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ComEd

November 12, 1996

Mr. A. Bill Beach
Regional Administrator
U. S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Subject: Programs to Improve the Quality, Maintenance, and Accessibility of the Design Bases at ComEd Nuclear Stations

Dear Mr. Beach:

**Background**

As a result of recent NRC inspections at ComEd's Nuclear Stations, as well as our own self assessments, ComEd has initiated several short term and long term corrective actions at all or our nuclear stations to improve the quality, maintenance, and accessability of design information.

**History of Design Information Control at ComEd**

Until 1994, ComEd relied heavily on outside engineering contractors to maintain design information at our nuclear stations. In 1994, ComEd began a three year strategic plan to transition engineering design leadership to ComEd. This plan consisted of four main elements:

1. Establishing and staffing an in-house design organization: To ensure consistency and continuity in maintaining the design bases, we hired engineers and designers from our primary contractors.

2. Training: We placed a high priority in training and certifying our less experienced personnel to perform engineering design work.

3. Design Information Access: We developed and assembled existing design bases information in a common format for the top 20-25 risk significant systems and topical subjects for the older stations (Dresden, Quad Cities, and Zion Station).

4. Design Information Control: We are in the process of transferring direct control of high-use calculations, drawings, and data bases from our contractors into ComEd control.

**Immediate Actions following Zion and LaSalle Inspections**

Following the recent inspections and events at Zion and LaSalle, ComEd self initiated the following *corrective actions at all six stations*:

1. Completed validating the UFSAR information for a minimum of two systems against the operating and surveillance procedures.

2. Established engineering oversight teams to review operability and safety (50.59) evaluations.

3. Completed a change to our action request screening program to include a licensed operator and an Engineering Department representative on the screening committee.

4. Completed a review of Technical Specification Interpretations against the Technical Specifications.

5. Completed a review of safety evaluations of old modifications with partial implementation and established schedules to close them out in a timely manner.

6. Commenced an Engineering Department safety system functional inspection at each ComEd site.

7. Commenced consistency reviews of in-service testing (IST) programs against the Design Bases.

8. Commenced effectiveness reviews of the Plant Operations Review Committees.

**Dresden Independent Safety Inspection Lessons Learned**

The recent Independent Safety Inspection (ISI) at Dresden identified some instances of missing design information, lack of ready access to design information, and problems with control of design information. Recent enforcement actions at LaSalle and Zion confirm that these problems are present, to varying degrees, at our other nuclear sites.

In a letter from J. Stephen Perry to Bill Beach, dated November 8, 1996, we reported that a series of reviews of the top 10 risk significant systems at

Dresden Station were conducted to verify that current plant conditions are safe and support continued unit operation *(Assessment of Current Conditions)*. I have directed the Station Vice Presidents of the other ComEd nuclear plants to conduct similar reviews of their top risk significant systems by February 14, 1997.

I have reviewed the other compensatory actions being taken at Dresden as described in Mr. Perry's letter and have directed the following similar short term actions be taken at the other nuclear stations:

1. Establish an Engineering Assurance Group by February 1, 1997 reporting to the Station Engineering Manager consisting of experienced engineering personnel to provide oversight of key engineering activities. The organization will continue these functions until normal engineering activities have improved to the point where these reviews are no longer necessary.

2. Revise Nuclear Engineering Procedures to provide specific direction to engineers on steps to be followed whenever a potential Design Bases discrepancy is identified. Revisions issued and associated training completed by February 1, 1997.

3. Expand the SQV audits of our major contractors with focus on: 1) Interfaces with ComEd; 2) Design control processes; and, 3) Corrective action notification. An action plan will be developed by December 31, 1996 to include principal architect-engineers, fuel suppliers, and NSSS vendors.

4. Critical calculations are an important part of maintaining the Design Bases. ComEd will define the set of calculations that are critical to maintaining design control and reconstitute them when they do not exist. Until this long term program is completed, we will validate or reconstitute a critical calculation when needed to support ongoing operations or new modifications.

I have directed the Engineering Vice President to evaluate the long term actions described in Mr. Perry's letter, and provide me a comprehensive plan by December 31, 1996 to upgrade the quality and access to design information at all six stations. This plan is being developed in conjunction with our response to Mr. Taylor's 10 CFR 50.54(f) letter on Design Bases Control.

We recognize that a substantial financial commitment is necessary to conduct these short and long term actions successfully, but acknowledge that this is a necessary investment to reach our goal of conducting the majority of engineering design functions in house. We view these efforts are essential to safe and competitive electricity generation.

Sincerely,

Thomas J. Maiman

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Executive Vice President

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