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SUBJECT: Forwards listed info re requalification program evaluation, per 900417 request.

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600 North Adams • P.O. Box 19002 • Green Bay, WI 54307-9002

June 20, 1990

Mr. Tim Reidinger
United States Nuclear Regulatory Commission
Region III
Operator Licensing Section, Building 4
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Mr. Reidinger:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Requalification Program Evaluation

Reference: 1) Letter to K. H. Evers (WPSC) to G. C. Wright (NRC) dated April 17, 1990

In accordance with the requirements of Reference 1, please find enclosed the following information.

1. 603 Section A open - reference exam questions with associated static simulator settings.

2. 434 Section B open - reference exam questions.

3. Reference material for the open - reference exam questions - Attachment 1.

4. 15 dynamic simulator scenarios.

5. 75 Job Performance Measures (JPMs) with associated questions.

6. List of systems and topics covered during the 1988-89 and 1989-90 requalification period - Attachment 2 and 3.

7. Sampling plan for the 1988-89 and 1989-90 requalification period - Attachment 4.

9006280050 900620
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1/1

8. The following are the designated facility representatives for the requalification exam team:

   Operations Department Representative

   Terence J. Gencius, Shift Supervisor

   Training Department Representative

   Stephen M. Buraczewski - Nuclear Instructor - SRO

   Examination Coordinator

   Ronald F. Zube, Asst. Superintendent - Nuclear Training - Operations

9. List of proposed licensed operators for NRC observed requalification exam - Attachment 5.

If you have any questions or require additional material, please feel free to contact Ronald F. Zube of our Training Department Staff at 414/388-2560.

Sincerely,

K. H. Evers
Manager - Nuclear Power

RFZ/cah

Enc.

cc - Mr. Patrick Castleman, US NRC
US NRC, Region III
US NRC, Document Control Desk

50-305 KEWAUNEE

REQUALIFICATION PROGRAM EVALUATION

REC'D W/LTR DTD 06/20/90...9006280050

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-NOTICE-

Mr. Tim Reidinger
June 20, 1990
Attachment 1, Page 1

Reference Material for Licensed Operator Requalification Exam
Sent to Tim Reidinger on June 20, 1990

1. Administrative Control Directives - 2 Volumes, Off-Site #2
2. Accident and Transient Analysis - 1 Volume, Off-Site #2, Control Copy #85
3. Alarm Response Sheets
   a. Control Room - 2 Volumes, Off-Site #2
   b. Local - 1 Volume, Off-Site #2
4. Dynamic Scenarios, 1 Volume, Off-Site #1
5. Electrical Distribution Cross Reference Manual - 1 Volume, Off-Site #2
6. Emergency Plan - 1 Volume, Off-Site #2
7. Emergency Plan Implementing Procedures (EPIPs) - 1 Volume, Off-Site #2, Control Copy #12
8. Equipment Retrieval List - 1 set of microfiche cards, Off-Site #1
9. Health Physics Procedures - 2 Volumes, Off-Site #2
10. Integrated Plant Emergency Operating Procedures (IPEOPs) - 1 Volume, Off-Site #2
11. Integrated Plant Emergency Operating Procedures Background Document - 4 Volumes, Off-Site #2
12. Job Performance Measures (JPMs) - 2 Volumes, Off-Site #2, Control Copy #11
13. Kewaunee Core Control Theory Manual - 1 Volume, Off-Site #2, Control Copy #34
14. Knowledge and Abilities Catalog - 1 Volume, Off-Site #2, Control Copy #2
15. Miniprints - 1 Volume, Off-Site #4, Control Copy #94
16. Motor Control Center Manual (Front Views) - 1 Volume, Off-Site #2
17. Operator Training Manual - 1 Volume, Off-Site #2
18. Operating Procedures - 5 Volumes, Off-Site #3
19. Operations Department Instruction Book - 1 Volume, Off-Site #2

Reference Material for Licensed Operator Requalification Exam
(Continued)

20. Operations Surveillance Procedures - 1 Volume, Off-Site #4

21. Plant Procedures and Administrative Controls Open Reference Questions (Part B) - 3 Volumes, Off-Site #1

22. Radiation Protection Manual - 1 Volume, Off-Site #2, Control Copy #51

23. Radiochemistry Procedures - 2 Volumes, Off-Site #2

24. Reactor Data Manual - 1 Volume, Off-Site #4

25. Reactor Engineering Procedures - 1 Volume, Off-Site #2

26. Reactor Test Procedures - 1 Volume, Off-Site #2

27. Reactor Operator Simulator Exercise Plans - 1 Volume, Off-Site #2

28. Selected Corrective Maintenance Procedures, Preventative Maintenance Procedures, and Surveillance Procedures - 1 Volume, Off-Site #1

29. Simulator Initial Conditions, Remote Functions, and System Overrides - 1 Volume, Off-Site #2, Control Copy #6

30. Simulator I/O Bible - System Sort & Number Sort - 2 Volumes, Off-Site #2, Control Copy #6

31. Simulator Malfunction Cause and Effects Document - 1 Volume, Off-Site #3, Control Copy #7

32. Simulator Problems, Failure Capabilities, & SRO Training Program - 1 Volume, Off-Site #2

33. Senior Reactor Operator Simulator Exercise Plans - 1 Volume, Off-Site #2

34. Standing Night Orders - 1 Volume, Off-Site #2

35. Static Scenarios - 1 Volume, Off-Site #1

36. Static Simulator Scenario Open Reference Questions (Part A) - 3 Volumes, Off-Site #1

37. System Descriptions - 5 Volumes, Off-Site #3, Control Copy #27

38. Technical Specifications - 1 Volume, Off-Site #2, Control Copy #8

39. Technical Specifications Interpretations - 1 Volume, Off-Site #2

40. Updated Safety Analysis Report (USAR) - 4 Volumes, Off-Site #2

Mr. Tim Reidinger
June 20, 1990
Attachment 2, Page 1

1988-1989 Requalification Classroom Session Reference List

Session/ Hours	Topics	References	Instructor
M-C1 8 hrs.	Conduct of Operations	Class Handouts	Westinghouse
A-C1 4 hrs.*	Full-Length Rod Control System	Sys. Description No. 49 Tech. Specs., Section 3.10 Sys. 49 Oper. & Surveillance Procedures Class Handouts & Lecture Notes	Kwiatkowski
A-C2 4 hrs.*	Excore Nuclear Instrument System	Sys. Description No. 48 Tech. Specs. Sections 3.5,3.8, 3.10 Sys. 48 Oper. & Surveillance Procedures Class Handouts & Lecture Notes	Brown
A-C3 4 hrs.*	Reactor Coolant System	Sys. Description No. 36 Tech. Specs. Sections 3.1, 3.10, 4.3 Sys. 36 Oper. & Surveillance Procedures Dwgs.: XK100-10, E2036 thru E2041 Class Handouts & Lecture Notes	Krogh
A-C4 4 hrs.*	Rod Position Indication/ Rod Insertion Limits	Sys. Descriptions No. 47 & 49 Tech. Specs. 2.0,3.5,3.10&4.1 Systems 35&49 (related) Oper. & Surveillance Procedures Class Handouts & Lecture Notes	Riste
B-C1 4 hrs.*	IPEOP Background	Background Documents and Class Handouts	Shaeffer
B-C2 4 hrs.*	IPEOP Background	Background Documents and Class Handouts	Shaeffer
B-C3 4 hrs.*	IPEOP Background	Background Documents and Class Handouts	Shaeffer
B-C4 4 hrs.*	Reactor Coolant Pump/ Steam Generator	Sys. Description No. 36 Oper. Trng. Manual (II-1.2 & II-1.3) Tech. Specs. 4.2 Sys. 36 (related) Oper. and Surveillance Procedures Class Handouts & Lecture Notes	Taylor/Bennett
C-C1 4 hrs.*	Component Cooling/ Service Water	Sys. Description Nos. 2 & 31 Tech. Specs., Section 3.3 Systems 2 & 31 Oper. and Surveillance Procedures Dwgs.: (2) M202,M547,E1630 thru E1633 (31) XK100-19 & 20, E2045, E2055 Class Handouts & Lecture Notes	Taylor

* Includes approximately ½ hour Simulator Briefing.

1988-1989 Requalification Classroom Session Reference List
(Continued)

Session	Topics	References	Instructor
C-C2 4 hrs.*	DCRs, LERs and Operational Events/EPRI Chemistry Limits	Class Handouts & Lecture Notes	Riste/Flint
C-C3 4 hrs.*	Tech. Specs., ACDs, Refueling	Class Handouts & Lecture Notes	Krogh
C-C4 4 hrs.*	Fire Protection System/ Pump & Motor Bearings	Sys. Description No. 8 Tech. Specs., Sections 3.15, 4.15 Sys. 8 Oper. & Surveillance Procedures Dwgs.: M208,M384,E1619,E1620, E2009 Class Handouts & Lecture Notes	Buraczewski/ Bennett
D-C1 8 hrs.	Job Performance Measures (JPM) Training	JPMs Class Handouts & Lecture Notes	Westinghouse/ Krogh
D-C2 8 hrs.	Main Steam System/ Steam Dump Control/ JPM Training	Sys. Description No. 6 Tech. Spec. Sections 3.1,3.4, 4.7 Sys. 6 & related Oper. and Surveillance Procedures Dwgs.: M203,M206,E1626,E1627, E1629 JPMs Class Handouts & Lecture Notes	Skinner/Krogh
D-C3 8 hrs.	Loss of RHR	Class Handouts & Lecture Notes	Taylor
D-C4 8 hrs.	Main & Auxiliary Feedwater Systems/ Condensate System/ Exam Preparation	Sys. Description No. 3,5A,5B Tech. Specs. Sections 3.4,4.8 Dwgs.: M204,M205,E1602,E1615, E1624,E1625,E2006	Skinner/ Buraczewski

* Includes approximately ½ hour Simulator Briefing.

Mr. Tim Reidinger
June 20, 1990
Attachment 2, Page 3

1988-1989 Requalification Schedule - Simulator

Session	Topics	Hours
1-S1	Simulator Instruction	4
1-S2	Simulator Instruction	4
1-S3	Simulator Instruction	4
1-S4	Simulator Weekly Evaluation	4
1-S5	Simulator Instruction	4
1-S6	Simulator Instruction	4
1-S7	Simulator Instruction	4
1-S8	Simulator Weekly Evaluation	4
1-S9	Simulator Instruction	4
1-S10	Simulator Instruction	4
1-S11	Simulator Instruction	4
1-S12	Simulator Weekly Evaluation	4
3-S1	Exam Preparation	4
3-S2	Exam Preparation	4
4-S1	Simulator Operational Examination	4
5-S1	Static Simulator Examination	4
M-SP1-4	Special Instruction	16

1989 - 1990 (C8Y2) REQUAL CLASSROOM SUBJECTS

A-C1	2 HRS	OPERATIONS PRACTICES / NRC RESIDENTS' TALK
	2 HRS	CVCS
A-C2	2 HRS	RHR
	2 HRS	PRZR PRESSURE AND LEVEL CONTROL
A-C3	2 HRS	CONTAINMENT SYSTEM, CONTAINMENT COOLING, & ICS
	2 HRS	PROCESS & AREA RADIATION MONITORING SYSTEMS
A-C4	2 HRS	CASE STUDIES (CHERNOBYL & REACTIVITY MISMANAGEMENT)
	2 HRS	WRITTEN EXAM QUESTIONS - PRACTICE & CRITIQUE (USE A-C1 THRU A-C3 SUBJECTS FOR QUESTIONS) (EMPHASIZE REFERENCE USAGE)
B-C1	4 HRS	THERMODYNAMICS
B-C2	4 HRS	THERMODYNAMICS
B-C3	2 HRS	THERMODYNAMICS
	2 HRS	CIRCULATING WATER / AIR REMOVAL SYSTEM
B-C4	2 HRS	CASE STUDIES (INADVERTANT RAPID COOLDOWN & DEPRESSURIZATION DURING A SHUTDOWN TEST / LOSS OF MAIN & AUXILIARY FEEDWATER)
	2 HRS	WRITTEN EXAM QUESTIONS - PRACTICE & CRITIQUE (USE B-C1 THRU B-C3 SUBJECTS FOR QUESTIONS) (EMPHASIZE REFERENCE USAGE)
C-C1	2 HRS	MAIN TURBINE & EHC
	2 HRS	DIESEL GENERATOR MECHANICAL
C-C2	2 HRS	DIESEL GENERATOR ELECTRICAL
	2 HRS	AC ELECTRICAL SYSTEMS
C-C3	2 HRS	REACTOR PROTECTION SYSTEM
	2 HRS	ESF ACTUATION SYSTEM
C-C4	2 HRS	CASE STUDIES (LOSS OF POWER TO INTEGRATED CONTROL SYSTEMS LEADING TO OVERCOOLING TRANSIENTS / LOSS OF AC POWER & FEEDWATER LINE WATER HAMMER)
	2 HRS	WRITTEN EXAM QUESTIONS - PRACTICE & CRITIQUE (USE C-C1 THRU C-C3 SUBJECTS FOR QUESTIONS) (EMPHASIZE REFERENCE USAGE)
D-C1	4 HRS	IPEOPS - CLASS
D-C2	4 HRS	IPEOPS - CLASS
D-C3	4 HRS	IPEOPS - CLASS

D-C4 2 HRS CASE STUDY (IPEOP DEVELOPMENT)
2 HRS WRITTEN EXAM QUESTIONS - PRACTICE & CRITIQUE
(USE D-C1 THRU D-C3 SUBJECTS FOR QUESTIONS)
(EMPHASIZE REFERENCE USAGE)

1989 - 1990 (C8Y2) REQUAL SIMULATOR SUBJECTS

IN GENERAL - EMPHASIZE TECH SPECS DEFINITIONS AND SELF-VERIFICATION ON ALL SIMULATOR SESSIONS.

1S1 NOPS/AOPS/EOPS WITH CVCS INSTRUCTION

1S2 NOPS/AOPS/EOPS WITH RHR & PRZR CONTROL SYSTEMS INSTRUCTION

1S3 NOPS/AOPS/EOPS WITH A-C3 SUBJECTS INSTRUCTION

1S4 WEEKLY EVALUATION (USE DYNAMIC EXAM SCENARIOS)

1S5 EPLAN PROFICIENCY ON THE SIMULATOR (EMPHASIZE REPORTABILITIES & NOTIFICATIONS)

1S6 NOPS/AOPS/EOPS WITH INSTRUCTION ON ATA TYPE MATERIAL

1S7 NOPS/AOPS/EOPS WITH CW & AIR REMOVAL SYSTEMS INSTRUCTION

1S8 WEEKLY EVALUATION (USE DYNAMIC EXAM SCENARIOS)

1S9 IPEOPS - SIM

1S10 IPEOPS - SIM

1S11 IPEOPS - SIM

1S12 WEEKLY EVALUATION (USE DYNAMIC EXAM SCENARIOS)

SPEC CREW SELECTIONS

SPEC CREW SELECTIONS

JPMT JPM TRAINING ON THIS CYCLE/YEAR'S (C8Y2) SUBJECTS (EMPHASIZE REFERENCE USAGE)

JPMT JPM TRAINING ON THIS CYCLE/YEAR'S (C8Y2) SUBJECTS (EMPHASIZE REFERENCE USAGE)

3S1 DYNAMIC EXAM PRACTICE

3S2 JPM EXAM PRACTICE

3S3 STATIC EXAM PRACTICE

C8Y2-W.89

4S1	DYNAMIC EXAM
4S2	JPM EXAM
4S3	STATIC EXAM

Mr. Tim Reidinger
June 20, 1990
Attachment 4, Page 1

K/A SAMPLE PLAN

Continuous Rod Withdrawal (000001) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000001	EK1.03	B	4.2	4.3
000001	EK3.02	B	3.4	4.0
000001	EA1.05	B	4.6	4.5
000001	EA2.05	B	4.6	4.5
000001	G11	A	4.0	4.5

Dropped Control Rod (000003) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000003	EK1.21	A	4.0	4.0
000003	EK3.08	B	3.0	3.5
000003	EA1.02	A	3.6	3.5
000003	EA1.07	A	3.8	3.7
000003	EA2.01	B	3.8	4.2
000003	EA2.01	A	3.8	4.2
000003	EA2.03	A	3.6	3.8
000003	G10	A	4.5	4.5

Inoperable/Stuck Control Rod (000005) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000005	EK1.02	A	4.0	4.2
000005	EK3.06	A	3.5	4.5
000005	EA1.01	A	4.4	3.8
000005	EA1.05	A	3.6	4.0
000005	EA2.03	B	4.2	4.7
000005	G8	A	3.5	3.5

Reactor Trip (000007) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000007	EK1.04	A	3.6	3.9
000007	EK1.05	A	3.6	3.8
000007	EK1.06	B	4.2	4.0
000007	EK1.06	A	4.2	4.0
000007	EK3.01	B	4.0	3.7
000007	EK3.01	A	4.0	3.7
000007	EA1.06	B	4.2	4.0
000007	EA2.01	A	4.8	4.2
000007	EA2.04	A	5.0	4.8
000007	EA2.06	A	4.8	4.7
000007	G10	B	4.5	4.5
000007	G12	A	4.0	4.2

Pressurizer Vapor Space (000008) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000008	EK1.02	B	3.0	3.0
000008	EK3.03	A	4.3	3.5
000008	EK3.04	A	3.6	4.3
000008	EK3.05	A	3.0	3.2
000008	EA1.01	A	4.2	4.3
000008	EA2.01	A	4.2	4.8
000008	EA2.19	B	4.0	3.3
000008	EA2.20	A	3.3	3.5
000008	G3	A	3.3	4.2
000008	G12	A	4.3	3.7

Small Break LOCA (000009) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000009	EK1.01	B	4.2	4.2
000009	EK3.11	B	4.0	4.7
000009	EA1.01	A	4.0	4.3
000009	EA1.09	A	3.8	3.7
000009	EA2.02	A	3.6	3.8
000009	EA2.11	A	3.6	3.8
000009	EA2.34	A	3.6	3.5
000009	G2	A	2.5	4.0
000009	G7	A	3.5	3.9
000009	G12	B	3.6	3.8
000009	G12	A	3.6	3.8

Large Break LOCA (000011) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000011	EK3.14	B	3.6	3.5
000011	EK3.14	A	3.6	3.5
000011	EK3.15	A	3.5	3.8
000011	EA1.06	A	3.6	3.7
000011	EA1.09	A	3.6	3.5
000011	EA1.11	B	3.6	3.5
000011	EA1.11	A	3.6	3.5
000011	EA2.10	B	4.4	4.8
000011	EA2.13	A	3.5	3.8
000011	G11	A	4.0	4.2
000011	G12	B	4.8	3.7
000011	G12	A	4.8	3.7

Reactor Coolant Pump Motor Malfunction (000015) BR-0122 Group 1 and Partial Loss of Reactor Coolant Flow (000017) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000015	EK1.01	B	4.2	3.7
000015	EK3.03	B	3.2	3.7
000015	EA2.08	A	3.6	3.7
000015	G11	B	4.3	3.7

Loss of Reactor Coolant Makeup (000022) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000022	EK1.03	B	3.6	3.8
000022	EK3.02	B	3.5	3.5
000022	EA1.01	B	4.2	4.2
000022	EA2.02	B	3.4	3.5

Emergency Boration (000024) GR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000024	EK1.02	B	4.2	3.8
000024	EK3.01	A	4.4	4.2
000024	EK3.02	B	4.6	4.3
000024	EA1.15	A	4.4	4.0
000024	EA2.2	B	4.6	4.3

Loss of Residual Heat Removal (000025) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000025	EK2.02	B	3.2	3.3
000025	EK3.01	B	3.3	3.0
000025	G10	B	3.8	4.0

Loss of Component Cooling (000026) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000026	EK3.02	B	3.4	3.2
000026	EA2.06	B	3.0	3.0
000026	G1	B		
000026	G6	A		

Pressurizer Pressure Control System Malfunction (000027) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000027	EK3.02	A	3.0	3.5
000027	EA1.01	B	4.2	4.2
000027	EA2.15	B	4.0	4.2
000027	EA2.16	A	4.0	4.2
000027	G3	A	3.3	4.0
000027	G11	B	4.0	4.0

Pressurizer Level Malfunction (000028) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000028	EK2.12	B	3.2	4.0
000028	EK3.03	B	3.2	3.7
000028	G3	A	3.3	4.2
000028	G5	A	3.7	3.7
000028	G8	B	3.0	3.8

Anticipated Transient Without Scram (000029) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000029	EK1.11	B	4.5	4.5
000029	EK3.12	B	4.4	4.4
000029	EA2.01	A	4.6	4.5
000029	G3	A	3.8	3.8
000029	G12	B	4.8	3.7

Loss of Source Range Nuclear Instrumentation (000032) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000032	EK3.02	A	3.0	3.0
000032	EA1.01	A	3.4	3.0
000032	EA2.06	B	4.4	4.3
000032	G3	B	3.3	3.3
000032	G3	A	3.3	3.3
000032	G8	A	3.0	3.0
000032	G12	A	3.0	3.0

Loss of Intermediate Range Instrumentation (000033) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000032	EK3.02	B	3.0	3.0
000032	EK3.02	A	3.0	3.0
000032	EA1.02	B	3.2	3.3
000032	EA1.02	A	3.2	3.3
000032	EA2.02	A	3.4	3.5
000032	EA2.11	A	3.0	3.0
000032	G8	A	2.8	3.4

Steam Generator Tube Leak (000037) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000037	EK2.13	B	4.0	4.5
000037	EK3.07	A	3.5	3.7
000037	EA1.04	A	3.6	3.5
000037	EA1.11	A	3.4	3.3
000037	EA1.13	A	3.6	3.7
000037	EA2.09	A	2.8	3.4
000037	EA2.10	A	3.0	3.8
000037	G1	A	3.5	3.8
000037	G2	A	2.5	4.2
000037	G3	B	3.3	4.2
000037	G3	A	3.3	4.2
000037	G8	A	3.5	4.3
000037	G11	A	3.5	4.2
000037	G12	A	3.3	3.3

Steam Generator Tube Rupture (000038) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000038	EK2.17	B	3.5	3.5
000038	EK3.01	B	3.8	4.2
000038	EK3.01	A	3.8	4.2
000038	EK3.06	A	3.5	3.5
000038	EK3.08	A	3.5	3.8
000038	EA1.14	A	4.2	3.7
000038	EA1.16	B	4.2	3.7
000038	EA1.16	A	4.2	3.7
000038	EA1.32	A	4.0	5.0
000038	EA1.44	A	3.0	3.4
000038	EA2.01	B	3.8	4.3
000038	EA2.07	A	4.0	4.8
000038	G11	A	4.0	4.2
000038	G12	B	4.8	3.7

Steam Line Rupture (000040) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000040	EK1.01	B	3.4	3.7
000040	EK1.06	A	3.4	3.2
000040	EK1.07	A	3.4	3.2
000040	EK3.01	A	3.6	4.0
000040	EK3.04	B	3.0	3.0
000040	EK3.04	A	3.0	3.0
000040	EA1.10	A	4.2	3.8
000040	EA1.20	A	3.8	4.0
000040	EA2.01	A	3.4	3.8
000040	EA2.01	B	3.4	3.8
000040	EA2.03	A	3.6	4.3
000040	G5	A	3.8	3.3
000040	G11	A	4.0	4.0
000040	G12	B	4.5	4.0

Loss of Condenser Vacuum (000051) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000051	EK3.01	A	3.2	3.0
000051	EA1.02	A	3.6	3.8
000051	EA1.02	B	3.6	3.8
000051	EA1.03	A	2.9	2.8
000051	EA1.08	A	2.5	3.0
000051	EA1.09	A	3.2	3.2
000051	EA2.01	A	3.0	3.3
000051	EA2.02	B	4.2	4.0
000051	EA2.02	A	4.2	4.0
000051	G5	A	3.3	3.3

Loss of Main Feedwater (000054) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000054	EK1.02	B	3.6	3.5
000054	EK1.02	A	3.6	3.5
000054	EK3.01	A	3.6	4.3
000054	EK3.04	B	3.0	3.2
000054	EK3.04	A	3.0	3.2
000054	EK3.05	A	3.6	4.0
000054	EA1.04	B	4.8	4.5
000054	EA1.04	A	4.8	4.5
000054	EA2.01	A	4.6	4.3
000054	EA2.02	8	4.0	3.8
000054	EA2.03	A	4.0	3.3
000054	EA2.05	A	3.4	3.7
000054	G11	B	3.4	3.3
000054	G12	A	3.2	3.2

Loss of Off-Site and On-Site Power (000055) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000055	EK3.02	B	3.0	3.3
000055	EK3.02	A	3.0	3.3
000055	EA1.06	A	4.2	4.2
000055	EA2.02	B	4.2	4.3
000055	EA2.04	A	3.4	3.0
000055	G2	A	2.5	4.0
000055	G11	A	4.0	4.0
000055	G12	B	4.5	3.7

Loss of Off-Site Power (000056) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000056	EK1.03	A	3.2	3.2
000056	EK3.02	B	3.0	3.3
000056	EA2.03	A	1.8	2.0
000056	EA2.44	A	4.4	4.3
000056	G12	A	4.5	3.7

Loss of Vital AC Electrical Instrument Bus (000057) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000057	EA2.13	A	3.2	3.0
000057	G4	A	2.3	3.0

Loss of Service Water (000062) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000062	EK3.03	A	3.3	3.2
000062	EA1.01	B	3.8	3.2
000062	EA2.01	B	3.4	3.2

High Reactor Coolant Activity (000076) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
000076	EK2.01	B	2.6	3.0
000076	EK3.06	B	3.0	3.0
000076	EA2.03	A	3.4	3.5
000076	EA2.08	A	3.6	3.3
000076	G1	A	3.8	4.0
000076	G11	B	3.0	3.2

K/A SAMPLE PLAN

Control Rod Drive (001) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
001000	K1.04	A	3.2	3.4
001000	K1.05	A	4.2	4.7
001000	K3.02	A	3.2	4.3
001000	K4.01	A	3.5	3.7
001000	K4.07	A	4.2	3.8
001000	K4.09	A	3.0	3.0
001050	K5.02	B	3.4	3.7
001000	K5.05	A	3.2	3.3
001000	K5.06	A	4.4	4.7
001000	K5.09	A	4.0	4.5
001000	K5.17	A	4.2	4.2
001010	K5.42	A	3.4	3.4
001000	K6.03	A	3.6	3.5
001000	A1.01	B	3.8	4.2
001000	A1.01	A	3.8	4.2
001050	A2.01	B	3.8	3.7
001050	A2.01	A	3.8	3.7
001000	A2.03	B	3.8	4.3
001050	A2.06	A	4.4	4.3
001010	A2.07	A	3.6	4.3
001000	A3.02	A	4.4	4.0
001000	A3.03	A	4.2	4.2
001000	A4.02	A	4.4	4.8
001000	A4.03	A	4.4	4.3
001010	A4.03	A	3.5	4.3
001050	G5	B	4.2	4.3
001050	G11	A	3.4	4.3

Reactor Coolant System (002) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
002020	K1.01	A		
002000	K1.09	B	4.2	4.3
002000	K1.11	A	3.4	3.4
002020	K3.01	B	4.2	4.5
002020	K4.01	A	3.4	3.5
002000	K4.10	A	3.8	4.2
002020	K5.02	A	3.1	3.1
002020	K5.09	A	3.6	3.7
002020	K5.11	B	4.0	4.2
002000	A1.03	A	3.6	4.3
002000	A1.04	A	4.0	4.5
002000	A2.03	B	4.2	4.8
002020	A3.01	A	4.2	4.3
002020	G8	A	3.5	3.5
002020	G13	B	4.0	3.7
002020	G13	A	4.0	3.7

Reactor Coolant Pump (003) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
003000	K1.03	B	3.2	3.3
003000	K1.12	A	3.2	3.5
003000	K2.01	A	3.4	3.3
003000	K3.04	B	4.6	4.2
003000	K3.04	A	4.6	4.2
003000	K3.07	A	4.0	4.3
003000	K4.04	B	3.0	3.2
003000	K6.14	B	3.7	3.0
003000	A1.07	B	3.6	3.7
003000	A1.09	A	3.0	3.0
003000	A2.01	A	3.4	3.4
003000	A2.02	A	3.6	3.6
003000	A3.06	A	2.6	2.7
003000	A4.04	A	3.6	3.0
003000	G5	B	3.2	3.3
003000	G12	A	4.3	3.7
003000	G15	A	3.5	4.2

Chemical and Volume Control (004) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
004000	K1.01	A	4.2	4.3
004000	K1.04	A	3.4	3.4
004000	K1.18	A	3.2	3.2
004000	K1.30	B	3.6	3.2
004000	K3.04	B	4.2	3.7
004010	K4.01	A	2.5	3.0
004020	K4.02	A	3.2	3.3
004020	K4.03	A	3.2	3.3
004010	K4.03	A	3.1	3.8
004000	K4.07	B	3.3	3.3
004000	K5.02	B	4.0	3.7
004000	K5.27	A	3.0	3.0
004000	K6.09	B	5.0	4.8
004020	K6.12	A	2.9	3.0
004010	A2.02	A	3.0	3.8
004000	A2.07	A	3.6	3.7
004020	A2.08	B	4.0	4.2
004020	A2.10	A	2.0	1.8
004000	A3.02	A	3.6	3.5
004010	A3.05	B	3.3	3.3
004020	A3.05	A	3.0	3.0
004020	A4.01	A	3.8	3.8
004000	A4.04	B	3.2	3.2
004020	A4.04	A	3.3	3.3
004020	A4.12	A	3.0	3.0
004020	G8	A	3.8	3.8
004020	G13	B	4.2	4.3

Residual Heat Removal (005) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
005000	K1.09	B	3.8	4.3
005000	K3.01	B	4.2	4.5
005000	K4.01	B	4.0	3.7
005000	K5.03	B	3.8	3.0

Safety Injection (006) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
006000	K1.03	B	4.2	4.8
006000	K3.02	B	4.0	4.7
006000	K4.05	B	4.0	4.0
006000	K4.05	A	4.0	4.0
006000	K5.06	A	3.5	3.9
006000	K6.02	B	3.2	4.7
006000	K6.02	A	3.2	4.7
006050	K6.02	A	3.8	4.2
006000	A3.02	A	4.1	4.1
006000	A4.02	A	3.6	4.2
006030	A4.03	A	4.4	4.2
006020	A4.04	A	4.0	4.2
006050	G1	B	4.1	4.3
006050	G11	A	3.5	3.7
006050	G5	A	4.0	4.3
006050	G7	A	3.8	3.8

Pressurizer Relief Tank (007) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
007000	K1.03	B	3.2	3.7
007000	K4.01	B	3.0	3.0
007000	A2.02	A	3.0	3.0
007000	A4.10	B	3.6	3.8
007000	A4.10	A	3.6	3.8
007000	G7	B	3.5	3.5

Component Cooling (008) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
008000	K1.01	B	3.8	3.2
008000	K4.01	A	3.4	3.2
008000	A1.04	B	3.2	3.2
008000	A2.01	B	3.6	3.3
008000	A2.01	A	3.6	3.3
008030	A3.04	B	3.4	3.3
008000	A4.01	A	3.4	3.3

Pressurizer Pressure Control (010) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
010000	K1.01	A	4.0	4.7
010000	K1.02	B	4.0	4.8
010000	K1.08	A	3.0	3.0
010000	K3.01	B	3.8	4.5
010000	K4.01	B	3.0	3.2
010000	K4.02	A	3.0	3.3
010000	K5.03	B	3.0	4.0
010000	K6.03	B	3.2	3.6
010000	A1.09	A	3.0	3.2
010000	A2.02	A	4.2	4.5
010000	A2.03	A	4.4	4.7
010000	A3.02	A	3.8	4.2
010000	A4.01	A	4.0	4.3
010000	A4.02	A	3.8	4.2
010000	A4.03	A	4.0	4.3
010000	G5	B	3.3	4.3
010000	G8	A	3.5	3.5

Pressurizer Level Control (011) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
011000	K1.01	B	4.0	3.8
011000	K1.02	A	3.8	4.2
011000	K1.05	A	3.0	3.0
011000	K2.02	B	3.2	3.2
011000	K3.02	B	3.6	4.0
011000	K4.02	B	3.4	3.4
011000	K4.06	A	3.2	3.5
011000	K5.13	B	3.0	3.0
011000	K6.03	B	3.0	3.0
011000	A2.03	A	4.0	4.3
011000	A2.11	A	3.5	3.5

Reactor Protection System (012) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
011000	K1.08	A	3.0	3.0
011000	K4.01	A	3.0	3.0
011000	K4.02	A	3.6	3.2
011000	K5.02	A	3.2	3.7
011000	K6.07	A	3.0	3.0
011000	K6.10	A	3.0	3.0
012000	A2.06	B	4.8	4.7
012000	A2.06	A	4.8	4.7
012000	A4.02	A	3.4	3.0
012000	G5	A	3.3	3.8
012000	G8	A	3.5	3.3
012000	G11	A	3.0	3.8

ESD Actuation (013) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
012000	K1.01	A	4.2	4.0
012000	K1.05	A	3.7	3.7
012000	K1.11	A	3.5	3.5
013000	K1.15	B	3.4	3.4
013000	K2.01	B	3.6	3.8
013000	K4.01	A	3.8	4.5
013000	K4.03	A	3.6	4.0
013000	K4.13	B	3.7	3.9
013000	A3.02	A	3.8	4.2
013000	A4.03	A	4.4	4.7
013000	G5	A	3.8	4.2
013000	G11	A	3.5	4.0
013000	G12	A	4.3	3.7

Nuclear Instrumentation (015) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
015000	K1.01	A		
015000	K2.01	B	3.3	3.0
015000	K3.01	B	4.2	4.0
015000	K3.01	A	4.2	4.0
015000	K4.05	B	4.6	4.0
015000	K4.06	A	3.4	3.0
015000	K4.07	A	3.4	3.2
015020	K5.03	A	3.0	3.5
015000	K5.05	B	4.0	4.5
015020	K5.13	B	3.2	3.3
015000	A1.04	B	3.2	3.7
015000	A1.04	A	3.2	3.7
015000	A2.01	A	3.2	3.0
015020	A2.01	A	3.0	3.5
015020	G5	B	3.5	3.7
015020	G5	A	3.5	3.7
015020	G6	A	2.3	3.0
015020	G10	A	3.0	3.0

Rod Position Indication (014) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
014000	K1.01	B	3.0	4.3
014000	K3.02	B	3.0	3.0
014000	K4.06	B	3.8	4.0
014000	A1.02	A	3.0	3.5
014000	A1.02	B	3.0	3.5
014000	A2.02	A	3.0	3.8
014000	A2.05	B	3.8	4.7
014000	G1	B	3.0	3.3

Internal Containment Spray (026) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
026000	K1.01	B	3.8	4.0
026000	K2.01	B	3.4	3.7
026000	K4.01	B	3.6	3.7
026000	K4.01	A	3.6	3.7
026000	K4.02	A	3.0	3.0
026000	A1.01	A	3.6	4.5
026000	A3.01	A	4.2	3.7
026000	A4.01	A	4.4	4.0
026000	G13	B	4.0	3.3
026020	G15	A	3.3	4.0

Steam Generator (035) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
035010	K1.01	B	4.0	4.2
035010	K1.02	A	4.0	4.2
035010	K1.11	A	3.0	3.0
035010	K3.01	B	4.4	4.5
035010	K3.01	A	4.4	4.5
035010	K4.01	A	3.4	3.8
035010	K5.01	B	3.6	3.5
035010	K5.03	A	3.0	3.3
035010	K6.01	A	3.0	3.2
035010	K6.02	B	3.0	3.3
035010	K6.02	A	3.0	3.3
035010	A1.02	A	3.2	3.5
035010	A2.01	B	4.2	4.2
035010	A2.01	A	4.2	4.2
035010	A3.01	B	4.0	4.0
035010	A4.01	A	4.0	3.3
035010	G7	A	3.8	3.8
035010	G8	A	3.5	3.7
035010	G12	A	4.3	3.5
035010	G13	A	4.5	3.7
035010	G15	A	3.8	4.0

Main and Reheat Steam (039) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
039000	K1.02	B	3.4	3.7
039000	K3.05	B	3.4	3.8
039000	K4.05	A	3.6	3.7
039000	K5.08	B	3.0	3.0
039000	A1.06	B	3.6	3.8
039000	A2.05	B	4.4	3.7
039000	A4.01	B	4.0	3.8
039000	G15	B	3.5	3.8

Steam Dump (041) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
041020	K1.05	B	4.0	3.7
041020	K1.05	A	4.0	3.7
041020	K1.06	A	3.8	3.3
041020	K3.02	B	4.2	3.7
041020	K4.17	B	4.0	3.5
041020	K4.17	A	4.0	3.5
041020	K5.09	B	3.2	3.7
041020	A2.02	B	3.6	4.0
041020	A3.02	A	4.0	3.8
041020	A4.03	A	3.2	3.3
041020	A4.08	A	3.6	3.5

Main Turbine Generator (045) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
045000	K4.12	A	4.0	3.3
045050	G13	A	4.0	3.0

Main Feedwater (059) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
059000	K1.01	B	3.6	3.7
059000	K3.02	B	4.0	3.7
059000	K4.02	B	4.2	3.5
059000	K4.19	A	3.0	3.5
059000	A2.07	A	4.0	3.8
059000	A2.11	A	3.8	3.8
059000	A2.12	B	4.0	3.8
059000	A3.02	A	3.4	3.3
059000	A4.08	B	2.9	2.9
059000	A4.13	A	3.4	3.3
059000	G8	A	3.5	3.2
059000	G11	A	2.8	3.2
059000	G13	A	3.8	3.3
059000	G15	A	3.5	3.8

Condensate (056) BR-0122 Group 1

K/A Section	K/A Number	Type	RO	SRO
056000	K1.13	B	3.2	3.2
056000	K4.03	A	3.4	3.3
056020	A1.05	A	2.9	2.9
056000	A2.06	A	2.8	2.8
056000	A2.07	B	3.6	3.3
056020	A2.05	A	2.9	2.9
056020	A3.06	A	2.9	2.9
056020	G7	A	2.8	2.8

Auxiliary/Emergency Feedwater (061) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
061000	K1.01	B	4.2	4.2
061000	K3.01	B	3.8	4.5
061000	K5.01	B	3.4	3.5
061000	A1.01	A	3.6	4.0
061000	A2.03	B	3.8	4.5
061000	A2.04	A	3.6	3.5
061000	A2.08	A	2.7	2.9
061000	A3.01	A	4.0	3.7
061000	A3.02	A	3.8	3.2
061000	A4.01	B	4.6	4.2
061000	A4.04	A	3.4	3.5
061000	G11	B	3.0	3.5
061000	G12	A	4.0	3.3

AC Electrical Distribution System (062) BR-0122 Group 2

K/A Section	K/A Number	Type	RO	SRO
061000	K1.02	A	3.8	4.2
061000	K1.04	A	3.4	4.0
061000	K2.01	A	3.0	3.7
061000	K4.01	A	3.4	3.0
062000	A4.01	A	3.6	3.2
062000	G5	A	3.3	3.5
062000	G8	A	3.5	3.2
062000	G10	A	3.0	3.2

Emergency Diesel Generator (064) BR-0122 Group 2

K/A Section	K/A Number	Type	RO	SRO
064000	K1.01	B	4.0	4.2
064000	K1.01	A	4.0	4.2
064000	K3.02	B	3.8	3.8
064000	K4.02	B	3.4	3.0
064000	K5.04	B	3.0	3.3
064000	K6.08	B	3.0	3.0
064000	A3.01	A	3.2	3.3
064000	A3.06	A	3.3	3.3
064000	A4.01	B	4.2	3.3
064050	G5	B	3.8	4.0
064050	G6	B	2.3	3.0

Area Radiation Monitoring (072) BR-0122 Group 1

K/A Section	K/A Number	Type	RO	SRO
072000	G2	A	4.0	3.8
072000	G4	A	3.8	3.5
072000	G13	A	3.5	3.2

Process Radiation Monitoring System (073) Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
072000	K1.01	A	3.2	3.2
072000	A2.04	A	3.0	3.0
073000	G15	B	3.5	3.8
073000	G5	A	3.0	3.3
073000	G8	A	3.8	3.0

Circulating Water System (075) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
075000	K3.02	B	2.9	2.9
075000	A2.02	A	3.2	3.0
075000	A4.02	A	3.2	3.0

Service Water (076) BR-0122 Group 3

K/A Section	K/A Number	Type	Rating RO	Rating SRO
076000	K1.05	B	4.2	4.0
076000	G11	A	3.0	3.5

Fire Protection (086) BR-0122 Group 2

K/A Section	K/A Number	Type	Rating RO	Rating SRO
086000	K4.06	B	3.4	3.0
086000	A1.05	B	3.0	3.0
086000	A2.04	B	3.4	3.3
086000	A3.01	B	3.2	3.0
086000	A4.01	B	3.6	3.0
086000	A4.03	A	3.8	3.0
086000	G8	A	4.0	3.3

Containment System (103) BR-0122 Group 1

K/A Section	K/A Number	Type	Rating RO	Rating SRO
103000	K3.03	B	3.4	3.0
103000	K5.02	A	3.8	3.3

GENERAL SUBJECT SAMPLE PLAN

Lecture Series

BR-0122 Grouping	System	Lesson Plan	Cycle Year	Contact Time (Emphasis)
II	Emergency Diesel Generator	C-C1	C8/Y2	2
		C-C2	CB/Y2	2
I	Chemical and Volume Control	A-C1	C8/Y2	2
I	Control Rod Drive	A-C1	C8/Y1	3.5
II	Reactor Coolant	A-C3	C8/Y1	3
I	ESF Actuation	C-C3	C8/Y2	2
I	Nuclear Instrumentation	A-C2	C8/Y1	3.5
III	Residual Heat Removal	D-C3	C8/Y1	8
		A-C2	C8/Y2	2
I	Reactor Coolant Pump	B-C4	C8/Y1	3
II	Pressurizer Level Control	A-C2	C8/Y2	1
I	Main Feedwater	D-C4	C8/Y1	1.5
III	Steam Dump	D-C2	C8/Y1	2
III	Component Cooling	C-C1	C8/Y1	2
II	Main and Reheat Steam	D-C2	C8/Y1	2
II	Steam Generator	B-C4	C8/Y1	1
		D-C1	C7/Y2	3
III	Service Water	C-C1	C8/Y1	2
I	Condensate	D-C4	C8/Y1	1.5
I	Auxiliary Feedwater	D-C4	C8/Y1	1.5
II	Pressurizer Pressure Control	A-C2	C8/Y2	1
II	Rod Position Indication (RIL)	A-C4	C8/Y1	3.5
II	Internal Containment Spray	A-C3	C8/Y2	1
II	Fire Protection	C-C4	C8/Y1	2
III	Pressurizer Relief Tank	A-C3	C8/Y1	1
I	Containment System/Containment Cooling	A-C3	C8/Y2	1
	Components	C-C4	C8/Y1	2
	Thermodynamics	B-C1	C8/Y2	4
		B-C2	C8/Y2	4
		B-C3	C8/Y2	2
I	Area Radiation Monitoring	A-C3	C8/Y2	1
II	Process Radiation Monitoring	A-C3	C8/Y2	1
II	Circulatiing Water	B-C3	C8/Y2	1
II	Air Removal	B-C3	C8/Y2	1
III	Main Turbine/EHC	C-C1	C8/Y2	2
II	AC Electrical	C-C2	C8/Y2	2
II	Reactor Protection	C-C3	C8/Y2	2

GENERAL SUBJECT SAMPLE PLAN

Special Lecture Series

BR-0122 Grouping	Lecture Series	Lesson Plan	Cycle Year	Contact Time (Emphasis)
	Case Study (Chernobyl and Reactivity Mismanagement)	A-C4	C8/Y2	2
	Case Study (Inadvertent Rapid Cooldown and Depressurization During a Shutdown Test/Loss of Main and Auxiliary Feedwater)	B-C4	C8/Y2	2
	Case Study (Loss of Power to Integrated Control Systems Leading to Overcooling Transient/Loss of AC Power and Feedwater Line Water Hammer)	C-C4	C8/Y2	2
	IPEOPs	D-C1	C8/Y2	4
		D-C2	C8/Y2	4
		D-C3	C8/Y2	4
	Case Study (IPEOP Development)	D-C4	C8/Y2	2

GENERAL SUBJECT SAMPLE PLAN

Simulator

BR-0122 Grouping	Emergency Plant Evolutions	Simulator Exercise Plan	Cycle Year	Contact Time (Emphasis)
I	Continuous Rod Withdrawal	2.1.2	C8/Y1	5
I	Dropped Control Rod	2.1.1	C8/Y1	5
I	Inoperable/Stuck Control Rod	2.1.3	C8/Y1	5
		2.1.11	C8/Y1	4
		2.1.1	C8/Y2	4
		3.1.6	C8/Y2	4
II	Reactor Trip	2.1.1	C8/Y1	5
		2.1.2	C8/Y1	5
		2.1.5	C8/Y1	4
		2.1.6	C8/Y1	4
		2.1.8	C8/Y1	4
		2.1.1	C8/Y2	4
II	Pressurizer Vapor Space Accident	2.1.3	C8/Y1	4
		2.1.2	C8/Y2	4
II	Small Break LOCA	2.1.2	C8/Y1	5
		2.1.3	C8/Y1	5
		2.1.6	C8/Y1	4
		2.1.11	C8/Y2	4
I	Large Break LOCA	2.1.7	C8/Y1	4
		2.1.7	C8/Y2	4
		2.1.11	C8/Y2	4
II	Loss of Reactor Coolant Makeup	2.1.3	C8/Y1	5
		2.1.5	C8/Y1	4
		2.1.4	C8/Y1	5
I	Emergency Boration	2.1.11	C8/Y1	4
		2.1.1	C8/Y2	4
II	Loss of RHR	2.1.9	C8/Y1	4
		2.1.2	C8/Y2	4
I	Loss of Component Cooling	2.1.1	C8/Y2	4
II	Pressurizer Pressure Control System Malfunction	2.1.3	C8/Y1	5
		2.1.7	C8/Y1	4
		2.1.2	C8/Y2	4
		2.1.3	C8/Y2	4

GENERAL SUBJECT SAMPLE PLAN

Simulator

BR-0122 Grouping	Emergency Plant Evolutions	Simulator Exercise Plan	Cycle Year	Contact Time (Emphasis)
III	Pressurizer Level Malfunction	2.1.7	C8/Y1	4
		2.1.2	C8/Y2	4
I	Anticipated Transient Without Scram	2.1.11	C8/Y1	4
		2.1.5	C8/Y2	4
II	Loss of Source Range Nuclear Instrumentation	2.1.1	C8/Y1	5
II	Loss of Intermediate-Range Nuclear Nuclear Instrumentation	2.1.2	C8/Y1	5
		2.1.7	C8/Y1	4
		2.1.5	C8/Y2	4
II	Loss of Power Range Instrumentation	2.1.2	C8/Y1	5
		2.1.3	C8/Y1	5
		2.1.4	C8/Y1	4
		2.1.7	C8/Y2	4
II	Steam Generator Tube Leak	2.1.8	C8/Y1	4
		2.1.1	C8/Y1	5
		2.1.3	C8/Y2	4
		2.1.10	C8/Y2	4
II	Steam Generator Tube Rupture	2.1.4	C8/Y1	4
		2.1.1	C8/Y1	5
		2.1.8	C8/Y1	4
		2.1.3	C8/Y2	4
		2.1.9	C8/Y2	4
		2.1.10	C8/Y2	4
I	Steam Line Rupture	2.1.4	C8/Y1	4
		2.1.6	C8/Y1	4
		2.1.5	C8/Y2	4
		2.1.10	C8/Y2	4
I	Loss of Condenser Vacuum	2.1.3	C8/Y2	4
II	Loss of Main Feedwater or Feedwater System Failure	2.1.11	C8/Y1	4
		2.1.7	C8/Y2	4
II	Loss of Off-Site and On-Site Power	2.1.5	C8/Y2	4
		2.1.9	C8/Y2	4
II	Loss of Off-Site Power	2.1.9	C8/Y1	4
		2.1.5	C8/Y2	4
		2.1.6	C8/Y2	4
		2.1.11	C8/Y2	4
II	Loss of Service Water	2.1.8	C8/Y1	4
		2.1.7	C8/Y2	4

GENERAL SUBJECT SAMPLE PLAN

Simulator

BR-0122 Grouping	Emergency Plant Evolutions	Exercise Plan	Cycle Year	Contact Time (Emphasis)
I	Plant Fire On-Site	C.C.4	C8/Y1	2
I	Reactor Coolant Pump Motor Malfunction	2.1.1	C8/Y1	5
I	Partial Loss of Reactor Coolant Flow	2.1.1	C8/Y1	5
I	Loss of Vital AC Electrical Instrument Bus	2.1.7	C8/Y2	4
I	High Reactor Coolant Activity	2.1.3	C8/Y2	4
	Inadvertent Criticality	2.1.1	C8/Y2	4
I	Loss of Component Cooling to an Individual Component	2.1.5	C8/Y2	4
II	CVCS charging line leak	2.1.1	C8/Y2	4
	Continuous Rod Insertion	2.1.1	C8/Y2	4
	Malfunction of Reactor Coolant Pressure/Volume Control Systems	2.1.2	C8/Y2	4
II	Rad Monitor Failure	2.1.3	C8/Y2	4
	Inadvertent ICS Actuation	2.1.3	C8/Y2	4
	Inability to Drive Control Rods	2.1.5	C8/Y2	4
	RCS Leaks	2.1.6	C8/Y2	4
	Natural Circulation Cooldown			
II	Loss of Emergency Coolant Recirculation	2.1.7	C8/Y2	4
		2.1.11	C8/Y2	4
III	Loss of Instrument Air	2.1.9	C8/Y2	4
	Loss of Aux. Feedwater	2.1.11	C8/Y2	4

GENERAL SUBJECT SAMPLE PLAN

On The Job

BR-0122 Grouping	JPM Number	JPM Title	Rating
I	O-LRQ-JPM-1	Perform an Emergency Boration	4.7
II	O-LRQ-JPM-3	Perform Actions Necessary for a Loss of Source Range Instrumentation	3.6
I	O-LRQ-JPM-4	Verify Control Rod Misalignment	4.0
II	O-LRQ-JPM-6	Locally Operate The S/G PORV	3.6
II	O-LRQ-JPM-7	Energize DC Distribution System	3.6
II	O-LRQ-JPM-9	Perform Actions Necessary for a Loss of Intermediate Range Instrumentation	3.6
II	O-LRQ-JPM-10	Cross-Connect DC Buses	3.2
II	O-LRQ-JPM-11	Perform Actions To Stop A Continuous Rod Insertion	4.6
I	O-LRQ-JPM-12	Respond to High Reactor Coolant Activity	4.2
I	O-LRQ-JPM-13	Reset TDAFW Pump Trip and Throttle Valve	4.2
III	O-LRQ-JPM-14	Isolate SW From IA Air Compressor	3.4
III	O-LRQ-JPM-15	Perform SW Pump Test	3.0
I	O-LRQ-JPM-16	Operate The Emergency Borate Valve (Locally)	4.6
I	O-LRQ-JPM-18	Shutdown the Control Rod Drive MG Set	3.1
I	O-LRQ-JPM-19	Startup the Control Rod Drive MG Set	3.4
II	O-LRQ-JPM-23	Confirm ESF Actuation	4.4
I	O-LRQ-JPM-25	Verify Rod Position Indication	3.3
I	O-LRQ-JPM-29	Perform AFW Pump And Valve Test	3.4
II	O-LRQ-JPM-30	Shift Station/Instrument Air Compressors	3.1
I	O-LRQ-JPM-31	Start a Reactor Coolant Pump	3.4
II	O-LRQ-JPM-32	Fill the ICS Caustic Additive Standpipe	3.1
I	O-LRQ-JPM-34	Perform a Dropped Rod Recovery	3.6

GENERAL SUBJECT SAMPLE PLAN

On The Job

BR-0122 Grouping	JPM Number	JPM Title	Rating
II	O-LRQ-JPM-35	Adjust Accumulator Level	3.5
II	O-LRQ-JPM-36	Adjust Accumulator Pressure	3.2
II	O-LRQ-JPM-38	Locally Shut the MSIV	3.6
III	O-LRQ-JPM-39	Trip the Turbine Locally	4.5
II	O-LRQ-JPM-40	Operate the Reactor Trip Breakers (Open & Close)	3.2
I	O-LRQ-JPM-42	Perform Boron Concentration Dilution of the RCS	3.3
I	O-LRQ-JPM-43	Perform Boration of the RCS	3.5
II	O-LRQ-JPM-44	Transfer from Manual to Automatic Pressure Control	3.1
I	O-LRQ-JPM-45	Perform Boron Concentration Change Calculations	3.1
III	O-LRQ-JPM-46	Manually Isolate the Steam Dump Valves	4.5
III	O-LRQ-JPM-47	Shift to/from Various Modes of Steam Dump Control	3.7
III	O-LRQ-JPM-48	Perform Generator Startup and Synchronize Turbine Generator with Grid	3.1
II	O-LRQ-JPM-49	Place the Charging Pump Controller in Manual to Remove Reset	3.0
III	O-LRQ-JPM-50	Perform Generator Shutdown	3.0
I	O-LRQ-JPM-51	Feed S/G's with AFW System	4.1
II	O-LRQ-JPM-52	Shutdown the Diesel Generator	3.5
II	O-LRQ-JPM-54	Load the Diesel Generator	3.9
II	O-LRQ-JPM-55	Operate PRZR Level Control in Manual	3.5
II	O-LRQ-JPM-56	Control PRZR Pressure in Individual Manual Mode (Using Heaters or Spray Manually)	3.7
II	O-LRQ-JPM-58	Start and Load the Diesel Generator	4.1

GENERAL SUBJECT SAMPLE PLAN

On The Job

BR-0122 Grouping	JPM Number	JPM Title	Rating
II	O-LRQ-JPM-59	Record the Conditioning Module Voltage to Verify Rod Position	3.0
II	O-LRQ-JPM-60	Secure SI System	3.6
I	O-LRQ-JPM-61	Transfer Feed Control Between the Main and Bypass FRV's	4.1
I	O-LRQ-JPM-62	Operate An AFW Pump From The DSP To the 1A S/G	4.0
I	O-LRQ-JPM-65	Perform a Manual QPTR Calculation	3.4
I	O-LRQ-JPM-66	Perform ECP Calculations	3.6
II	O-LRQ-JPM-67	Operate MD-400-1: Secondary Analytical Panel Divert Valve	3.1
III	O-LRQ-JPM-68	Synchronize Turbine Generator with Grid	3.3
I	O-LRQ-JPM-69	Perform a QPTR Calculation (Plant Computer)	3.5
III	O-LRQ-JPM-71	Operate the Steam Dump Control System in the Pressure Mode	3.5
II	O-LRQ-JPM-73	Makeup to the SFP	3.0
I	O-LRQ-JPM-76	Operate the TDAFW Pump Locally	4.2
II	O-LRQ-JPM-77	Manually Dump Steam Through the Atmospheric Relief/Dump Valves	3.6
II	O-LRQ-JPM-78	Operate The Diesel Generator (Locally)	3.5
II	O-LRQ-JPM-80	Establish Natural Circulation	4.8
I	O-LRQ-JPM-81	Recover from an Urgent Failure	3.4
I	O-LRQ-JPM-82	Operate Turbine Driven Auxiliary FWP	4.0
I	O-LRQ-JPM-85	Place an Excore Nuclear Instrumentation Channel Out of Service	4.1

GENERAL SUBJECT SAMPLE PLAN

On The Job

BR-0122 Grouping	JPM Number	JPM Title	Rating
I	O-LRQ-JPM-88	Boric Acid Batching	3.1
III	O-LRQ-JPM-89	Isolate Various SW Headers	3.6
III	O-LRQ-JPM-90	Operate the SW System from the DSP	3.8
III	O-LRQ-JPM-91	Monitor Turbine During Startup To Rated Speed	3.5
I	O-LRQ-JPM-92	Feed The S/G's Locally With AFW	3.2
I	O-LRQ-JPM-93	Adjust AFW Pump Cooling Water Flow	3.5
I	O-LRQ-JPM-95	Perform A Hotwell Discharge	3.1
III	O-LRQ-JPM-96	Don and Remove Respiratory Protective Equipment	3.6
II	O-LRQ-JPM-97	Perform Manual Makeup To The RWST	3.3
I	O-LRQ-JPM-98	Operate Portable Beta/Gamma Survey Equip	3.0
III	O-LRQ-JPM-99	Operate And Monitor The Post Loca Hydrogen Control System	3.1
I	O-LRQ-JPM-100	Shift Boric Acid Tank Lineups	4.1
III	O-LRQ-JPM-101	Don And Remove Anti-Contamination Clothing	3.7
II	O-LRQ-JPM-102	Identify Protective Relay and Lockout Trips	3.9
I	O-LRQ-JPM-105	Place an Excore Nuclear Instrumentation Channel in Service	4.1

Requalification Exam Designated Licensed Operators

Operations Crew C

Glenn W. Hoppe	SOP-30112-3	55-4638
Roger J. Nicolai	SOP-30580-1	55-30172
Mark (N) Lorger	OP-30468-1	55-31085
Dennis J. Borkenhagen	OP-30620	55-31352

Operations Crew D

David L. Gauthier	SOP-30250-2	55-30044
Larry E. Michalek	SOP-30252-2	55-6067
James E. Langer	SOP-30958	55-31080
James M. Rozell	OP-30621	55-31351

STFF Crew 2

David T. Braun	SOP-2266-7	55-4637
Thomas D. Hooker	SOP-30956	55-5496
David A. Karst	SOP-30957	55-31081
Charles A. Schrock	SOP-30770	55-5989