM-82/215	5/14/82	AECM-83/0550	9/1/83	
AECM-82/467	10/5/82	AECM-83/0683	10/24/83	
AECM-82/5150	3/3/83	AECM-83/0635	10/24/83	

RO

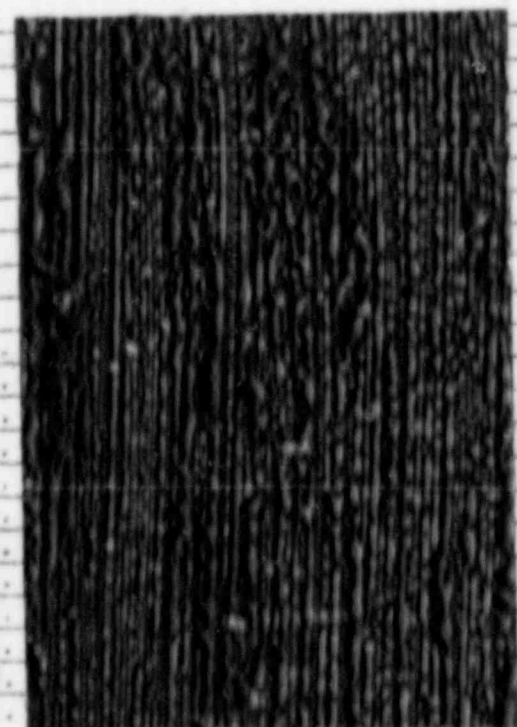
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Special Agent in Charge
 6/10/83 12:00 PM

SFD

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Special Agent in Charge
 12/14/83

	1	2	3	4	5	6
NAME	Application Type	REC'd Letter #	Date	Application Type	REC'd Letter #	Date
[REDACTED] SRO-4506-7356 1/9/83	SRO 2	REC-92/47	10/8/82	SRO 1	REC-92/15	9/14/82
	Same as MAR 83/0133 except Simulator Refresher Training at Tulsa OK is 13 days on 2nd application - This is shown as a note on MAR on 1st application					
[REDACTED]	SRO 1	REC-93/50	9/1/83			9/10/83 application withdrawn
[REDACTED]	SRO ↓	REC-93/50	9/1/83	SRO ↓	REC-81/02	9/1/81
	Note that 91 application should be 1st but 83 does not show as a reapplication. 1983 shift was not part of mar. 1981 back side shifts were compared and do match. 1983 front shift was compared and does match					
[REDACTED] SRO-4220-3169 2/25/82	SRO 1	81/002	9/3/81			
[REDACTED]	SRO 1	83/550	9/1/83			
[REDACTED]	SRO 1	81/002	9/3/81			
	* Basic Req. Fund. (MSU) shows 1 wk on application. That has a strike through with 20 written in and 10 startups annuled in at end of line. Note on MAR copy indicates could not verify more than 1 wk. Change on application has no initials or date					
[REDACTED]	SRO 1	81/002	9/3/81			
[REDACTED]	SRO 1	81/002	9/3/81			
[REDACTED] SRO-4216-3176 2/25/82	SRO 1	81/002	9/3/81			

CA withheld 2/27/83

[Redacted]

SRO / 3 83/0305 5/15/83 SRO / 2 82/215 5/14/82
SRO / 1 81/002 9/3/81

Reverse side of App. 3 is not included in MAR, nor was attached sheet. All other sheets, Apps. 1, 2, & 3 match

[Redacted]
SRO-4217-8178
2/25/82

SRO / 1 81/002 9/3/81

[Redacted]

SRO / 2 83/0550 9/1/83 SRO / 1 81/002 9/3/81

App. #2 does not indicate that it is the second App.
App. #2 does not appear in MAR pkg

[Redacted]

SRO / 1 83/0550 9/1/83

[Redacted]

SRO / 1 81/002 9/3/81

[Redacted]

SRO / 2 82/215 5/14/82 SRO / 1 81/002 9/3/81

App #2 does not appear in MAR pkg. App #2 matches the App shown in MAR pkg except for Retaining statement (10 weeks). App #1 matches that app shown in MAR pkg.

3
14/19/83

[Redacted]

SRO / 1 81/002 9/3/81

[Redacted]

SRO / 1 81/002 9/3/81

[Redacted]
SRO-4211-8187
2/25/82

SRO / 1 81/002 9/3/81

[Redacted]
SRO-4294-8187
5/19/82

SRO / 1 81/002 9/3/81

C-8991-819
8/26/82

B8

1 [REDACTED] SRO/2 82/467 10/8/82 SRO/1 81/002 9/5/81
RO-5975-8190 5/18/82 SRO-4507-8190 1/19/83

2 [REDACTED] SRO/1 83/0550 9/1/83

3 [REDACTED] RO/2 83/0683 10/24/83 RO/2 83/0305 5/25/83
APP # 2 DOES NOT APPEAR IN THE MAR PKG

4 [REDACTED] RO/3 83/0683 10/24/83 RO/2 83/0305 5/25/83
RO/1 82/215 5/14/82

REVERSE SIDE OF APPS 2 & 5 ARE NOT INCLUDED IN THE MAR PKG

5 [REDACTED] RO/1 82/215 5/14/82

6 [REDACTED] RO/1 82/467 10/8/82

7 [REDACTED] RO/2 83/0683 10/24/83 RO/1 82/215 5/14/82
REVERSE SIDE OF APP # 2 NOT INCLUDED

8 [REDACTED] RO/2 83/0683 10/24/83 RO/1 82/0305 5/25/83
REVERSE SIDE OF APP # 1 NOT INCLUDED
APP # 2 NOT INCLUDED AT ALL

9 [REDACTED] RO/1 82/467 10/8/82
RO-441-8171 1/10/83

10 [REDACTED] SRO/1 81/002 9/5/81

11 [REDACTED] RO/3 82/467 10/8/82 RO/2 82/215 5/14/82
RO/1 81/002 9/5/81
RO-4437-8175 1/17/83

MR 1 [REDACTED] RO/1 83/0305 5/25/83

MR 2 [REDACTED] RO/1 82/467 10/8/82

RD-2243-8970
11/9/83

MR 3 [REDACTED] RO/3 82/467 10/9/82 RO/2 82/215 5/14/82

RD-2240-8177
1/19/82

RO/1 81/002 9/1/81

MR 4 [REDACTED] RO/2 83/0150 5/3/83 RO/1 82/467 10/9/82

RD-20017-8971
8/9/83

APP # 2 WAS NOT INCLUDED IN MAR Pkg.

MR 5 [REDACTED] RO/1 83/0305 5/25/83

MR 6 [REDACTED] RO/1 82/215 5/14/82

RD-8075-8192
9/10/82

MR 7 [REDACTED] RO/1 81/002 9/1/81

RD-8075-8192
9/10/82

5/11/83
12/17/83