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 ALEXICH, M. P. Indiana & Michigan Electric Co.  
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SUBJECT: Submits addl info re enhancement of meteorological measuring sys at plant, including description of sys w/location of towers & location of instrumentation of towers & operational characteristics of enhanced sys, per DL Wigginton request.

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NAME	DATE	TIME	LOCATION	REMARKS
JOHN DOE	10/10/2023	14:30	Room 101	Completed task
JANE SMITH	10/10/2023	15:00	Room 102	Meeting with client
BOB JONES	10/10/2023	16:00	Room 103	Training session
ALICE BROWN	10/10/2023	17:00	Room 104	Report review
CHARLIE DAVIS	10/10/2023	18:00	Room 105	Equipment check
DAVID MILLER	10/10/2023	19:00	Room 106	Project planning
EMMA WILSON	10/10/2023	20:00	Room 107	Document review
FRANK MOORE	10/10/2023	21:00	Room 108	System update
GRACE TAYLOR	10/10/2023	22:00	Room 109	Final check
HENRY CLARK	10/10/2023	23:00	Room 110	Shutdown

# INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631  
COLUMBUS, OHIO 43216

February 6, 1987  
AEP:NRC:0999B

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74  
ADDITIONAL INFORMATION ON METEOROLOGICAL MEASURING SYSTEM

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Dear Sirs:

Per the request of Mr. D. L. Wigginton of the NRC staff, the following is additional information with regard to the enhancement of the meteorological measuring system at the D. C. Cook Nuclear Plant Unit Nos. 1 and 2 and as discussed in our letter AEP:NRC:0999A dated December 2, 1986.

Specifically, we are providing the following information: (1) additional description of the system, including the location of the towers, location of instrumentation on the towers and operational characteristics of the enhanced system, and (2) a revised schedule, including the date when meteorological data from the enhanced system should be available for use.

The three-tower system (composed of the primary tower, the backup tower and the shoreline tower) will be controlled by a central computer located at the Cook Plant site. The central computer will have the capability to be monitored by onsite and remote terminals.

The proposed locations of the towers are shown on Figure 1. The primary and backup towers will be located approximately 1 mile east of the plant and will be within the Thermal Internal Boundary Layer (TIBL) at all times. As discussed in our December 2, 1986 letter, the towers will be more representative of the meteorology within the 10-mile Emergency Planning Zone since they will be within the TIBL. For the primary tower, we propose to erect a 60-meter tower and place our instruments at the 10- and 60-meter levels. The proposed location for the backup tower is a siren pole located across from the plant entrance. Its instruments will be located at the 10 meter level of the pole. These proposed locations are subject to minor changes as details are developed. The third tower will be located just southwest of the plant on the shore of Lake Michigan. This tower is being installed to monitor unmodified air at a coastal facility. The instruments for this tower will also be located at 10 meters.

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Each tower site will be equipped with a local microprocessor. The microprocessors for the primary and backup site will be located in protective enclosures. Strip charts for windspeed and wind direction will also be located at these towers. The shoreline tower microprocessor and strip charts will be located with the central computer at the plant site. Each microprocessor will sample the analog sensor output, test for invalid or suspect data, flag and store the data, calculate 15-minute averages and respond to polling requests from the central computer. The proposed meteorological system will monitor the same parameters as are now monitored. The data recovery and data quality will be as good as, and probably better than, the data obtained from our present system.

A schematic of the computer system is shown in Figure 2. The central computer will receive signals from the three towers microprocessors. It will also be accessed by five remote terminals: one in the D. C. Cook environmental office, one in the Technical Support Center, one at the Central computer location, one at the emergency operating facility and one located at the corporate office. There will also be a printer in the environmental office. The central computer will also have the capability to send information to the Technical Support Center computer. The system could be expanded in the future to include a dial-up line from the state offices, an NRC data line and an input line from the radiation monitoring system.

The computer software for the system will include the operating system, a program to calculate 10 CFR 50 Appendix I dose estimates and a program to determine the doses from accident releases for emergency planning.

The project is scheduled for completion in June 1988. As part of this schedule the system hardware and software are to be installed by December 31, 1987. At that time we could, if necessary, be able to manually retrieve data from the new towers. The system will be run in parallel with the present system for evaluation and checkout with the turnover from old system to new system scheduled for June 1988.

If you require further details in regard to this proposed system, we will be happy to meet with your staff to discuss it.

This document has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,



M. P. Alexich  
Vice President

PAK  
2/6/87

cm

cc: John E. Dolan  
W. G. Smith, Jr. - Bridgman  
R. C. Callen  
G. Bruchmann  
G. Charnoff  
NRC Resident Inspector - Bridgman  
J. G. Keppler, NRC Regional Administrator, Region III

Rosemary Beach

Powerplant

Drain

LEGEND

X PROPOSED PRIMARY SITE

Δ PROPOSED SECONDARY SITE

O PROPOSED LAKESHORE SITE

FIGURE 1  
PROPOSED MONITORING SITE  
LOCATIONS

BM  
656

Livingston

ROAD

APPENDIX: 0999B

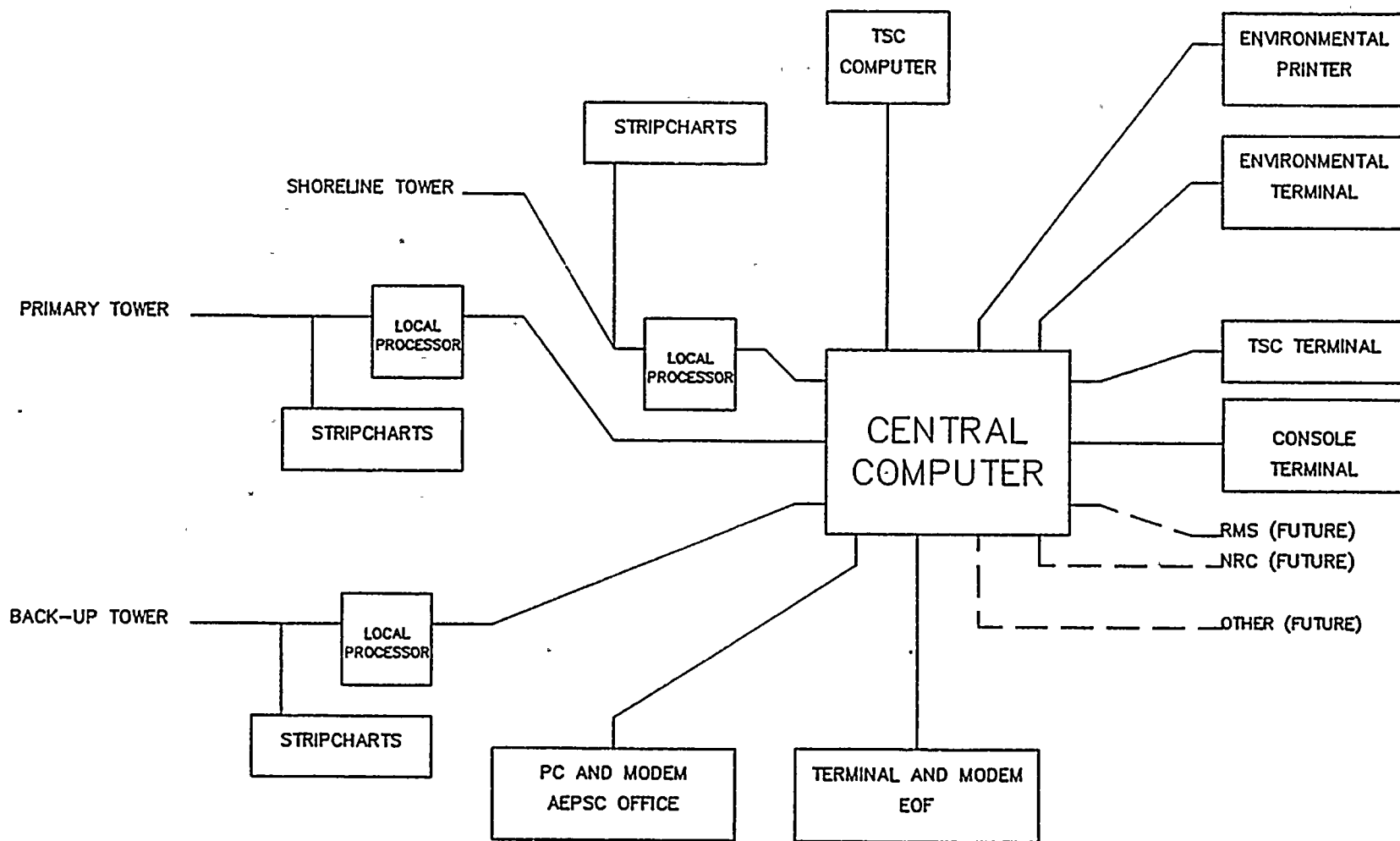


FIGURE 2

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JAN 1954