Wayne H. Jens Vice President Nuclear Operations

Detroit

2000 Second Avenue Detroit, Michigan 48226 (313) 586-4150

> May 17, 1984 EF2-69104

PRINCIPAL STAF RA PRPV D/RA DRMSF DRMA SC. PAO SGA ML ENF File

Mr. R. C. Knop, Section Chief Projects Section 1C U. S. Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, IL 60137

Dear Mr. Knop:

Reference: Fermi-2

NRC Docket No. 50-341

Subject:

Specification for Fermi-2

Final Assessment of Construction

Following our meeting in Glen Ellyn yesterday, we have called the contractors and sent them a modification of the Final Assessment of Construction that we discussed in your office. I believe it now reflects your comments, and we see no problem in proceeding along the lines indicated.

One major change that I made was to require a list of significant deviations known to the NRC that could be generic so that it could be included in the work plan. I assume that Pat Gwynn can provide that information for us.

The second change that was made was to require a detailed work plan to be written as Phase I of the contract. This work plan would be discussed with you as the next step in our program. We previously had planned to meet with you prior to the award of the contract, but we now plan to meet with you about June 11, a week after award of the contract, with a detailed work plan.

If you have any questions regarding this new specification, please call me.

Sincerely,

WHJ:mb

cc: P. M. Byron

W. R. Holland

Enclosure

Phayne A. Jens.

8406010126 840517 PDR ADDCK 0500034

SPECIFICATION FOR FERMI-2

FINAL ASSESSMENT OF CONSTRUCTION

May 17, 1984

Purpose

The purpose of this assessment is to make a final walkdown of safety-related systems and structures in the reactor and auxiliary buildings to determine if <u>significant</u> deviations from the final design disclosure documents exist, that were not detected during previous walkdown, assessment, inspection or testing activities. This assessment is to provide reasonable assurance that the plant is constructed in accordance with the final design disclosure documents.

Scope

- Contractor is to provide qualified, experienced engineers (Field Engineers with relevant experience are preferred). Several Quality Control Inspectors should also be included.
- 2. The Contractor shall select sufficient portions (samples) of safety-related systems, subsystems and components to provide adequate confidence that Fermi-2 was constructed as designed. The sampling plan and bases for selection shall be determined by the Contractor and concurred by the Contract Administrator. With assistance from the DECo Contract Administrator, the Contractor shall assemble the relevant design disclosure documents for the samples selected. The systems selected shall include mechanical, electrical and I&C systems and subsystems, attached structural supports for these systems, and steel structures, with emphasis on drywell locations.
- 3. Determine the attributes important to system safety functions that will be verified in the assessment. Input will be obtained from the NRC on significant deficiencies discovered at other construction sites.
- 4. The contractor is to establish the methodology to be used such as selecting annotated design documents (e.g., drawings, specifications, procedures, etc.) as checklists, walkdown the systems and verify the acceptance of attributes selected.
- 5. The areas and systems to emphasize are those in which a number of contractors have done work which include instances where work was done using normal design documents where relatively large numbers of design changes (DCN, DCR, FMR) have occurred. The assessment should also include systems where design packages consisted of Design Change Packages (DCP's).

- 2 -The attributes shall include, but not be limited to, the follow-6. ing in the assessment: Clearances required for thermal expansion. Missing hardware (e.g., components, supports, or parts of supports and components). Installed hardware not shown on final design documents. d. Improperly installed hardware. 7. During the assessment, areas of concern that conform to design documents but to an experienced engineer do not appear to be correct, shall be identified and routed to DECo Engineering for explanation and verification of the design. Emphasis should be placed on system attributes which are not readily verified during construction or preoperational testing (e.g., seismic features). 8. Since the piping systems will be insulated and other structures may be coated or otherwise covered, and electrical connections all made, some removal should be made to verify construction but this should be minimized. 9. All confirmed (concurred with by DECo Engineering) discrepant attributes or deviations detected shall be identified and formally dispositioned using the Fermi-2 Nonconformance Reporting System (Ref. Procedure 12.000.52T). Contractor shall evaluate previous "third party" assessment reports 10. to determine whether they can be endorsed and incorporated into the conclusions of the final assessment of construction. One of these assessments addressed the adequacy of quality records, in general, and specifically included an assessment of the core spray system. The specific system portion of this assessment was not completed. The scape of the assessment shall include the completion of the core spray system records assessment and field verification of selected components. Caution should be exercised in carrying out this assessment since 11. many of the systems may be energized or filled with fluids under pressure. 'The contractor shall conform to Fermi-2 safety programs and rules. A full-time NRC Manager will be assigned to this assessment to 12. work closely with the assessment team and the Edison Contract Administrator. The NRC Manager will have the authority to add to the scope provided some compensating scope is subtracted. The final report format shall be agreed to in the work plan 13. and it will document all the findings of the assessment and how they were dispositioned. The assignment shall be initiated with a Phase I which will be 14. a detailed development of the work plan which will be discussed

with the NRC and sent to them to document the scope of work prior to initiation of subsequent phases. The NRC Manager will participate in the Phase I work.

15. A copy of the final report will be simultaneously sent to the NRC as well as to Detroit Edison.

Assumptions

- It shall be assumed that the design documents are correct; i.e., no effort should be made to recalculate or examine the design calculations, except for reconcilliation of differences of opinion/judgment between the Contractor and DECo Engineering.
- 2. The final design disclosure is defined as those documents that were used to build the plant or the "as built" documents that were reviewed and approved by DECo Engineering as being adequate.
- 3. It is expected that, for those assessments endorsed by the Contractor (reference Item 10 under Scope), less effort will be placed on the areas or attributes addressed by these assessments.

Organization

Detroit Edison will provide a Contract Administrator who will assist in providing space, clerical help, instructions on protective procedures, etc., and who will serve as the principal interface with the Contractor for all technical and administrative matters.

DECo Engineering will provide training, in the form of a lecture, on the organization of engineering information. Nuclear Administration will provide training on how to acquire the latest design disclosure documents.

Contractor to meet regularly (details to be arranged) with Contract Administrator, the NRC Manager, et al, for interim review of results of the ongoing assessment and to permit the Edison team to provide information and background when the documentation is not available or could not be found by the Contractor.

Schedule

Proposals to be submitted by May 25, 1984.

Proposals to be evaluated and selection made by May 30, 1984.

Contractor to be notified by May 30, 1984.

Initiate work by June 4, 1984.

Complete Phase I work plan by June 11, 1984, and initiate walkdown.

Complete on-site work by July 15, 1984.

Final Report by July 30, 1984.

Final Report submitted to Region III August 6, 1984.

Prepared by:

T. A. Alessi, Director

Corporate Quality Assurance

Prepared by:

G. M. Trahey, Director Nuclear Quality Assurance

Approved by:

Wayne Hy Jens Vice President

Nuclear Operations

/mb

VP-84-0114

Revision 4