## AMERICAN ELECTRIC POWER Service Corporation



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June 23, 1982

PROPOSED RULE PR-Misc Notice Req Guide

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2 Docket Nos. 50-315 and 50-316 License Nos. DPR-58 and DPR-74 COMMENTS ON PROPOSED REVISION 1 TO REGULATORY GUIDE 1.89

Mr. Samuel J. Chilk Secretary of the Commission U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Attention: Docketing and Service Branch

Dear Mr. Chilk:

This letter transmits our comments on the Nuclear Regulatory Commission's Proposed Revision 1 to Regulatory Guide 1.89, "Environmental Qualification of Electric Equipment for Nuclear Power Plants".

While Regulatory Guide 1.89, issued in November, 1974 was applicable only to plants with construction permit Safety Evaluation Reports (SERs) dated after July 1, 1974, Revision 1 to Regulatory Guide 1.89 is applicable to all operating plants. This change will have a massive impact on D. C. Cook Nuclear Plant since, in general terms, we are committed to meet the IEEE 323-1971 standards instead of the IEEE 323-1974 standard endorsed by Regulatory Guide 1.89.

All Class IE electrical equipment in the Plant will need to be environmentally qualified regardless of its location. Equipment located in mild environments will be required to have a "design or purchase specification that contains a description of the functional requirements and the specific environmental conditions during normal and abnormal conditions". The ability of the equipment will have to be supported by a certificate of compliance from the equipment manufacturer based on test data and analysis.

Even if it is restricted to new equipment only, this requirement will have a very large effect on plant operation. For example, plant zones will have to be charted and environmental conditions (temperature, humidity, radiation, pressure, chemical environment) specified for every zone.

D509 Add: Ed Hill

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June 23, 1982 Mr. S. J. Chilk - NRC The implementation section of Regulatory Guide 1.89 states that it will be used in the evaluation of the qualification of electrical equipment for all operating plants. Clarification is needed whether this means new equipment in operating plants or all equipment for all plants. Regulatory Position C.1 adds to the systems that should be qualified those systems whose failure could affect a safety system. Non-safety related circuits that share a raceway or an enclosure with safety related circuits (associated circuits) will therefore, have to be environmentally qualified. This item will impact a large majority of electrical cables installed at Cook Plant. Material aging analysis will need to be performed for all Class IE components in the Plant. Radiation analysis will also be necessary for equipment installed in mild environments for which radiation test data is not readily available. Since this is a comment letter, it has not been subject to our Corporate Procedures for transmittals to the Commission. Very truly yours. R. W. Jurgensen RWJ/os Assistant Vice President Nuclear Engineering cc: John E. Dolan - Columbus R. S. Hunter W. G. Smith, Jr. - Bridgman R. C. Callen G. Charnoff