

U. S. ATOMIC ENERGY COMMISSION
REGION I
DIVISION OF COMPLIANCE

Report of Inspection

CO Report No. 247/71-9

Licensee:

Consolidated Edison Company
Indian Point No. 2 (IP-2)
License No. CPPR-21
Category B

Dates of Inspection:

May 4, 5, 14, 26 and 27, 1971

Dates of Previous Inspection:

April 6, 7, 8, 21 and 22, 1971

Inspected by:

G. L. Madsen
G. L. Madsen, Reactor Inspector

6/23/71
Date

Reviewed by:

N. C. Moseley
N. C. Moseley, Senior Reactor Inspector

6/29/71
Date

Proprietary Information:

None

SCOPE

Announced inspections were made to the IP-2 construction site on May 4, 5, 14, 26 and 27, 1971. Major items reviewed included preoperational testing, power ascension programs, operating procedure preparation, pipe support installation, reactor internals preparation, implementation of security and emergency plans, and resolution of previously identified items. Mr. M. Hildreth, CO:HQ, reviewed operation procedure coverage at the IP-2 site on May 26 and 27, 1971.

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SUMMARY

Ninety-eight percent of the Phase II preoperational tests have been written. Five additional test items are under consideration. (Section II.A.1)

Eighty percent of the Phase II preoperational testing, that is scheduled to be completed prior to core loading, has been completed. The review of test results is progressing. (Section II.A.3)

Wedco has presented 25 of 29 power ascension tests to Con Ed for review. Sixteen of the 29 procedures have been approved. Compliance has identified five apparent differences between the proposed program and the AEC Guide for Planning Startup Programs which require resolution. Con Ed is making a comparison between the proposed program and the AEC Guide and will respond to apparent differences identified. (Section II.B)

About 1350 pipe hangers and restraints remain to be installed. Some 550 of these are within containment. Surveillance of pipe movement is scheduled to be performed during the next heatup, however, a specific program has not been formalized. (Section II.C)

Several corporate management assignments were recently instituted. A Quality Assurance organization, at the corporate level, has been established within Con Ed. (Section II.D)

Sixteen individuals have been awarded SRO or RO licenses for IP-2. (Section II.D)

Progress is being made in upgrading routine operating procedures. A number have been rewritten. The specific new procedures reviewed by the inspector met the TS requirements with the exception that the "as low as practicable" concept was not included. Additional followup will be made by CO. (Section II.E)

The reactor internals were removed for examination and preparation for core loading. Final inspection and cleaning of the reactor vessel and lower internals has been completed. The lower internals were reinstalled. (Section II.F)

The outer seal of reactor coolant pump 21 is being replaced and the pump internals, shaft and seal assembly is scheduled to be replaced on reactor coolant pump 24. (Section II.H)

A review of control rod and plugging device installation in fuel elements indicated that the various inserts were correctly positioned. (Section II.J)

The security program for IP-2 is basically an extension of the measures presently in effect at IP-1. Items requiring completion include fencing, normal passageways to the control access areas and door installation. (Section II.K)

Implementation of the contingency plans (earthquake, fire, tornado and radiation) as described in the FSAR are in progress. Present plans include performance of a notification drill. The implementation program for the Wedco

construction personnel was not readily available. (Section II.L)

Resolution to eight previously identified items are included in this report. (Section II.M)

A listing of items requiring followup is included. (Section II.N)

DETAILS

I. Persons Contacted

A. Con Ed

Mr. A. Corcoran, Construction Project Superintendent
Mr. P. Leo, Assistant Construction Project Superintendent
Mr. E. Dadson, Quality Assurance Supervisor
Mr. A. Kohler, Nuclear Engineer, Construction
Mr. S. Austin, Senior Mechanical Engineer
Mr. J. Makepeace, Startup Manager, IP-2
Mr. R. Cosgrove, Mechanical Engineer, Startup
Mr. H. Kerns, Mechanical Engineer
Mr. S. Cantone, Superintendent, Performance

B. Wedco

Mr. W. Hooten, Project Manager
Mr. W. Dibeler, Manager, Quality Control
Mr. R. Matheny, Manager, Startup Operations

II. Results of Inspection

A. Preoperational Testing

1. Status of Procedure Preparation

Preparation of proposed Phase II preoperational test procedures is 98% complete. The remaining two proposed procedures are in the final review status. Test coverage for seven additional items is under consideration.* The resolution status for these seven items is as follows:

a. Procedures being written for:

- 1) Boron line heat tracing
- 2) Voice communications
- 3) Hydrogen recombiner
- 4) Filter testing

*CO Report No. 247/71-8, paragraph II.A.1.

b. Under consideration:

Wedco collected data during the hot functional testing and is presently analyzing the data versus the FSAR* commitments for testing the RCS leak rate detection instrumentation.

c. Resolutions

- 1) Con Ed and Wedco have taken the position that the operability testing requirements** for the pressurizer and main steam safety valves has been fulfilled. Their conclusion is based on satisfactory vendor shop testing and subsequent in place testing which verified freedom of the valves to operate. The inspector visually inspected the surfaces of the pressurizer safety valves and no surface damage was evident. On the basis of the above, this item is considered to be resolved.
- 2) Wedco previously presented data relative to the diesel generator test program and concluded that adequate testing has been performed to prove satisfactory operation.*** Con Ed engineering subsequently evaluated the data and concur with the Wedco position. On the basis of data and evaluations presented, this item is considered to be resolved.

2. Review of Functional Test Procedures

The following system functional test procedures were reviewed

- 4.2.6 Boric Acid Blender Calibration
- 4.6.4 Solid Waste
- 4.8.4 Reactor Protection Setpoint Verification
- 4.23.1 FW System Functional

These procedures have been approved for use by Wedco and Con Ed and the procedure coverage was found to be acceptable. An addendum to procedure 4.8.1 was issued and reviewed. This addendum includes a checkout of the reactor trip breakers and interlocks and provides a resolution for previous concerns on this item.****

*Q-4.4.4.

**FSAR Table 13.1-1.

***CO Report No. 247/71-8, paragraph II.A.1.

****CO Report No. 247/71-8, paragraph II.A.2.

3. Status of Test Performance

The status of Phase II system functional testing scheduled to be completed prior to core loading is as follows:

a. Tests to be performed	66
b. Tests completed	53 (80%)
c. Tests in progress	7 (11%)
d. Test results reviewed by Wedco	25 (37%)
e. Tests results reviewed by Con Ed	7 (11%)

The fire protection, primary sampling and DC power supply systems have been accepted by Con Ed, with exceptions noted on punchlists approved by Wedco and Con Ed. The major noted exception was the need for testing of the tunnel fog spray system as required by Addendum II to preoperational procedure 4.17. A review of the test results by the inspector revealed no significant discrepancies.

During a review of the service air procedure, it was noted that the data sheets were not fully completed.* Con Ed indicated that many of the values were included in the body of the procedure and duplicate numbers were not recorded on the data sheet. The inspector made a step-by-step comparison of the data contained in the body of the procedure and the omissions noted on the data sheets and noted that the required data was recorded.

The inspector asked if the final containment leak rate report was available for review. Mr. Kohler indicated that Gilbert Associates had submitted the report to Westinghouse for review and that the report should be available in the near future and that a copy will be submitted to DRL.

The inspector inquired as to the availability of hot functional vibration data for the reactor internals. Messrs. Matheny and Kohler stated that the data is being evaluated by Westinghouse at Penn Center and the result probably would not be available for some months. The inspector encouraged Con Ed to obtain results information in a more prompt time span.

4. Major Problem Encountered

Some isolation valve seal water system leakage exceeded the predicted values as presented in procedure 4.34.** Wedco and Con Ed have evaluated the test results and have concluded that the variance between the measured and predicted values was caused by the existence of open valves during the early phases of the test.

*CO Report No. 247/71-8, paragraph II.A.3.

**CO Report No. 247/71-8, paragraph II.A.4.c.

Wedco and Con Ed stated that the final steps were performed with valves in the closed position and the observed leakages were within the acceptance values. The inspectors review of the test results failed to uncover shortcomings in the Wedco and Con Ed conclusion. The item is therefore considered to be resolved.

B. Power Ascension Program

Wedco has submitted 25 of 29 proposed power ascension test procedures to Con Ed for review. Sixteen of the 29 procedures have been approved for use by Con Ed. As previously discussed, Compliance's review of the proposed program identified apparent differences associated with loss of flow, generator trip, turbine trip, shutdown from outside the control room and internals vibration testing.* Procedure 9.5, Plant Trip Test, has been expanded to include turbine trip testing at 35 and 100 percent reactor power. This turbine trip testing fulfills the essential requirements of the AEC Guide for Planning Initial Startup Programs. The inspector asked if Con Ed had completed their comparison of the proposed power ascension program versus the AEC Guide. Mr. Makepeace indicated that negotiations are in progress with Westinghouse. The inspector stressed the need for prompt resolution of differences which may exist and that these resolutions were an essential ingredient in Compliance's finding that an acceptable power ascension program exists. The inspector also pointed out that the existence of an approved power ascension program is normally required to exist prior to issuance of an operating license. Mr. Makepeace showed the inspector a listing of items presented to Westinghouse for consideration. The inspector inquired as to a proposed deadline for definition of the final program and presentation of explanations relating to differences between the proposed program and the AEC Guide. Mr. Makepeace indicated a 4 to 6 week time span. The inspector indicated that this would not permit CO's evaluation of the program prior to resumption of the Public Hearing on July 13, 1971. Mr. Makepeace indicated that an attempt will be made to resolve this item at an earlier date.

Mr. Makepeace presented the inspector with a "Draft" administrative procedure for the power ascension program. A review of this procedure by the inspector indicated that the essential requirement of the AEC guide would be fulfilled by an approved procedure of this nature. Mr. Makepeace indicated that an approved procedure would be available in the very near future.

C. Pipe Supports

CO has previously voiced concerns relative to the performance of hot functional testing prior to the installation of 100% of the pipe supports.**

*CO Report No. 247/71-6, paragraph II.B.

**CO Report No. 247/71-4, paragraph II.B.7.

The control programs and installation status were previously reported.* As of May 7, 1971, the following seismic restraints, whip restraints and dead-weight hangers remain to be installed:

1. Inside containment and on lines up to the second valve outside of containment - 550.
2. Remainder of plant - approximately 800.

The inspector asked if a pipe monitoring program had been prepared as discussed during the last inspection.** Mr. Corcoran indicated that preparation of this item is in progress.

D. Organization

The following corporate management assignments were recently instituted by Con Ed:

1. Vice President of Power Generation - Mr. B. Caldwell replaced Mr. T. Griffin.
2. Asst Vice President of Power Generation - Mr. G. Sarakas replaced Mr. R. Freyberg.
3. Vice President of Construction - Mr. W. Coburn replaced Mr. A. Husband.
4. Vice President of Quality Assurance - Mr. T. Griffin. This is a newly established organization within Con Ed. The exact roll of involvement for this group has not been totally defined; however, the organization is to provide Quality Assurance coverage for all Con Ed plants (nuclear and conventional). Dr. Gordon has been hired as the Quality Assurance Director and several individuals have been transferred from the Mechanical Engineering Bureau to the QA organization.

Fourteen individuals have been issued SRO licenses and two individuals have been issued RO licenses for IP-2. One individual failed his walk through examination for an RO license and is scheduled for a retake. Six operating mechanics from IP-1 have been assigned as control room operator-B's at IP-2. Present plans call for training assignments on shift at IP-2 followed by formal classroom training in preparation for licensing.

E. Operating Procedures

The inspector examined the revised index of procedures and five procedures at the site on March 25 and 26. Results of the review are:

*CO Report No. 247/71-6, paragraph II.D.

**CO Report No. 247/71-8, paragraph II.C.

1. Index of Operating Procedures

Since the last review of procedures*, 25 procedures have been added to the index. These procedures were added to provide the required procedures in the following areas:

- a. Engineered safety features and systems.
- b. Systems whose failure might cause or increase the severity of a loss-of-coolant accident or result in an uncontrolled release of excessive amounts of radioactivity.
- c. Systems and components vital to safe shutdown and isolation of the reactor.

A review of the revised index indicates that procedures required by the TS will be provided.

2. Operating Procedures

The inspector examined operating procedure 0-1, "Plant startup from cold shutdown condition to hot, critical, zero power condition". This procedure has been upgraded to incorporate the inspector's comments of March 1, 1971* and February 10 and 11.** COL-1, "Precriticality check off list", and a new procedure 0-22, "Weld channel and containment penetration pressurization", were also examined. No deficiencies were noted in these three procedures.

Procedure 0-25, "Containment entry and egress", was examined. The inspector observed that this procedure didn't include the concept of "as low as practicable". Specifically, utilization of the containment purge system was not required by the procedures for pre-access cleanup.

This deficiency was discussed with Messrs. Makepeace and Contone. The inspector noted*** that the two auxiliary particulate and charcoal filter units were installed in the containment primarily for pre-access cleanup. The procedure did not require the system to be operated prior to routine entry.

Mr. Makepeace agreed to review all procedures and to include the "as low as practicable" concept, as required, in each procedure.

In response to questions, Messrs Makepeace and Cantone stated that the procedures reviewed by the inspector were typical in depth and scope to all other procedures.

*CO Report 247/71-6, Item II.C.

**CO Report 247/71-4, Item II.B.8.

***FSAR Section 5.3.2.3.

3. Maintenance Procedures

The inspector discussed the maintenance procedures with Messrs. Makepeace and Cantone. The maintenance program and required procedures are being developed by Southern Nuclear Engineering, Inc. for the licensee. A typical procedure was examined by the inspector. Based on this review and the discussion, the inspector concluded that the maintenance program as planned would meet the TS requirements.

In summary, if all procedures on the revised index are developed with comparable scope and depth to those reviewed by the inspector, and if the maintenance program as discussed is completed, the Indian Point 2 procedures will be adequate to comply with TS requirements.

F. Reactor Internals

The reactor internals were removed from the reactor vessel for examination and preparation for fuel loading. Procedures were available for removal of temporary vibration instrumentation and performance of NDT. Additionally, Wedco and Con Ed had prepared cleaning and inspection procedures for the reactor coolant system, reactor vessel and reactor internals. Review of the above procedures revealed that detailed coverage was prescribed. A review of Wedco, QC and Con Ed records indicated adherence to the procedures. A visual inspection of the lower internals and the inside surfaces of the reactor vessel by the inspector revealed no apparent deficiencies or interferences. The fuel transfer channel has been cleaned and is a controlled access area. The lower internals have been reinstalled and the reactor vessel is covered and the access door is locked. The Wedco QC Manager's approval is required for admission. The upper internals are enclosed in a temporary covered area and access is also restricted. A final examination of the upper internals remains to be performed.

G. Construction Log Book Review

Resolution of seven of eight construction log book deficiency items was previously reported.* The remaining item was deficient in that mill certification for pipe spool piece SI 20A was not available. Con Ed and Wedco consider that spool piece SI 20A was determined to be acceptable for use during the previous pipe allegation review.** Field inspections during this pipe allegations review included performance of UT measurements on 18 spool pieces (including SI 20A) which indicated that the wall thickness exceeded the minimum ASTM requirements. On the basis of the above, this item is considered resolved.

*CO Report No. 247/71-8, paragraph II.F.

**CO Report No. 247/69-10, paragraph II.B.2

H. Reactor Coolant Pumps

The inspector noted that the motors for reactor coolant pumps 21 and 24 had been removed. Subsequent questions revealed that the following work is in progress:

1. Pump 21 - The outer seal is to be replaced.
2. Pump 24 - The pump internals, shaft and seal assembly is to be replaced. The replacement was prompted by excessive vibrations noted during hot functional testing.

I. Main Steam System

A final review of field weld documentation by Wedco and Con Ed indicated that 14 main steam welds were partially welded by welders for which proper qualification documentation was not available. Subsequent efforts by Wedco revealed that welder qualification documentation exists for six of the 14 welds in question. Wedco and Con Ed consider the remaining eight welds acceptable on the following basis:

1. The subject welds satisfactorily passed radiographic examination (root and final).
2. The welds were subjected to cold hydrostatic testing and hot functional testing.
3. Specific documentation deficiencies and the basis for acceptance are:

a. MS Joints - 6A1, 7-1A, 7-A, 12B, 13A and 18BB

The root passes for these welds were made by welders F52, F16, F206 and F316. Documentation does not exist which indicates that welder F52 had been properly qualified. Wedco and Con Ed indicated that the root passes for these welds were performed with consumable inserts and that welder F52 was used as an observer only. Additionally, welder F52 was qualified to perform the remainder of the weld and the root pass was satisfactorily radiographed.

b. Joint MS-33BA

Welders F125 and F159 made the root pass. Welder qualification documentation is not available. Wedco and Con Ed indicated that the welders are experienced and were qualified to perform the remainder of the weld, the root pass was radiographed, and the summer 1970 Addenda to ASME Section IX, paragraph Q-21(a) permits qualification of welders by radiograph, in lieu of mechanical testing.

c. Joints MS-12B and MS-13A

Welders F99 and F104 made these welds, with the exception of the root pass. Welder F104 was qualified to a thickness of 7/8 inch whereas 1 1/2 inch material was welded. Wedco and Con Ed consider that welder F104 was essentially qualified for the performance of these welds.

d. Joint MS-43B

Welders F22 and F223 made this weld, with the exception of the root pass. Welder F22 was qualified to a thickness of one inch whereas 1 1/2 inch material was welded. Wedco and Con Ed consider that welder F22 was essentially qualified for the performance of these welds.

Based on the above information plus the summer addenda to ASME Section IX paragraph Q-21(a) which permits welder qualification with radiographs, this item is considered to be resolved.

J. Reactor Fuel Elements

A review of control rods, burnable poison rods and plugging devices versus fuel elements was performed as a result of mistakes encountered at another reactor facility. The following pertinent information was obtained:

1. The IP-2 fuel was produced at a different plant.
2. Fuel element, control rod and insert numbering data was included on the shipment bill of lading and were checked during receipt inspection. No discrepancies were reported.
3. Con Ed has made comparisons between the proposed core loading sequence summaries and the receipt records. No discrepancies were encountered.

On the basis of the above, Con Ed is confident that the various fuel element inserts are correctly positioned.

K. Security

The required security program* for IP-2 is basically an extension of the measures presently in effect for IP-1. Items requiring completion are as follows:

1. The restricted area fence has not been completed. Additionally, a fence for the river front is not included in the present plans.

*FSAR, Q 12.6.

The absence of a fence along the river front was questioned. Mr. Makepeace agreed to give this subject additional consideration.

2. The normal access passageways to the controlled area (containment, fuel storage, primary auxiliary and emergency diesel buildings) have not been completed.
3. Doors and the associated alarms systems have not been completed.

L. Contingency Plan

A review of the implementation status of the Contingency Plan (earthquake, fire, tornado and radiation emergencies) as described in the FSAR* revealed the following:

1. Contingency plan manuals have been prepared and the context adheres to the FSAR requirements.*
2. The plans have not been implemented. Present schedules call for implementation at time of licensing IP-2.
3. The notification rosters are being updated.
4. Personnel training programs, previously completed, included coverage relating to the contingency plans.
5. Contacts with the outside organizations included in Appendix A of the radiation contingency plan have been completed.
6. Site First Aid and decontamination facilities comply with the FSAR requirements.**
7. Present plans call for performance of a notification drill for persons and organizations included on the radiation contingency rosters.
8. The radiation contingency plan includes notification of Wedco management to alert them to a possible evacuation of construction personnel. The Wedco implementation program was not readily available.

The inspector stated that a followup inspection, relating to implementation of the contingency plans, will be conducted.

*Q 12.5.

**Pages 11.2-27 through 11.2-30.

M. Resolution of Previously Identified Items
(CO Reference in parenthesis)

1. SIS Valves - CF8 vs CF8M Material (247/69-11, Section II.B.3)

The acceptability of the eight accumulator check valves was questioned in that the valves were fabricated of CF8 rather than CF8M material as required by Westinghouse specifications. Con Ed and Westinghouse evaluated the condition and concluded that the subject valves were technically adequate for the intended use.* Subsequently, DRS submitted an evaluation of tentative acceptability criteria for large valves in the reactor pressure boundary.** Based on this DRS acceptability criteria and field thickness measurements of the valves, this item is considered to be resolved.

2. Lateness of Preoperational Procedure Preparation (247/70-2, Section II.B)

Ninety-eight percent of the proposed procedures are complete and the remaining two procedures are in the final review status, as is described in Section II.A of this report. Some additional test coverage is required and this subject is being handled as a separate resolution item.

3. Cable Tray Loading Audit (247/70-1, Appendix A)

Con Ed has completed their audit of electrical cable tray loading and conclude that the requirements of the FSAR*** have been attained. Based on Con Ed's conclusion, previous observations,**** and subsequent spot audits, this item is considered resolved.

4. Tunnel Fire Protection Installed (DRL Report to ACRS dated July 2, 1970)

The electrical tunnel fire protection system has been installed as required by the FSAR.***** Preoperational test procedure 4.17 provides a functional checkout of this system. This item is considered to be resolved.

*CO Report No. 247/70-8, paragraph II.H.

**Memo, E. G. Case to L. D. Low, same subject, dated April 21, 1971.

***Q-7.6.C.

****CO Report No. 247/70-12, paragraph II.D.3.

*****Q-7.6.C.

5. Trip Breaker Annunciation and Bypass Interlock Checkout (DRL Request)

An addendum to preoperational test procedure 4.8.1 has been issued and included a checkout of the breaker and bypass interlocks. Con Ed has also verified that if the reset and scram buttons are depressed simultaneously or if the reset button is depressed at the time of a manual trip that a scram of the reactor will take place.* Based on the above, this item is considered resolved.

6. Welder Qualifications for 14 Main Steam Welds (247/71-2, Section II.H)

The resolution for this item is included in Section II.I of this report.

7. Log Book Review Deficiencies (247/71-7)

The resolution for this item is included in Section II.G of this report.

8. Electrical Jumper Control (247/71-6, Section II.I.2)

Resolution to the jumper log book control question during construction was previously reported.** Con Ed has established jumper and termination logbooks for systems that have been accepted by Con Ed. On this basis, this item is considered resolved.

N. Items Requiring Followup

Resolution is required for the following items (CO Report reference in parenthesis):

1. Fuel Storage Building - completion of pre-ops (247/69-9, Section II.G.)
2. Electrical Barriers Installed (247/70-5, Section II.B)
3. Pipe Support Installation and Clearance Review (247/70-6, Section II.C)
4. Single electrical penetration (247/70-1, Appendix A)
5. DRL Report to ACRS, dated July 2, 1970:
 - a. Installation of strong motion seismograph

*CO Report No. 247/71-6, paragraph II.N.3.

**CO Report No. 247/71-8, paragraph II.E.1.

- b. Demonstration of hydrogen recombiner throttle back - preoperational test
- 6. Installation of modern fuel failure detection instrumentation (FSAR, Volume V)
- 7. DRL Report to ACRS, dated September 4, 1970:
 - a. Seismic reinforcement of buildings
 - b. Additional turbine overspeed protection
 - c. X-y stability test - power ascension
 - d. Iodine filters installed - recirculation fans - preceded by HEPA filters
- 8. Need for additional Preoperational Tests (247/71-1, Section II.g and 247/71-8, Section II.A.1)
- 9. Modification of Hot Functional Program (247/71-1, Section II.D and 247/71-6, Section II.A.3)
- 10. Circulating Water Intake - Fish Concerns (247/71-1, Section II.G)
- 11. RHR Unequal Flows to Four Loops (247/71-2, Section II.A.3)
- 12. Operating Procedure Deficiencies (247/71-2, Section II.C)
- 13. Power Ascension Program versus PI 6000/1 (247/71-8, Section II.B)
- 14. Health Physics preoperational items (247/71-5)
- 15. Complete Plant Security Construction (247/71-9, Section II.K)
- 16. Implementation of the Contingency Plan (247/71-9, Section II.L)
- 17. Complete Repairs on RC pumps 21 and 24 (247/71-9, Section II.H)

III. Management Interviews

Management interviews were conducted with Mr. Corcoran at the conclusion of the visits. Items discussed included the following:

A. Preoperational Testing

The status of procedure preparations for the preoperational test program was reviewed. The need for prompt completion of the remaining procedures and resolution of the reactor coolant system leak detection instrumentation item was stressed by the inspector. The inspector indicated that the

previous questions relating to pressurizer and main steam safety valve operational testing, coverage relating to emergency diesel generator checkout and test data for the service air system are considered to be resolved. The inspector voiced concern relative to the unavailability of reactor internals vibration data. Mr. Corcoran indicated an understanding of the inspector's concern and stated a desire to provide information in the near future.

B. Power Ascension Program

The status of the power ascension program was outlined. The inspector indicated that he was disappointed that Con Ed had not completed their comparison of the power ascension program with the AEC Guide and were not prepared to discuss differences and proposed alternate coverage. The inspector was informed that Mr. Makepeace was diligently working on this subject. The inspector stressed the need for a prompt definition of the total power ascension program.

C. Pipe Supports

The inspector reviewed the status of pipe hanger and support installation and related a need for a prompt definition of the proposed pipe movement program for the next heatup. Mr. Corcoran indicated that the heatup program is being formulated and pipe movement surveillance would be performed.

D. Operating Procedures

Mr. Hildreth discussed the "as low as practicable" concept with Mr. Makepeace. Mr. Makepeace stated that this concept would be written into all of the appropriate procedures.

E. Reactor Internals

The inspector indicated satisfactory findings relating to the reactor internals handling, preparation for core loading and cleanup programs. Mr. Corcoran indicated that Wedco QC had shown a commendable effort in this area.

F. Fuel Elements

The inspector indicated that reviews of the fuel elements versus inserts revealed no discrepancies.

G. Security

The inspector pointed out the need for completion of the security fence, control access passageways and doors associated with security measures as described in the FSAR. The inspector also stated that the absence of fencing along the water front will receive additional consideration and that Mr. Makepeace had agreed to give this item additional consideration.

H. Contingency Plans

The inspector indicated that the proposed contingency plans meet the essentials as presented in the FSAR. The main area of concern is the control of the Wedco construction personnel. Mr. Corcoran stated that he was aware that additional work was required. The inspector stated that the implementation of the contingency plan and the associated control program for the Wedco personnel would receive additional inspection coverage.

I. Resolution of Items

The resolution of items included in Section II.M of this report were reviewed.