September 2, 1981

Docket No. 50-331

Mr. Duane Arnold, President Iowa Electric Light & Power Company P. O. Box 351 Cedar Rapids, Iowa 52406

Dear Mr. Arnold:

Subject: REACTOR PROTECTION SYSTEM (RPS) POWER MONITORING SYSTEM DESIGN MODIFICATION

RE: DUANE ARNOLD ENERGY CENTER

By letter dated September 25, 1980 you submitted design information for the subject modification that you intend to install at your facility. As previously discussed with members of your staff, we have reviewed this information and find that, to complete our evaluation, we will require the additional information requested in enclosure (1). Please provide this information within 120 days.

Enclosure (2) forwards, for your consideration, model Technical Specifications for Electric Power Monitoring for RPS. Submittal of the proposed Technical Specifications for this modification should be in the form of a request for modification of your license accompanied by an appropriate fee.

This request for information was approved by OMB under clearance number 3150-0011 which expires September 30, 1981. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management, Room 3208, New Executive Office Building, Washington, D.C. 20503.

Thank you for your cooperation.

Sincerely,

Thomas A. Ippolito, Chief Operating Reactors Branch & Division of Licensing

SEP

Enclosures: As Stated

See next page

Distribution: Docket File-NRC PDR-Local PDR-ORB#2 Reading-D. Eisenhut-TERA-ACRS(10) J. Heltemes, AEOD-T. Ippolito-S. Norris-K. Agecleston-OELD-I&E(3)-NSIC-J. Van Vliet

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Mr. Duane Arnold Iowa Electric Light & Power Company

cc:

Mr. Robert Lowenstein, Esquire Harold F. Reis, Esquire Lowenstein, Newman, Reis and Axelrad 1025 Connecticut Avenue, N. W. Washington, D. C. 20036

Cedar Rapids Public Library 428 Third Avenue, S. E. Cedar Rapids, Iowa 52401

U. S. Nuclear Regulatory Commission Resident Inspectors Office Rural Route #1 Palo, Iowa 52324

### RPS POWER SUPPLY DESIGN MODIFICATION

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#### REQUEST FOR ADDITIONAL INFORMATION

### DUANE ARNOLD ENERGY CENTER

### DOCKET NO. 50-331

- Submit detailed drawings of the proposed design modification to the monitoring system for the RPS power supplies (MGs and alternate source). The drawings should include component ratings, and schematic and wiring diagrams. Detailed relay information may be submitted in the form of the manufacturers Technical Bulletin.
- 2. Provide justification that proposed time delays, if any, will not result in damage to RPS system components or affect the performance of required safety functions.
- 3. Provide justification that the design modification and components will meet the requirements of GDC 2 and GDC 21 of 10 CFR Part 50, Appendix A.
- 4. Specify monitoring system over-voltage, under-voltage, and under-frequency trip setpoints.

Enclosure (1)

### ELECTRICAL POWER SYSTEMS

# 3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

## ELECTRIC POWER MONITORING FOR REACTOR PROTECTION SYSTEM

## LIMITING CONDITION FOR OPERATION

3.8.2.7 The power monitoring system for the in service RPS MG set or Alternate Source shall be OPERABLE.

APPLICABILITY: CONDITIONS 1 and 2.

#### ACTION:

With the power monitoring system for the in service RPS MG set or Alternate Source inoperable, restore the inoperable power monitoring system to OPERABLE status within 30 minutes or remove the RPS MG set or Alternate Source associated with the inoperable power monitoring system from service. One channel of a power monitoring system may be inoperable, as necessary for test or maintenance, not to exceed 8 hours/month.

### SURVEILLANCE REQUIREMENTS

4.8.2.7 The above specified RPS power monitoring system instrumentation shall be determined OPERABLE:

- a. At least once per six months by performing a CHANNEL FUNCTIONAL TEST; and
- b. At least once per operating cycle by demonstrating the OPERABILITY of over-voltage, under-voltage and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  - 1. Over-voltage < \_\_\_\_ VAC,
  - 2. Under-voltage > \_\_\_\_\_ VAC, and
  - 3. Under-frequency ≥ \_\_\_\_ Hz.