



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. NPF-11 AND

AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-18

COMMONWEALTH EDISON COMPANY

LA SALLE COUNTY STATION, UNITS 1 AND 2

DOCKET NOS. 50-373 AND 50-374

1.0 INTRODUCTION

Commonwealth Edison Company (licensee), in its submittal dated February 7, 1986, and as supplemented by letters dated March 5, 1986, proposed to amend Appendix A, Technical Specification to Facility Operating License NPF-11 and NPF-18. The proposed changes are to eliminate the chlorine detectors from the control room habitability ventilation system because of new information which indicates the very low frequency of chlorine shipments in bulk quantities near the La Salle County Station.

2.0 EVALUATION

Chlorine detectors have been a high maintenance item which require significant manhours to survey and repair at the La Salle County Station. These detectors have, on numerous times, spuriously actuated trips initiating the recirculation mode of the control room and the auxiliary electric equipment room ventilation systems. Both of these systems are engineered safety features.

The licensee indicates that chlorine detectors are not required for the La Salle County Station for reasons discussed below.

On the basis of Regulatory Guide 1.78, "Assumptions for Evaluating the Habitability of a Nuclear Power Plant Control Room during a Postulated Hazardous Chemical Release," chlorine, as a hazardous chemical, requires a habitability analysis in case there is an accidental chlorine release from stationary or mobile sources near the plant. In addition, Position 1 of Regulatory Guide 1.78 states that chlorine stored or situated at distances greater than five miles from the control room need not be considered in evaluating the habitability of the control room.

The closest industries to La Salle County Station where chlorine may be stored are greater than five miles away. The three modes of transportation of chemicals for these industries are railroads, highways and the Illinois River. The railroads and highways are all located farther than five miles from the station. Only the Illinois River is located approximately 4.7 miles north of the station. However, early in 1986, Sargent and Lundy, the licensee's architect/engineer, conducted a survey of chlorine shipments on the Illinois River, indicating that the frequency of bulk chlorine shipments is extremely low.

In addition, the topographic profile of the La Salle County Station site is favorable with respect to the settling effect of chlorine in air, since the Illinois River is located over 200 feet below the grade elevation of the Station. Moreover, the control room ventilation inlets are an additional 130 feet above grade. Hence, even in the case of a rare occurrence of chlorine release from the shipping barges on the Illinois River, the likelihood of lethal concentrations of chlorine reaching the control room is highly unlikely.

The staff reviewed the licensee's submittal and contacted the Chlorine Institute of New York, the U.S. Coast Guard in Washington, D.C., the U.S. Army Corps of Engineers, local manufacturers and two transportation terminals in the vicinity of the La Salle County Station site. The staff finds that the information from the licensee's survey of chlorine shipments is acceptable.

On the basis of the above evaluation, we find that the proposed changes will not endanger the safety of the control room operators. Therefore, the staff concludes that removal of chlorine detectors at the La Salle County Station is acceptable. However, due to potential future changes in the chlorine shipping patterns within five miles of the La Salle County Station, the staff recommended, and the licensee agreed in a letter dated March 5, 1986, to conduct a survey of chlorine shipments on the Illinois River every three years and document the results in the Annual Report of the La Salle Station.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that these amendments involve no significant increase in the amounts, and no significant changes in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that these amendments involve no significant hazards consideration which was published in the Federal Register (51 FR 8588) on March 12, 1986, and consulted with the state of Illinois. No public comments were received, and the state of Illinois did not have any comments.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Angela Chu, NRR

Dated: ~~APR~~ 11 1988

AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. NPF-11 - LA SALLE, UNIT 1 and
AMENDMENT NO. 20 to FACILITY OPERATING LICENSE NO. NPF-18 - LA SALLE, UNIT 2

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EAdensam

Attorney, OELD

CMiles

RDiggs

JPartlow

RGrimes

EJordan

LHarmon

TBarnhart (8)

FEltawila

Mary Johns, RIII