



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

July 31, 1980

50-390

M44

TO ALL LICENSEES OF OPERATING PLANTS AND APPLICANTS FOR OPERATING LICENSES
AND HOLDERS OF CONSTRUCTION PERMITS

SUBJECT: INTERIM CRITERIA FOR SHIFT STAFFING

This is to provide you with the shift manning requirements as indicated in item (1) of our letter of May 7, 1980. Pending completion of the long-term development of criteria for shift staffing and administrative controls, the NRC staff has developed interim criteria for licensees of operating plants and applicants for operating licenses. Except for senior reactor operators, these interim criteria for shift staffing shall remain as described in the Standard Review Plan, Section 13.1.2, NUREG 75/087. Special requirements regarding the utilization and qualifications of an on-shift technical advisor to the shift supervisor were provided in our letter of October 30, 1979.

We have changed the previous requirements for senior reactor operators and now require that there be one licensed senior reactor operator in the control room at all times, other than during cold shutdown conditions. This will therefore require that there be a minimum of two senior reactor operators at each site at all times, other than during cold shutdown conditions, to assure the availability of one senior reactor operator in the control room without affecting the freedom of the shift supervisor to move about the site as needed. The criteria for reactor and auxiliary operators are stated below and the required staffing levels for selected station configurations and various plant operating modes are summarized in the enclosed table.

At any time a licensed nuclear unit is being operated in Modes 1-4 for a PWR (Power Operation, Startup, Hot Standby, or Hot Shutdown respectively) or in Modes 1-3 for a BWR (Power Operation, Startup, or Hot Shutdown respectively), the minimum shift crew shall include two licensed senior reactor operators (SRO), one of whom shall be designated as the shift supervisor, two licensed reactor operators (RO) and two unlicensed auxiliary operators (AO). For a multi-unit station, depending upon the station configuration, shift staffing may be adjusted to allow credit for licensed senior reactor operators (SRO) and licensed reactor operators (RO) to serve as relief operators on more than one unit; however, these individuals must be properly licensed on each such unit. At all other times, for a unit loaded with fuel, the minimum shift crew shall include one shift supervisor who shall be a licensed senior reactor operator (SRO), one licensed reactor operator (RO) and one unlicensed auxiliary operator.

Adjunct requirements to the shift staffing criteria stated above are as follows:

- a. A shift supervisor with a senior reactor operator's license, who is also a member of the station supervisory staff, shall be onsite ~~at all times~~ when at least one unit is loaded with fuel.

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- b. A licensed senior reactor operator (SRO) shall, at all times, be in the control room from which a reactor is being operated. The shift supervisor may from time-to-time act as relief operator for the licensed senior reactor operator assigned to the control room.
- c. For any station with more than one reactor containing fuel, the number of licensed senior reactor operators onsite shall, at all times, be at least one more than the number of control rooms from which the reactors are being operated.
- d. In addition to the licensed senior reactor operators specified in a., b., and c. above, for each reactor containing fuel, a licensed reactor operator (RO) shall be in the control room at all times.
- e. In addition to the operators specified in a., b., c., and d. above, for each control room from which a reactor is being operated, an additional licensed reactor operator (RO) shall be onsite at all times and available to serve as relief operator for that control room. As noted above, this individual may serve as relief operator for each unit being operated from that control room, provided he holds a current license for each unit.
- f. Auxiliary (non-licensed) operators shall be properly qualified to support the unit to which assigned.
- g. In addition to the staffing requirements stated above, shift crew assignments during periods of core alterations shall include a licensed senior reactor operator (SRO) to directly supervise the core alterations. This licensed senior reactor operator may have fuel handling duties but shall not have other concurrent operational duties.

These criteria do not relieve licensees of any special requirements for additional operators which may have been imposed for individual units.

General application of revised shift staffing criteria will be the subject of a rulemaking proceeding. However, these interim criteria will be effective for plants receiving operating licenses during the interim period (including TMI-1). Licensees of plants already holding operating licenses shall examine their current staffing practices and capabilities in light of these interim criteria and advise this office within 90 days of receipt of this letter of the date by which their shift staffing could be in compliance with these criteria. Licensees of operating plants shall take steps to meet the revised criteria as soon as practical, but no later than July 1, 1982. In your response to this letter, you are requested to discuss your plans, schedules and commitments to meet these staffing criteria. Holders of construction permits who have not as yet applied for an operating license should factor these criteria into their recruitment and crew training plans.

In addition, licensees of operating plants and applicants for operating licenses shall include in their administrative procedures (required by license conditions) provisions governing required shift staffing and movement of key individuals about the plant. These provisions are required to assure that qualified plant personnel to man the operational shifts are readily available in the event of an abnormal or emergency situation.

The administrative procedures shall also set forth a policy concerning overtime work for the senior reactor operators, reactor operators, and shift technical advisor required by these interim criteria. These procedures shall stipulate that overtime shall not be routinely scheduled to compensate for an inadequate number of personnel to meet the shift crew staffing requirements. In the event that overtime must be used, due to unanticipated or unavoidable circumstances, the following overtime restrictions shall be followed:

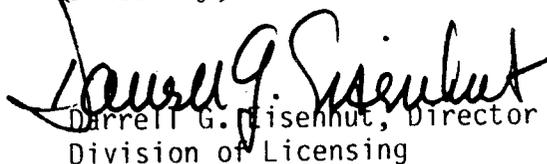
- (1) An individual shall not be permitted to work more than 12 hours straight (not including shift turnover time).
- (2) An individual shall not be permitted to work more than 24 hours in any 48 hour period.
- (3) An individual shall not work more than 72 hours in any 7 day period.
- (4) An individual shall not work more than 14 consecutive days without having two consecutive days off.

However, recognizing that circumstances may arise requiring deviation from the above restrictions, such deviation may be authorized by the plant manager or higher levels of management in accordance with published procedures and with appropriate documentation of the cause.

The limitations on overtime follow the guidance provided in IE Circular 80-02, except for the requirement noted above on the restriction on use of overtime in circumstances that are unavoidable.

Operating license applicants shall complete these administrative procedures before fuel loading. Development and implementation of the administrative procedures at operating plants will be reviewed by the Office of Inspection and Enforcement beginning 90 days after the date of this letter.

Sincerely,


Darrell G. Eisenhut, Director
Division of Licensing

Enclosures:
As stated

cc: OR Licensees, and OL Applicants
CP Holders Service Lists

INTERIM REQUIRED SHIFT STAFFING

	One Unit One Control Room	Two Units One Control Room	Two Units Two Control Rooms	Three Units Two Control Rooms
One Unit Operating*	1 SS (SRO) 1 SRO 2 RO 2 AO	1 SS (SRO) 1 SRO 3 RO 3 AO	1 SS (SRO) 1 SRO 3 RO 3 AO	1 SS (SRO) 1 SRO 4 RO 4 AO
Two Units Operating*	NA	1 SS (SRO) 1 SRO 3 RO 3 AO	1 SS (SRO) 2 SRO 4 RO 4 AO	1 SS (SRO) 2 SRO Only one SRO required if both units are operated from one control room) 4 RO 5 AO
All Units Operating*	NA	1 SS (SRO) 1 SRO 3 RO 3 AO	1 SS (SRO) 2 SRO 4 RO 4 AO	1 SS (SRO) 2 SRO 5 RO 4 AO
All Units Shutdown	1 SS (SRO) 1 RO 1 AO	1 SS (SRO) 2 RO 3 AO	1 SS (SRO) 2 RO 3 AO	1 SS (SRO) 3 RO 5 AO

SS - Shift Supervisor
SRO - Licensed Senior Reactor Operator

RO - Licensed Reactor Operator
AO - Auxiliary Operator

- NOTE: 1. In order to operate or supervise the operation of more than one unit, an operator (SRO or RO) must hold an appropriate, current license for each such unit.
2. In addition to the staffing requirements indicated in the table a licensed senior operator will be required to directly supervise any core alteration activity.

* Modes 1 through 4 for PWRs.
Modes 1 through 3 for BWRs.

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

POSTAGE & FEES PAID
U.S. Nuclear Regulatory Commission



PLANTS UNDER OL REVIEW

1. Farley 2	50-364
2. Byron 1/2	50-454, 455
3. Braidwood 1/2	50-456/457
4. LaSalle 1/2	50-373, 374
5. Midland 1/2	50-329, 330
6. McGuire 1/2	50-369, 370
7. So. Texas 1/2	50-498, 499
8. Shoreham	50-322
9. Waterford	50-382
10. Grand Gulf 1/2	50-416/417
11. Diablo Canyon 1/2	50-275, 323
12. Susquehana 1/2	50-387, 388
13. Salem 2	50-311
14. Summer 1	50-395
15. San Onofre 2/3	50-361, 362
16. Bellefonte 1/2	50-438, 439
17. Watts Bar 1/2	50-390, 391
18. Sequoyah 1/2	50-327, 328
19. Comanche Peak 1/2	50-445, 446
20. North Anna 2	50-339
21. WPPSS-2	50-397
22. Fermi 2	50-341
23. Zimmer 1	50-358

PLANTS UNDER CONSTRUCTION

1. Palo Verde 1/2/3	50-528, 50-529, 50-530
2. Perry 1/2	50-440, 50-441
3. Cherokee 1/2/3	50-491, 50-492, 50-493
4. Beaver Valley 2	50-412
5. St. Lucie 2	50-389
6. Vogtle 1/2	50-424, 50-425
7. River Bend 1/2	50-458, 50-459
8. Clinton 1/2	50-461, 50-462
9. Forked River	50-363
10. Wolf Creek 1	50-482
11. Jamesport 1/2	50-516, 50-517
12. Nine Mile Point 2	50-410
13. Millstone 3	50-423
14. Bailly 1	50-367
15. Limerick 1/2	50-352, 50-353
16. Hope Creek 1/2	50-354, 50-355
17. Marble Hill 1/2	50-546, 50-547
18. Seabrook 1/2	50-443, 50-444
19. Sterling 1	50-485
20. Hartsville 1/2/3/4	50-518, 50-519, 50-520, 50-521
21. Phipps Bend 1/2	50-553, 50-554
22. Yellow Creek 1/2	50-566, 50-567
23. North Anna 3/4	50-404, 50-405
24. WPPSS 1/3/4/5	50-460, 50-508, 50-513, 50-509
25. Callaway 1/2	50-483, 50-486
26. Harris 1/2/3/4	50-400, 50-401, 50-402, 50-403
27. Catawba 1/2	50-413, 50-414

PLANTS UNDER CP REVIEW

1. Pilgraim 2	50-471
2. Greenwood 2/3	50-452, 50-453
3. Perkins 1/2/3	50-488, 50-489, 50-490
4. Allens Creek 1	50-466
5. Montague 1/2	50-496, 50-497
6. New Haven 1/2	50-596, 50-597
7. Erie 1/2	50-580, 50-581
8. Pebble Springs 1/2	50-514, 50-515
9. Clinch River	50-537
10. Black Fox 1/2	50-556, 50-557
11. Skagit 1/2	50-522, 50-523
12. Davis Besse 2/3	50-500, 50-501
13. Haven	50-502
14. Greene County 1	50-549
15. FNP	50-437

ALL POWER REACTOR LICENSEES

Docket No. 50-348
Farley Unit 1

Docket No. 50-313
Arkansas Unit 1

Docket No. 50-368
Arkansas Unit 2

Docket No. 50-317
Calvert Cliffs Unit 1

Docket No. 50-318
Calvert Cliffs Unit 2

Docket No. 50-293
Pilgrim Unit 1

Docket No. 50-325
Brunswick Unit 1

Docket No. 50-324
Brunswick Unit 2

Docket No. 50-261
H. B. Robinson Unit 2

Docket No. 50-10
Dresden Unit 1

Docket No. 50-237
Dresden Unit 2

Docket No. 50-249
Dresden Unit 3

Docket No. 50-254
Quad-Cities Unit 1

Docket No. 50-265
Quad-Cities Unit 2

Docket No. 50-295
Zion Unit 1

Docket No. 50-304
Zion Unit 2

Docket No. 50-213
Connecticut Yankee (Haddam Neck)

Docket No. 50-3
Indian Point Unit 1

Docket No. 50-247
Indian Point Unit 2

Docket 50-286
Indian Point Unit 3

Docket No. 50-155
Big Rock Point

Docket No. 50-255
Palisades

Docket No. 50-409
Lacrosse

Docket No. 50-269
Oconee Unit 1

Docket No. 50-270
Oconee Unit 2

Docket No. 50-287
Oconee Unit 3

Docket No. 50-334
Beaver Valley Unit 1

Docket No. 50-302
Crystal River 3

Docket No. 50-335
St. Lucie Unit 1

Docket No. 50-250
Turkey Point Unit 3

Docket No. 50-251
Turkey Point Unit 4

Docket No. 50-321
Edwin I. Hatch Unit 1

Docket No. 50-366
Edwin I. Hatch Unit 2

Docket No. 50-315
D. C. Cook Unit 1

Docket No. 50-316
D. C. Cook Unit 2

Docket No. 50-331
Duane Arnold

Docket No. 50-219
Oyster Creek Unit 1

Docket No. 50-309
Maine Yankee

Docket No. 50-289
Three Mile Island Unit 1

Docket No. 50-320
Three Mile Island Unit 2

Docket No. 50-298
Cooper Station

Docket No. 50-220
Nine Mile Point Unit 1

Docket No. 50-245
Millstone Unit 1

Docket No. 50-336
Millstone Unit 2

Docket No. 50-263
Monticello

Docket No. 50-282
Prairie Island Unit 1

Docket No. 50-306
Prairie Island Unit 2

Docket No. 50-285
Ft. Calhoun

Docket No. 50-133
Humboldt Bay

Docket No. 50-277
Peach Bottom 2

Docket No. 50-278
Peach Bottom 3

Docket No. 50-344
Trojan

Docket No. 50-333
FitzPatrick

Docket No. 50-267
Ft. St. Vrain

Docket No. 50-272
Salem Unit 1

Docket No. 50-244
R. E. Ginna 1

Docket No. 50-312
Rancho Seco

Docket No. 50-206
San Onofre 1

Docket No. 50-259
Browns Ferry Unit 1

Docket No. 50-260
Browns Ferry Unit 2

Docket No. 50-296
Browns Ferry Unit 3

Docket No. 50-346
Davis-Besse 1

Docket No. 50-271
Vermont Yankee

Docket No. 50-338
North Anna 1

Docket No. 50-280
Surry Unit 1

Docket No. 50-281
Surry Unit 2

Docket No. 50-266
Point Beach Unit 1

Docket No. 50-301
Point Beach Unit 2

Docket No. 50-305
Kewaunee

Docket No. 50-29
Yankee-Rowe

Docket No. 50-267
Ft. St. Vrain