



**Wisconsin Electric** POWER COMPANY  
231 W. MICHIGAN, P.O. BOX 2046, MILWAUKEE, WI 53201

September 30, 1983

Mr. H. R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. NUCLEAR REGULATORY COMMISSION  
Washington, D. C. 20555

Dear Mr. Denton:

DOCKETS 50-266 AND 50-301  
RULE 10 CFR 50  
LICENSED OPERATOR STAFFING AT  
NUCLEAR POWER PLANTS  
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Wisconsin Electric Power Company has operated the Point Beach Nuclear Plant located on the shore of Lake Michigan, 90 miles north of Milwaukee, since 1970. Point Beach is a two-unit, single-control room configuration.

Wisconsin Electric requests that the effective date of compliance to rule 10 CFR 50 for the Point Beach Nuclear Plant be extended from January 1, 1984 to January 1, 1987. We also desire a change to the rule requiring two Senior Reactor Operators (SRO) and three Reactor Operators (RO) for a two-unit, one-control room configuration with only one unit operating and a change to the rule requiring that one SRO be present in the control room when any unit is being operated. The following provides background and justification for these requests:

1. Actions to Achieve Compliance

On September 1, 1983 Point Beach, with both units operating, had a six-crew rotation made up of the following on-shift complement:

Shift Superintendent (SRO)	1
Operating Supervisor (SRO/RO)*	1
Control Operators (RO)	2
Auxiliary Operators**	3
Extra Operator***	1
Total	8

\* SRO except for one crew.

\*\* Except for one crew, one of these operators on each crew holds an RO license.

\*\*\* Fire brigade member qualified and trained in health physics.

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This can be compared to the five-crew rotation of August 1979.

Shift Superintendent (SRO)	1
Operating Supervisor (SRO/RO)*	1
Control Operators (RO)	2
Auxiliary Operators**	<u>3</u>
Total	7

\* Not all SRO's. Some RO's in training for upgrade.

\*\* None licensed.

Since October 1980, Point Beach has licensed 13 RO's and 11 SRO's. The increased crew complement, number of licenses received, and expansion to a six-crew rotation are indications of our commitment to establish not only an adequate on-shift complement but also provide training time to maintain the operator's high competency level. It should be made clear, however, that the manning level of September 1, 1983 is expected to be a peak for the on-shift licensed operator population for the next year and one-half because of anticipated losses due to promotion of RO's to training positions to prepare them for upgrade to SRO, losses to other plant groups where licensed operator experience is beneficial, i.e., training, and other attrition typically found industry wide.

Wisconsin Electric feels that it is important that an individual have as much experience as possible in the plant for which he is obtaining a license. We have, therefore, tried to use the concept of progression from within; that is, to have individuals start at entry level positions and work their way up, learning the many necessary details required for safe and effective operation. To help perpetuate this concept and yet provide the numbers of licensed operators that are being required, we instituted a Nuclear Plant Operator Trainee (NPOT) entry position and associated training program in March 1982. This training program is designed to take new employees with no past power plant experience and develop them into qualified auxiliary operators in a period of about 20 months. The first class of ten NPOT's entered this program in March 1982. Eight now remain and are presently assigned to operating crews for final qualification as auxiliary operators. A second class of 13 entered the program in September 1982 of which 11 still remain. Another class of ten to twelve is scheduled to start in January 1984. We intend to continue to evaluate not only the need for the program but also the class size to ensure that a supply of operators with adequate experience is available for licensing.

In support of this new program is an active recruiting, screening, and processing organization. As an illustration, there were over 700 applicants for the next NPOT class. Of these applicants over 300 were tested and 100 preinterviewed by the corporate personnel office. It is expected that of these applicants, about 15 will undergo a final interview by plant staff. As you are aware, Wisconsin Electric has had for many years a very stringent screening process for job applicants. The process includes various tests for aptitude, a psychological profile examination, and oral interviews.

The Point Beach training organization has been expanded from one in January 1980 to the present permanent complement of seven. This total is supplemented by a Shift Superintendent rotated off of shift assignment and periodic outside contracted training. The assignment of a Shift Superintendent on a rotational basis has proven valuable in providing current operational experience in the training of operators. The success rate in the licensing of operators is a measure of the effectiveness of the training. Including exam retakes, Point Beach has licensed 11 out of 12 applicants (one retake pending) for SRO and 13 out of 14 applicants for RO since October 1980. The effectiveness of the training group is periodically evaluated.

Point Beach is committed to a continued strengthening of the training program and is considering adding up to three licensed people to the training group. Consistent with our philosophy of promotion of plant experienced, qualified people, it is probably the case that the individuals will come from the operating ranks.

A table is included that represents the predicted manpower available for on-shift assignment. The table illustrates why we have requested January 1987 as a date to be in compliance of this rule. The left-hand column lists job positions. Listed in the quota column are the minimum numbers for those positions we feel are necessary for six-crew, eight-hour shift staffing. These totals are also necessary for continued support of effective training and to reduce overtime to only that required to cover for vacations and unanticipated absences.

Anticipated gains and losses are shown on the table. Some of the assumptions used in preparation of the table are included, however, it should be recognized that it is an

optimistic schedule. It is also very difficult to predict individual job category stability. Those numbers represent what is necessary to satisfy the aforementioned criteria with an assumed attrition rate as shown.

It is important that a six-shift rotation be maintained. This is primarily due to the greatly expanded scope of continuing training for all operators, including increased training requirements in the following areas: emergency plan, fire brigade, TMI and fire protection backfit systems, mitigating core damage, heat transfer, fluid flow, new emergency procedures, simulator, etc. It is also important to continue six-crew rotation, eight-hour shifts and reduced overtime to provide alert operators with high morale.

We have increased the number of operators in the job categories of auxiliary operator and below by the hiring of NPOT's. However, it will not be until at least January 1985 that we would be confident in starting them in a licensing program and not until January 1986 that we could expect them to be licensed.

Therefore, although the table optimistically shows adequate numbers as of January 1, 1986, it is requested that compliance not be required until January 1, 1987. It should be recognized, however, that we will be close to the required numbers in most categories as of January 1, 1985 and will be actively attempting to fill all the vacancies to put us in compliance with the rule as soon as reasonably achievable.

## 2. Reactor Operators

The minimum staffing table of the rule requires three licensed operators for a two-unit, single-control room plant, even if one unit is shut down. Thus, no reduction is permitted from the requirements for a two-unit, two-control room plant under the same conditions, nor is any reduction permitted from a two operating unit situation. In our opinion, the monitoring required for a unit in cold shutdown is less demanding than that required for an operating unit, and some relaxation from the requirements for two operating units is appropriate.

The configuration of the plant-specific control room should also be taken into account. The included figure of the Point Beach control room shows normal watchstander locations. The major indicators, annunciators, and controls for both units are readily viewable and accessible from the watch stations of all of the licensed operators in the control room.



This provides rapid awareness and response to a problem. The Point Beach control room original design took into account some human factor engineering principles in that controls are well laid out with the extensive use of mimic buses. The two-loop plant design is also less complicated than later designs and is, in general, less demanding on the operator.

We therefore request that the requirements be modified for Point Beach to indicate a requirement for two licensed operators when only one unit is operating and the other unit is in cold shutdown condition since the second licensed operator (relief operator for the operating unit) plus the control room supervisor are sufficient to provide the minimal necessary surveillance and/or control manipulations required of a cold shutdown unit for our two-unit, one-control room facility. We would also like to clarify that the relief operator be free to leave the control room when not assigned to the operating unit provided the supervisor always is present in the control room.

### 3. Control Room SRO Requirement

The rule requires that a SRO be present in the control room from which a unit is being operated. As we intend to have at least one unit in operation as often as possible, we are approaching this rule from the position that we would always need to have a SRO in the control room.

Our practice over the past 13 years has been to strive to provide two SRO individuals per shift. There have, however, been occasions when only one supervisor (Duty Shift Superintendent) was a SRO; however, the other supervisor (Duty Operating Supervisor) was a senior RO getting prepared for SRO licensing. This was an interim situation which came about when an individual holding a RO license had recently been promoted to the management position of Operating Supervisor, but had not had the opportunity to obtain a SRO license. Such an individual is expected to obtain his SRO license at the next available opportunity.

Important attributes of a Shift Superintendent or Operating Supervisor are competent leadership, technical knowledge, and operating experience. This position is in agreement with the intent of the rule to provide supervision and technical expertise in the control room to respond to accident situations. The mere possession of a SRO license does not necessarily equate with possession of these other essential characteristics.

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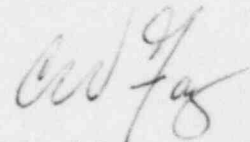
The essence of this rule is that the Operating Supervisor must hold a SRO license. This is similar to the staffing level requirements for emergency situations. In that instance, we previously presented our position to NRC Region III at a meeting held on May 6, 1982 with a follow-up letter dated May 19, 1982. In that letter, we committed to minimizing those situations where the Operating Supervisor holds a RO rather than a SRO license. The NRC will be notified and informed of actions being taken to return to a two SRO-on-shift situation. A letter from Region III dated June 10, 1983 stated that our program as submitted for on-shift staffing and augmentation was acceptable. The safety evaluation report of minimum staffing levels included with the letter evaluated our commitment that the Operating Supervisor hold a SRO license or RO license until upgraded to SRO. This was not identified as a deficiency and therefore we conclude that this staffing commitment for the Operating Supervisor position is acceptable to the NRC. We request that this commitment be accepted in lieu of the rule requiring the presence of a SRO-licensed person in the control room.

In summary, we hope you will agree with our position. Wisconsin Electric Power Company is committed to establishing an adequate on-shift complement. However, we feel that the method used and timing must be reasonable so as to not only prevent an adverse reaction to the nuclear industry in general because of "pirating" but also provide for continued safe operation based on a foundation of licensed operators with significant plant-specific experience.

Although we feel confident we can make the required staffing levels sooner than January 1, 1987, we are requesting the additional time to allow for unforeseen situations and not be required to renegotiate the compliance date.

We are available to provide additional information on these matters but would hope that we may receive your prompt concurrence.

Very truly yours,



Vice President-Nuclear Power

C. W. Fay

Attachments

Copy to NRC Resident Inspector

PROJECTED PERSONNEL REQUIREMENTS

	1983		1984			1985			1986	
	Quota	09/01	01/01	05/01	09/01	01/01	03/01	09/01	01/01	05/01
Shift Superintendent (SRO)	8	8	8 (-1)	7 +1	6	8 (-1) +1	8	8 (-1) +1	8 (-1) +1	8
Operating Supervisor (SRO/RO)	7	5 +1	5	6 -1 +2	7	7 -1 (-1) +2	7	7 -1	6 -1 +2	7
Operating Supervisor Trainee	Var.	1 -1 +2	2	2 -2 +2	2	2 -2	0 +2	2	2 -2 +2	2
Control Operator (RO)	12	12 -2 (-1) +3	12	12 -2 +2	12 (-2) +2	12 (-2) +2	12 -2 +2	12	12 -2 (-1) +3	12
Licensed Auxiliary Operator (RO)	6	5 -3 +2	4	4 -2 (-1)	1 -2 +5	5 -2	3 -2	1 +6	7 -3	4
Control Operator Trainee	Var.	2 -2 +6	6	6	6 -6 +6	6	6	6 -6 +4	4	4
Auxiliary Operator	12	13 -6 +8	15	15 +8	23 -6	17	17 +9	26 -4	22	22 NOTE (3)
Auxiliary Operator Trainee On-Shift	6	8 -8	0 +9	9 -8 (-1)	0	0 +9	9 -9	0	NOTE (3)	
Nuclear Plant Operator Trainee	Var.	11 (-1)	10 -9 (-1) +12	12	12 (-3)	9 -9	0	TO BE EVALUATED BY NEED		

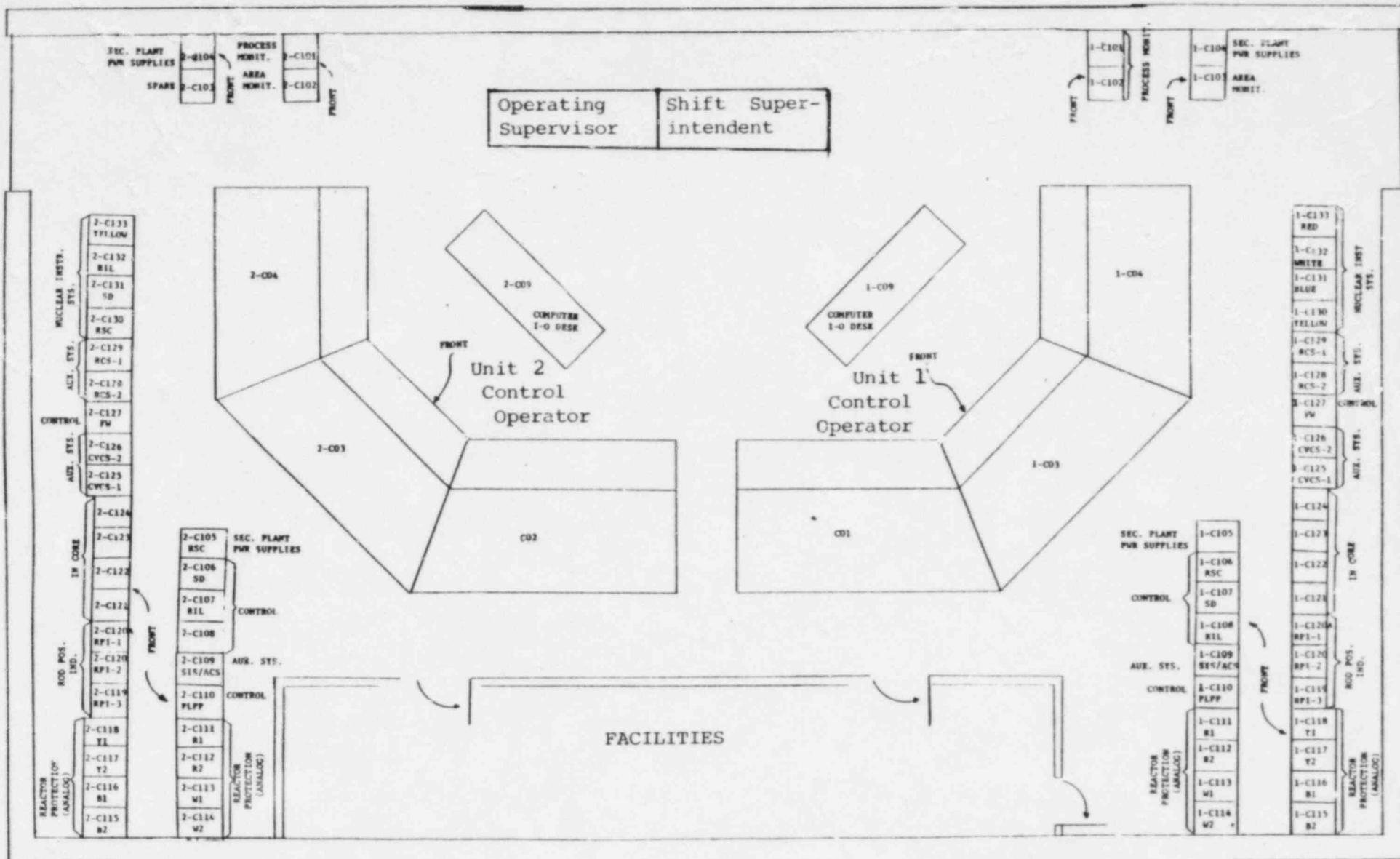
Circled numbers represent attrition from pipe line for various reasons and are summarized below:

SS	- 4	Start 09/01/83	65
OS	- 1	Attrition	-18
CO	- 6	Additional	12
LAO	- 1		
AOT	- 1	FINAL	59
NPOT	- 5		

18

Assumptions:

1. 100% success rate for licensing process.
2. Limited attrition as assumed.
3. Auxiliary Operator and Auxiliary Operator Trainee total >18.
4. No losses resulting from failure to maintain annual requalification requirements.



MAIN CONTROL ROOM LAYOUT

FIG. 7.7-1