



Commonwealth Edison

One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

February 17, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Unit 2
License Condition NPF-18, License
Conditions 2.C.15(b),(c), & (d)
Fire Protection Program
NRC Docket No. 50-374

Dear Mr. Denton:

The LaSalle Unit 2 Facility Operating License NPF-18 contains three Fire Protection Program License Conditions 2c(15)(b), 2c(15)(c) and 2c(15)(d) that are required to be completed prior to Unit 2 initial criticality. Attachments 1, 2 and 3 are provided and indicate that the required actions have been addressed. It is requested that these License Conditions be closed based on the information provided.

Procedures provided in the Attachments are for information only and future changes to the procedures will be controlled in accordance with LaSalle Unit 2 Technical Specification Administrative Section.

In various discussions and submittals to the NRC, Commonwealth Edison Company has made various other commitments regarding fire protection. For the record, in those cases where NPF-18 or its attachments specified dates other than those in our previous commitments, we want to clarify that Commonwealth Edison Company is proceeding with our actions on the schedule specified in our license.

To the best of my knowledge and belief the statements contained herein and in the Attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison and contractor employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

If there are any further questions regarding this matter, please contact this office.

Very truly yours,

8402220409 840217
PDR ADOCK 05000374
F PDR

C. W. Schroeder 2/17/84
C. W. Schroeder

Nuclear Licensing Administrator

1m

cc: J. G. Keppler - Region III
NRC Region III Inspector - LSCS

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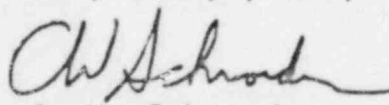
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ATTACHMENT 1

NPF-18 License Condition 2.c.(15)(b) States:

"(b) Prior to initial criticality, the Licensee shall replace the B diesel fire pump engine and perform a test in accordance with Sections 11-2.3, 11-2.4 and 11-2.5 of NFPA 20/1983"

NFPA 20/1983 Sections 11-2.3, 11-2.4 and 11-2.5 States:

11-2.3 A copy of the manufacturer's certified pump test characteristic curve shall be available for comparison of results of field acceptance test. The fire pump as installed shall equal the performance as indicated on the manufacturer's certified shop test characteristic curve within the accuracy limits of the test equipment.

11-2.4 The fire pump shall perform at minimum, rated and peak loads without objectionable overheating of any component.

11-2.5 Vibrations of the fire pump assembly shall not be of a magnitude to warrant potential damage to any fire pump component.

C. W. Schroeder letter to H. R. Denton dated 23 November 1983, in Issue 1 Stated:

- '1. The A diesel fire pump has been replaced with a rebuilt Engine and an overhauled fire pump.'
- '2. On November 5, 1983, a test of the A pump was performed. The results of that test have been provided to Region III.'

On December 29, 1983 a test similiar to the test performed on the A pump was conducted satisfactorily. The test on the B pump provided results similiar to those on the A pump and meet the requirements of sections 11-2-3, 11-2.4 and 11-2.5. A Fire Protection Engineer was present during the conduct of the test and confirmed that the pump performed satisfactorily and meet the requirements of sections 11-2-3, 11-2.4 and 11-2.5. It should be noted that the as tested pump curve at high flows when corrected to 1760 rpm did not equal the manufacturer pump test characteristic curve. The pump was accepted based on the following:

ATTACHMENT 1
(Contd)

1. The pump capacity does meet its design points
2. The pump curves developed in June 1981 and in December 1983 are almost identical at flows above the relief valve setpoint and thus no abnormal degradation has been detected.
3. Error analysis on test data indicates the pump is performing satisfactory in the field when compared to the manufacturers pump test curve assuming NO instrument error at the factory.

C. W. Schroeders letter referenced above further stated

- '3. Commonwealth Edison fire protection engineer and M&M Protection Consultants are reviewing the results of the A fire pump test against the applicable section of NFPA20'

This action has been completed.

ATTACHMENT 2

NPF-18 License Condition 2.c.(15)(c) States:

"Prior to initial criticality, the License shall revise the periodic fire pump tests to be in accordance with Section 11.3 of NFPA 20/1983 and be conducted on 18 month intervals."

NFPA-20/1983 Sections 11-3 States:

11-3 Annual Fire Pump Tests.

11-3.1 An annual test of the fire pump assembly (pump, driver and controller) shall be performed to determine its ability to continue to attain satisfactory performance at peak loads. All alarms shall operate satisfactorily. All valves in suction line shall be checked to assure that they are fully open.

11-3.2 This annual test shall be performed by personnel trained in the operation of the fire pump.

11-3.3 Any significant reduction in the operating characteristics of the fire pump assembly shall be reported to the owner and repairs made immediately.

C. W. Schroeder to H. R. Denton dated 23 November 1983 in Issue 1 Stated:

'12a) The periodic fire pumps surveillance will be revised (or prepared) in accordance with NFPA 20. It is understood that NFPA 20 "annual test" will be performed at 18 month intervals. Commonwealth Edison Company will have these procedures and the fire pump maintenance program reviewed by a fire protection engineer for technical adequacy. The revised surveillances will be performed at the next regularly scheduled test interval.

This action has been completed. It should be noted that the Fire Protection Consultant found that the maintenance program met the requirements of NFPA 20 but the station upgraded certain aspects based on additional comments and concerns. It also should be noted that the Fire Protection consultant reviewed almost all surveillance procedures concerning the Diesel Fire Pumps and procedures other than the annual test have been revised.

In specific reference to NFPA 20/1983 section 11.3 the point of 'shut off head' was determined, by the Fire Protection Consultant, to be satisfied by doing an all valves closed test point with the relief valve inservice.

Also in specific reference to NFPA 20/1983 a new procedure was prepared to address the controller specifically.

IMAGE EVALUATION
TEST TARGET (MT-3)

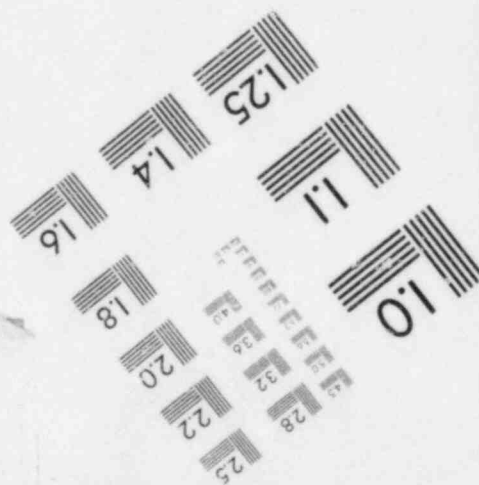
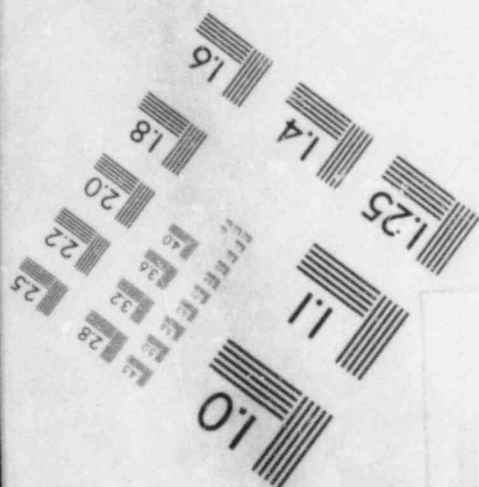
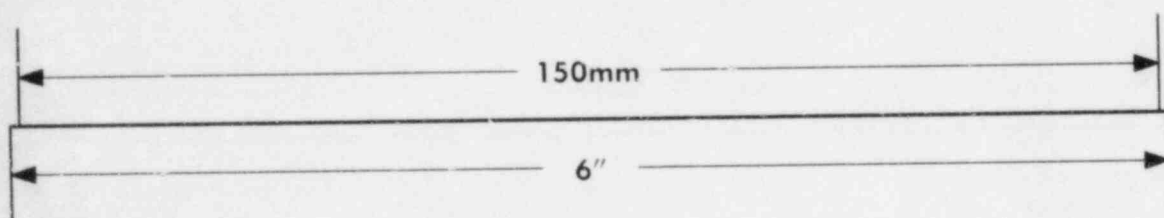
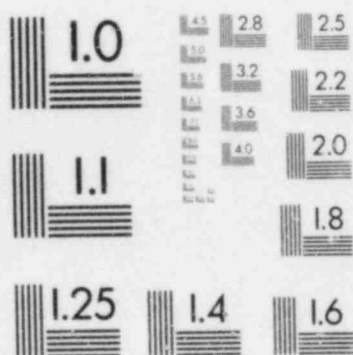
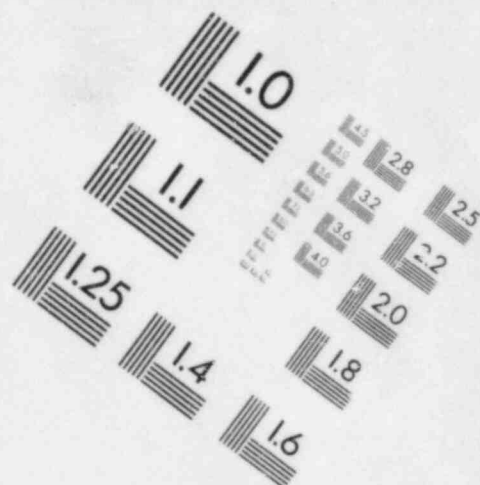
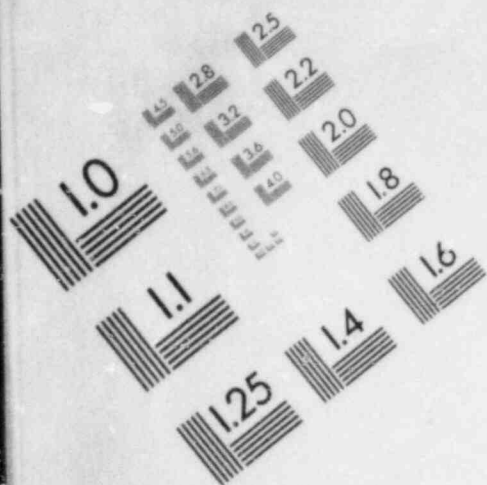
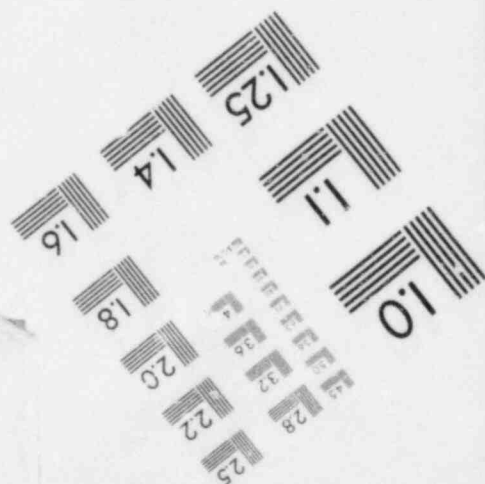
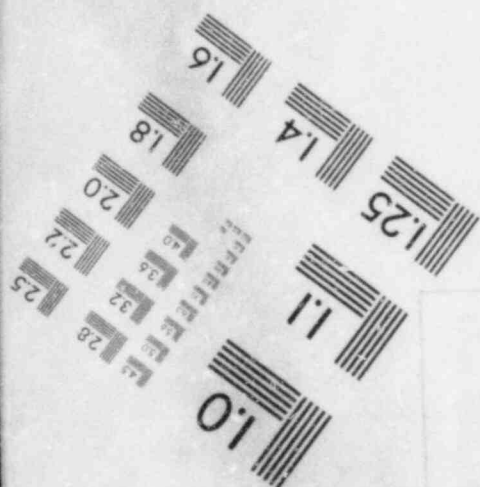
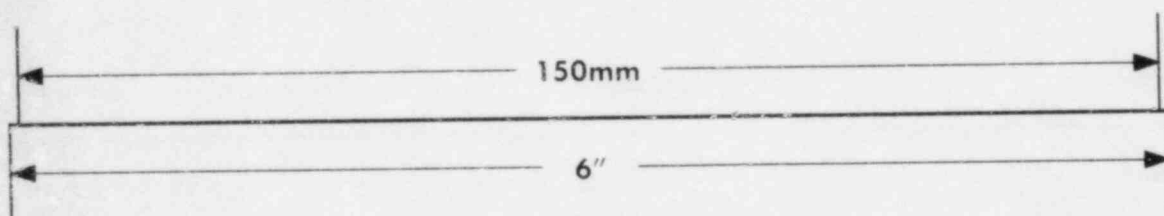
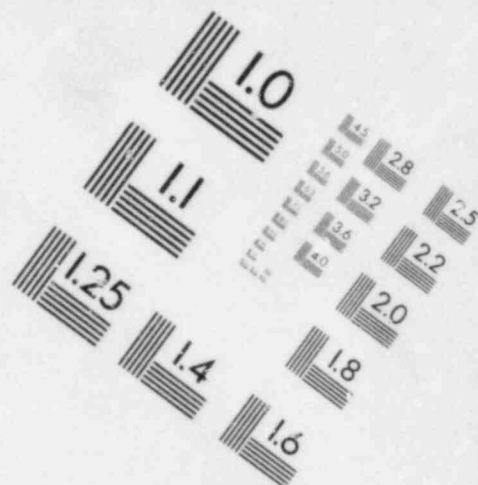
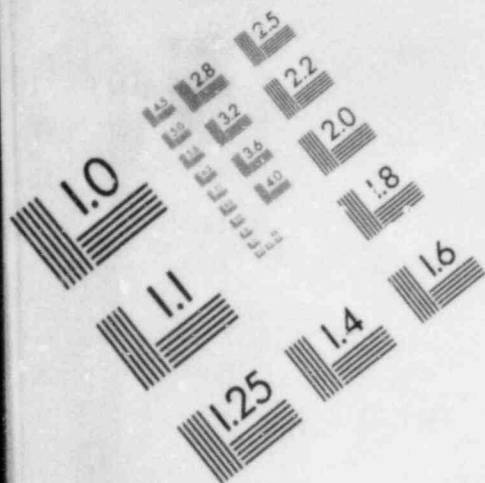


IMAGE EVALUATION
TEST TARGET (MT-3)



ATTACHMENT 2
(Contd)

Although the Fire Protection Consultants reviewed the Weekly Fire Pumps Test to NFPA 20 Commonwealth Edison has not made a commitment by this letter to a weekly Fire Pump Test. The LaSalle Technical Specification and the BWR Standardized Technical Specification require a monthly fire pump test for 30 minutes with a fuel requirement of 130 gallons.

Attached for information are the following procedures:

LTS-1000-34 'Fire Pump Flow Test'

LTS-1000-12 'Fire Pump Diesel Engine Overspeed Test,
Automatic Start Test and Automatic
Start Trips Bypass Test'

LOS-FP-W2 'Diesel Fire Pump Weekly Operational Check'

The procedures are controlled but future changes will not be forwarded to NRR.

ATTACHMENT 3

NPF-18 License Condition 2.c.(15)(d) States:

- "(d) Prior to initial criticality the licensee shall revise the fire protection loop flow test in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition published by the National Fire Protection Association.

C. W. Schroeder letter to H. R. Denton dated 23 November 1933 in Issue 1 States:

- "12b) The loop flow surveillance test procedure will be revised in accordance with Technical Specification 4.7.5.1.1.d. per Chapter 5, Section 11 of the Fire Protection Handbook, 14 Edition, published by the National Fire Protection Association, Commonwealth Edison Company will have this procedure reviewed by a fire protection engineer for Technical adequacy. The revised surveillance will be performed at the next regularly scheduled test interval."

The loop flow test procedure has been reviewed and revised in accordance with LaSalle County Station Operating License (NFP-18) condition 2.c.(15)(d) and Technical Specification 4.7.5.1.1.d to more definitively assess the state of the water distribution system. Paragraph B of the referenced Handbook states the following in part " the usual procedure for conducting a flow test on a water system is to take pitot readings on a sufficient number of hydrants to determine the capacity of the system " M&MPC, the fire protection consultant, determined contrary to paragraph B that for the LaSalle underground yard loop it is appropriate and acceptable to flow through the installed test header to develop friction loss curves.

Acceptance criteria have been embodied in the yard loop test to assure that the design requirements will be satisfied in the event of a design basis fire. The acceptance criteria takes the form of friction loss curves for selected points (hydrants) around the yard loop.

Additional flow paths have been identified and analyzed for acceptance criteria that could be used if necessary to determine the adequacy of the yard loop and interior plant supply loops, if the results of any scheduled test fall above the provide curves. The acceptance criteria were generated by computer analyses and reviewed by M&MPC.

Attached for information is LTS-1000-30 'Technical Specification Yard Loop Flow Test.' This procedure is controlled but future changes will not be forwarded to NRR. The subject test will be conducted at the next regularly scheduled test interval.