Docket No. 50-346

License No. NPF-3

Serial No. 1157

May 30, 1985

TOLEDO EDISON

RICHARD P. CROUSE
Vice President
Nuclear
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Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz
Operating Reactor Branch No. 4
Division of Licensing
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Stolz:

This letter is being submitted in regards to an inspection conducted by Region III on November 26-30, 1984 (Log No. 1-1093, Inspection Report 84-30). Toledo Edison committed, per Open Item 346/84-30-02, to contact the office of Nuclear Reactor Regulation (NRR) regarding the station vent stack monitor sample stream. The Inspection Report open item states:

> During a previous inspection, licensee representatives stated the sample stream drawn from the stack into the monitor is exhausted outside the turbine building. This matter was referred to the Meteorological and Effluents Treatment Branch of NRR for review in accordance with Standard Review Plan (SRP) 11.5. NRR's evaluation stated this sampling pathway is not consistent with Acceptance Criteria II.2.c of SRP 11.5, which indicates sample streams are to be directed back to the point of origin or to an acceptable radwaste system. This matter was discussed with the Station Superintendent who agreed to contact NRR regarding the sample stream return by June 1, 1985.

The design of the station vent stack radiation monitor exhaust was based on the following:

1. Standard Review Plan (SRP) 11.5, Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems, pertains to the monitoring of plant liquid and gaseous process streams and effluent release points.

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SRP 11.5 Sections II.1, II.3, and II.4 are applicable to the station vent stack monitors as well as other gaseous release path monitors. The station vent monitor measures the radioactivity of the air stream in the station vent as it is released to the environment.

The location of the vent monitor exhaust to the environment is not significant from an activity release standpoint because all radioactivity in the monitored effluent stream (station vent stack) is directly released to the atmosphere.

2. Sample flow rate is approximately 3.0 SCFM for each of the two vent monitors. This compares to a vent stack flow rate (release rate) of typically 120,000 SCFM. The difference in release points is in elevation only as the station vent stack exhausts 250 feet Above Ground Level (AGL) and the monitor exhausts 45 feet AGL.

   Additional filtering takes place within the radiation monitors as particulate and charcoal filters are part of the sample path. Attachment 1 represents the vent stack sample stream flow path and release points.

3. Design of the station vent stack monitor with tubing delivering the exhaust back to the vent (greater than 125 feet of tubing) would not only be unnecessary, but would increase the back pressure on the sample pump, reducing the sample inlet flow rate.

   The reduction in sample inlet flow rate would increase sample line plateout of particulates, providing a less representative sample. The present monitor exhaust design (short exhaust line) minimizes sample pump back pressure and the resulting sample line plateout.

Acceptance criteria II.2.c of SRP 11.5 is not applicable to the station vent stack monitor because the monitored sample stream is an effluent release pathway and not a radwaste process stream. The present sample stream configuration is acceptable from a radioactivity release standpoint and obtains a sample more representative of the vent stack activity than a design that routed the monitors' exhaust back to the station vent.

Very truly yours,

RPC:SGW:CMK:nlf
encl.
cc: DB-1 NRC Resident Inspector

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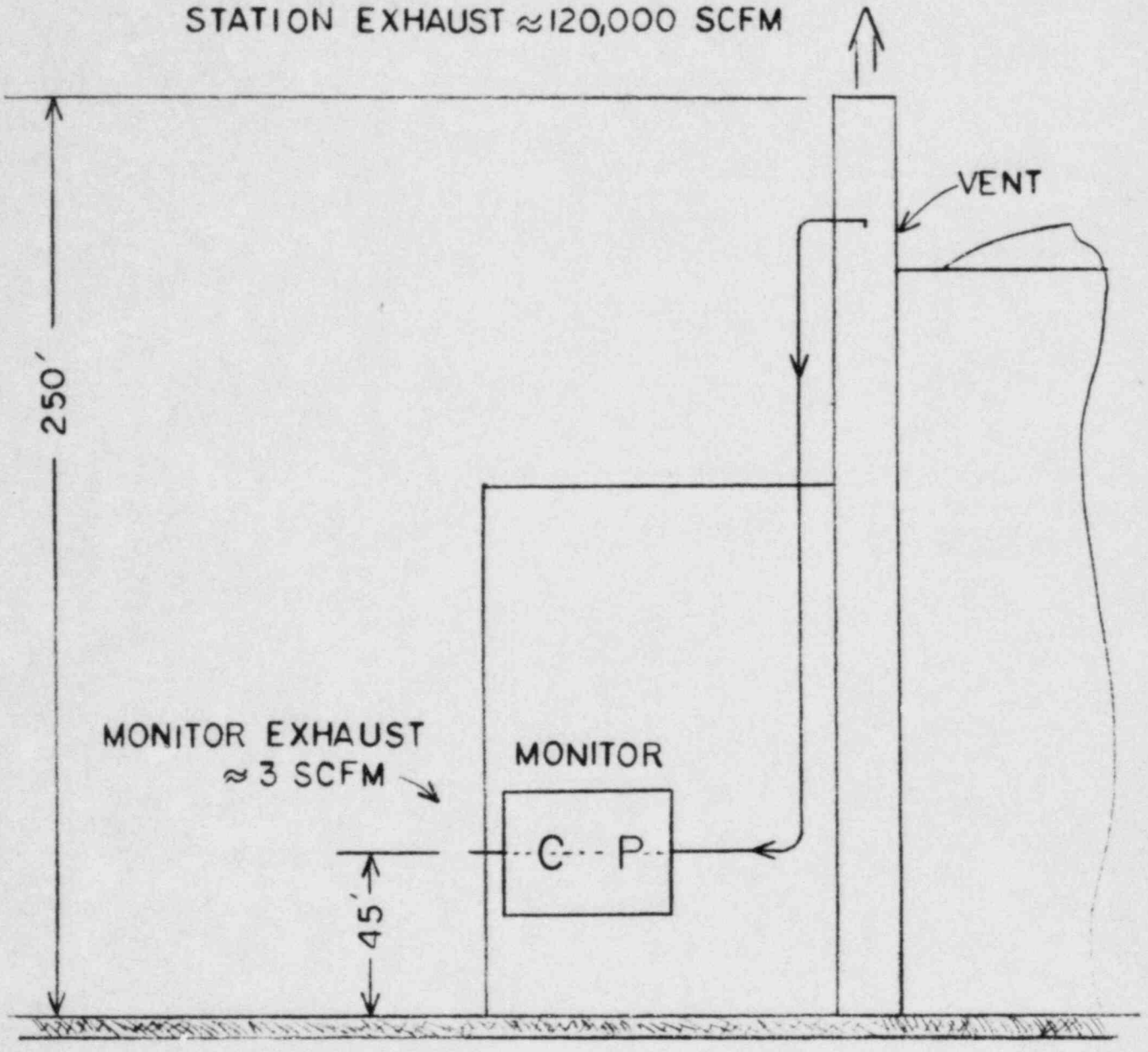
ATTACHMENT 1

VENT MONITOR FLOW PATH
(TYP. OF TWO)



P = PARTICULATE FILTER

C = CHARCOAL FILTER