

FEB -2 1993

Docket Nos. 50-338, 50-339
License Nos. NPF-4, NPF-7

Virginia Electric and Power Company
ATTN: Mr. W. L. Stewart
Senior Vice President - Nuclear
5000 Dominion Boulevard
Glen Allen, VA 23060

Gentlemen:

SUBJECT: NORTH ANNA ELECTRICAL DISTRIBUTION SYSTEM FUNCTIONAL INSPECTION
(EDSFI) ISSUES UNDER REVIEW: BYPASS OF EMERGENCY DIESEL GENERATOR
(EDG) AIR START TIMER CIRCUIT AND EDG AUTOMATIC START SURVEILLANCE
TEST ACCEPTANCE CRITERIA

This is to inform you of our conclusions regarding two issues related to EDG design and operating practices which were identified for further NRC review in EDSFI Report No. 50-338,339/91-17.

The first issue was related to your EDG design which provides for bypass of the air start timer circuit in the emergency mode which could result in exhausting all reserve starting air on a failed start attempt. For the last 6 to 7 years the NRC has recommended an approach of not exhausting all starting air if the EDG does not start on the first or second attempt. It is our understanding that the industry is generally in agreement with this thinking and has been implementing such an approach. Our evaluation has concluded that your design may not provide sufficient time for operations to react appropriately to an abnormal EDG unit condition. North Anna should consider conserving enough air in the air start receiver tank to allow a minimum of one engine start in the event that the EDG fails to start during the emergency mode. It is not clear that you have adequately evaluated this design aspect. We request you evaluate this design aspect in light of the EDSFI Report and the current staff and industry practice.

The second issue was related to EDG automatic start test acceptance criteria which would permit acceptance of an EDG start test when the voltage parameter had reached the acceptance band but was oscillating beyond the band in the observed time period. We can find no basis for acceptance of an automatic EDG start test under this condition and we do not believe that the acceptance criteria in your procedure (2-PT-82-2A) meet the intent of Technical Specification Surveillance requirement 4.8.1.1.2-C. This criteria is inconsistent with IEEE 387, Standard Criteria for Diesel Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations, and Regulatory Guide 1.108, Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants. We request that you re-evaluate the acceptability of the above acceptance criteria.

9302160066 930202
PDR ADOCK 05000338
Q PDR

IE01 1/0

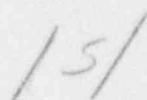
Virginia Electric and Power
Company

2

FEB - 2 1993

We request that you address these issues and provide to us within 60 days of receipt of this letter your conclusions and anticipated corrective actions where applicable. Should you have any questions concerning this letter, please contact us.

Sincerely,



Albert F. Gibson, Director
Division of Reactor Safety

cc w/o encl:

M. L. Bowling, Jr., Manager
Nuclear Licensing
Virginia Electric & Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

G. E. Kane, Station Manager
North Anna Power Station
P. O. Box 402
Mineral, VA 23117

Executive Vice President
Old Dominion Electric Cooperative
4201 Dominion Boulevard
Glen Allen, VA 23060

Dr. W. T. Lough
Virginia Corporation Commission
Division of Energy Regulation
P. O. Box 1197
Richmond, VA 23209

William C. Porter, Jr.
County Administrator
Louisa County
P. O. Box 160
Louisa, VA 23093

Michael W. Maupin, Esq.
Hunton and Williams
P. O. Box 1535
Richmond, VA 23212

(cc w/o encl cont'd - See page 2)

Virginia Electric and Power
Company

3

FEB - 2 1993

(cc w/o encl cont'd)
Patrick A. O'Hare
Office of the Attorney General
Supreme Court Building
101 North 8th Street
Richmond, VA 23219

C. M. G. Buttery, M.D., M.P.H.
State Health Commissioner
Office of the Commissioner
Virginia Department of Health
P. O. Box 2448
Richmond, VA 23219

bcc w/o encl:
P. Fredrickson, RII
L. Engle, NRR
Document Control Desk

NRC Resident Inspector
U.S. Nuclear Regulatory Commission
Route 2, Box -A
Mineral, VA 22117

RII:DRS
mem
RMoore
09/17/92

RII:DRS
MSH
MSHymlock
09/17/92

RII:DRS
CJ
CJutlan
09/17/92

RII:DRP
PF
PFredrickson
09/17/92

RII:DRS
AF
AFGibson
09/17/92

2/3/93