



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REGARDING FIRE BRIGADE TRAINING

DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated September 23, 1987 (NRC-87-0165), Detroit Edison Company (the licensee) proposed changes to their fire brigade training to provide necessary flexibility in scheduling use of the Toledo Fire Academy training facilities. The guidelines contained in Section C.2.d of BTP 9.5-1 call for a combination of classroom instructions, practice sessions, and drills for a fire brigade of at least five (5) members on all shifts. Initial classroom instruction that covers all aspects of plant fire brigade operation is to be provided to each member of the fire brigade at the time he or she first becomes a member. Periodic refresher instruction courses will then be provided to all members of the brigade and so structured that all information covered in the initial classroom training is repeated at least every two years.

Each brigade member is to participate at least once per year in practice sessions which provide actual "hands-on" experience in fighting the various types of fires that could occur in a nuclear power plant, including the use of emergency breathing apparatus under the strenuous conditions encountered in fire fighting operations.

Drills are to be conducted in the plant at regular intervals not to exceed three (3) months, so that each fire brigade can practice as a team, implementing up to the point of actually discharging fire suppressants, the skills learned in the instruction and practice sessions.

The licensee currently has about 120 personnel qualified to serve on the plant fire brigades. (They would need only five 5-member teams to meet the minimum provisions of BTP 9.5-1.) The licensee does not have a fire brigade training facility, but rather uses the facility owned and operated by the Toledo Fire Department. The quality of training received by the Fermi fire brigade members during their practice sessions is superior to that which the licensee could provide on its own because of the physical set up of the training facility. Additionally, the Toledo Fire Department professional instructors work with the licensee in tailoring the practice sessions to meet their specific needs. This fire department training facility is the only such facility readily available. As a result, many other industrial organizations also use it to similarly train their own private fire brigades. All of these outside users

have to be scheduled around the continuing, and sometimes immediate needs of the Toledo Fire Department. Therefore, while the licensee schedules use of the fire department training facility in advance, conditions over which the licensee has no control can develop which would preempt that schedule and the licensee could then exceed the time of once per year (365 days) for providing the hands-on practice sessions.

In the Fermi-2 SER (NUREG-0798) dated July 1981, the staff found acceptable the licensee's commitments regarding fire brigade size and instruction, including their commitments for hands-on practice. The licensee had not previously stated their intent to use the Toledo Fire Department Training facility, however, that level of detail is not required for NRC review and approval. The licensee has utilized this training facility since 1984 without any scheduling problems. However, in anticipation of potential scheduling conflicts, the licensee has proposed changes to the Fermi Fire Protection Program which would provide relief for potential scheduling problems by allowing certain extensions in the training schedule. Specifically, they propose that "all training shall be performed within the time interval specified with:

1. A maximum allowable extension not to exceed 25% of the training interval, but:
2. The combined interval for three consecutive training intervals shall not exceed 3.25 times the specified training interval."

2.0 EVALUATION

The intent of Section C.2.d of BTP 9.5-1 is that each plant fire brigade will be adequately trained and capable of successfully extinguishing any fire that may occur in their plant without compromising the ability to safely shut down the plant. The licensee has endeavored to assure a fully trained and equipped fire brigade for Fermi-2.

- o Branch Technical Position 9.5-1 specifies a minimum fire brigade of at least five (5) members. In order to assure at least five members at all times, five 5-member brigades must be maintained to provide coverage for all 21-shifts each week and absences such as vacation and sickness. The licensee has substantially exceeded that minimum number and has approximately 120 trained and certified members of the Fermi fire brigade.
- o Branch Technical Position 9.5-1 specifies initial classroom instruction that is to be provided for each member of the fire brigade, and periodic refresher instructions (intervals implied to not exceed 3-months) that will completely cover the initial classroom instruction every two years. The licensee has fully complied with the instruction guidelines.
- o Branch Technical Position 9.5-1 specifies annual practice sessions for each fire brigade member where actual fires will be extinguished and all tools and equipment (such as emergency self contained breathing apparatus) will be utilized under realistic fire

conditions. The BTP is silent on how these practice sessions will be provided and who will develop and lead them.

The Toledo Fire Department Training facility provides better quality and more effective practice sessions for the Fermi-2 fire brigade members than the licensee would be able to furnish themselves. The Toledo Fire Department instructors who operate the training facility work with the licensee to provide practice sessions that are "tailor made" for conditions that are specific to Fermi plant needs.

Training sessions are scheduled and the Toledo Fire Department Training facility is reserved well in advance, and there have not been problems in the past with maintaining these schedules. However, since it is the only facility of its kind in the immediate vicinity, and due to the seasonal nature of its use, both weather and higher priority needs by the Toledo Fire Department could cause previously scheduled use of this training facility by the licensee to be postponed. Even with this uncertainty (which has not caused problems in the past), the quality and effectiveness of the practice sessions provided to the licensee's fire brigade members by the Toledo Fire Department at their training facility is superior to that which the licensee could provide directly. The intent of providing annual practice sessions would still be satisfied even with the proposed change. The same applies with respect to quarterly drills and instruction sessions, and we believe this requested relaxation can be granted without compromise to the ability of the Fermi-2 fire brigade to successfully control and extinguish any fire they may be called on to fight manually.

3.0 CONCLUSION

On the basis of the above evaluation, we conclude that the changes proposed by the licensee to the Fermi Fire Protection Program are acceptable. These changes are:

- UFSAR Section 13.2.4.1.2 Practice Sessions
".... not to exceed 1 year (Ref. Section 13.2.4.1.4)"
- UFSAR Section 13.2.4.1.3 Fire Drills
".... not to exceed 3 months (Ref. Section 13.2.4.1.4)....
Periodically (at least annually Ref. Section 13.2.4.1.4)...."
- Add Section 13.2.4.1.4
All training shall be performed within the time interval specified with:
 1. A maximum allowable extension not to exceed 25% of the training interval, but:
 2. The combined interval for three consecutive training intervals shall not exceed 3.25 times the specified training interval.

Dated: April 13, 1988