



Commonwealth Edison  
Dresden Nuclear Power Station  
R.R. #1  
Morris, Illinois 60450  
Telephone 815/942-2920

*Central  
Mail*

*50-237/249*

September 15, 1976

BBS Ltr. #674-76

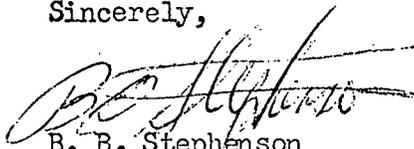
Mr. James G. Keppler  
Regional Director  
Directorate of Regulatory Operation-Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

SUBJECT: Repair Program for ACAD/CAM System Drywell and  
Suppression Chamber Penetrations

Dear Mr. Keppler:

Please find enclosed the final draft copy of the  
repair program for the ACAD/CAM system penetrations.

Sincerely,

  
B. B. Stephenson  
Station Superintendent

BBS:ELS:gt

Enclosure

cc: File/NRC

*9*  
SEP 22 1976

September 17, 1976

Subject: Repair Program for ADAL/CAM System  
Drywell and Suppression Chamber Penetrations

Mr. B.B. Stephenson:

In recent meetings with the NRC we have committed to modifying our Repair Program for the Subject Penetrations as follows:

1. The new 12-inch suppression chamber penetration sleeves (2 per unit) have been deleted from the scope of this repair program. (Section I-D of Program) With this deletion any reference to testing for these 12-inch sleeves is also deleted.
2. Testing for penetrations X-202L and X-202X, for Unit 3 and X-202K and X-204C for Unit 2 (Section I-B of Repair Program) shall in addition to a hydrostatic test (Section 4 of Repair Program), include a local pneumatic leak rate test. This test shall be conducted at 48 psig in accordance with Technical Specification requirements for Local Leak Rate Testing.
3. Testing for penetrations X-316A and X-316B, Unit 2 and 3, shall also, in addition to a hydrostatic test (Section 4 of Repair Program), include a local pneumatic leak rate test at 48 psig.
4. Pressure Suppression Chamber electrical penetrations shall now consist of 1 inch penetrations utilizing the spare 1 inch pipes being installed in penetrations X-316A and X-316B for Units 2 and 3. These electrical penetrations shall be testable and shall be purchased for this application by the Station Nuclear Engineering Department.

If you have any questions on the above modifications to the Repair Program please contact Mr. R.T. Steen. A "marked-up" copy of the Repair Program is attached indicating the above mentioned deletions.

*Kenneth H. Bennett for R.T.S.*  
R.T. Steen

Approved:

*Chris Sankhanna for WHK*  
Dresden/CC Project Engineer 9-16.

RTS/eng

August 18, 1976

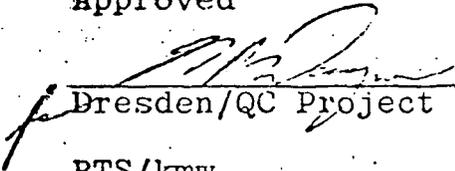
Mr. B. B. Stephenson:

Subject: Repair Program for ACAD/CAM System Drywell and  
Suppression Chamber Penetrations

Enclosed find the final draft copy of the Repair  
Program for the ACAD/CAM system penetrations. Also I  
am sending three copies for distribution to the proper  
authorities as outlined in the program.

  
R. T. Steen

Approved

  
Dresden/QC Project Engineer

RTS/kmw  
Enclosure

Repair Program  
ACAD/CAM System Drywell and  
Pressure Suppression Chamber  
Penetration Installation  
Dresden Station Units 2 and 3  
Commonwealth Edison Company

1. Description of Modification

The modification consists of the following (see attached sketch):

- A. Modification to existing 12-inch drywell penetrations X-202T and X-204B for Unit 2 by removing the existing end plates on the penetration sleeves and replacing with end plates containing six 1-inch stainless steel pipes through each penetration sleeve.
- B. Modification to existing 12-inch drywell penetrations X-202K and X-204C for Unit 2, and X-202L and X-202X for Unit 3 by installing end plates on the inside end of the penetration sleeves. The existing outside end plates to be removed after pressure test is performed to facilities installation of the radiation sensors.
- C. Modification to existing 10-inch suppression chamber penetrations X-316A and X-316B for both Units 2 and 3 by removing the existing end plates and replacing with end plates containing four 1-inch stainless steel pipes through each penetration sleeve.

~~D. Addition of new 12-inch suppression chamber penetration sleeves, two per unit. The sleeves will be welded to weld neck flanges for attachment to the electrical penetrations.~~

- E. All the modification work shall conform to Sargent & Lundy's Specification K-3178, Modifications of Reactor Containment Drywell and Suppression Chamber for CAM/ACAD Penetrations.

2. Codes

- A. Jurisdictional Concerns - This work is governed neither by the Illinois Boiler Safety Act of 1976, nor the ASME Boiler and Pressure Vessel Code - Section XI. Commonwealth Edison shall take guidance from the ASME Code in effect at the time of the modification (as defined in section 1.C. below), as well as, the applicable requirements of the original design specification.

A copy of the "Repair Program" to be followed in the performance of this work shall be filed for review with all enforcement authorities having jurisdiction at the plant site. This includes the Nuclear Regulatory Commission (NRC) in addition to the Authorized Inspector. A copy of the repair program

should be sent to the Illinois Chief Boiler Inspector for information.

**B. Applicable Codes**

1. As constructed vessel classification: Class B as defined in ASME Boiler and Pressure Vessel Code, Section III, paragraph N-130, 1965 Edition and all Addenda up to and including the Summer, 1965 Addendum.
2. All penetrations shall be designed to the ASME Boiler and Pressure Vessel Code, Section III, 1965 Edition and all Addenda up to and including the Summer, 1965 Addenda. All fabrication, materials, installation, inspection, and testing shall be in accordance with the ASME Boiler and Pressure Vessel Code, Section III Division 1, Subsection NE for class MC components, 1974 Edition, and all Addenda up to and including the Winter, 1975 Addendum.
3. Fabrication, materials, installation, inspection and testing of all 1-inch pipes and associated couplings shall meet the requirements of the ASME Boiler and Pressure Vessel Code, Section III Division 1, Subsection NC for class 2 components, 1974 Edition including all Addenda up to and including the Winter, 1975 Addendum.
4. This modification will not compromise the original design specification or the original stress report. The original stress report will be modified by Commonwealth Edison to reflect this modification.

**C. Requirements**

**1. Materials -**

- a. Penetration Materials will be provided in accordance with ASME Boiler and Pressure Vessel Code - Section III, Division I, Subsection NE - 2000, 1974 Edition and all addenda up to and including the Winter, 1975 addendum.
- b. Piping material will be provided in accordance with ASME Boiler and Pressure Vessel Code Section III, Division I, Subsection NC-2000, 1974 edition and all Addenda up to and including the Winter, 1975 Addendum.

**2. Welding -**

- a. Welding of the drywell and suppression chamber penetration assemblies shall be performed in accordance with ASME Boiler and Pressure Vessel Code - Section III, Division 1, Subsection NE - 4000, 1974 Edition and all addenda up to and including the Winter, 1975 Addendum.

- b. Welding of piping shall be performed in accordance with ASME Boiler and Pressure Vessel Code - Section III, Division 1, Subsection NC-4000, 1974 Edition and all addenda up to and including the Winter, 1975, Addendum.
3. Quality Assurance Program - Work will be performed under the accepted revision of a Quality Assurance Program meeting the requirements of ASME Boiler and Pressure Vessel Code. Section III, Division 1, Subsection NA-4000, 1974 Edition, and all addenda up to and including the Winter, 1975 addendum.
4. Hydrostatic Test - Penetration assemblies shall be hydrostatically ~~tested~~ tested in accordance with ASME Boiler and Pressure Vessel Code-Section III, Division 1, Subsection NE-5000, 1974 Edition, and all addenda up to and including Winter, 1975 addendum. ~~Penetration reinforcement plate to suppression chamber weld will not be either hydrostatically tested or vacuum box tested.~~
5. Data Reports - A manufacturer's report of welded repairs or alterations will be submitted by the contractor.
6. Non-destructive Examination -
- a. All penetration assembly welds performed shall be liquid penetrant examined in accordance with the ASME Boiler and Pressure Vessel Code - Section III, Division 1, Subsection NE-5000, 1974 Edition, and all addenda up to and including the Winter, 1975 addendum.
- ~~b. All reinforcement plate to suppression chamber welds shall be radiographed in accordance with the ASME Boiler and Pressure Vessel Code - Section III, Division 1, Subsection NE-5000, 1974 Edition, and all addenda up to and including the Winter, 1975 addendum. These welds shall also be Vacuum Box tested or hydrostatically tested and Liquid Penetrant inspected as in 6a.~~
- c. All piping welds performed shall be liquid penetrant examined in accordance with ASME Boiler and Pressure Vessel Code - Section III, Division 1, Subsection NC-5000, 1974 Edition, and all addenda up to and including the Winter, 1975 addendum.

7. Documentation Check List

The documentation to be included for this modification shall include, as a minimum:

- a. Certified Material Test Report, where required, which shall include the actual results of all chemical analyses and mechanical tests required by the material specifications.

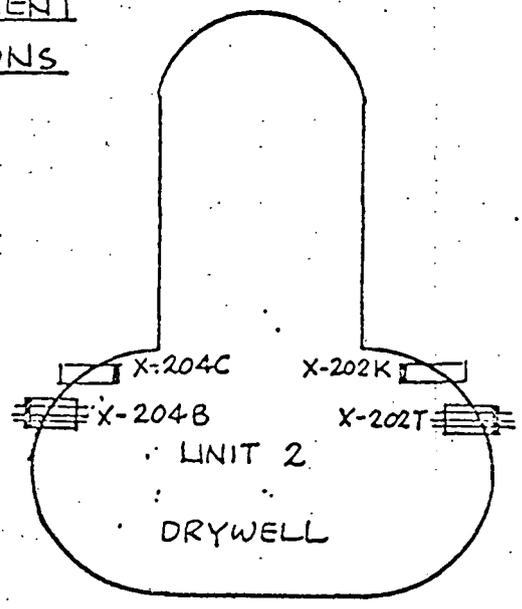
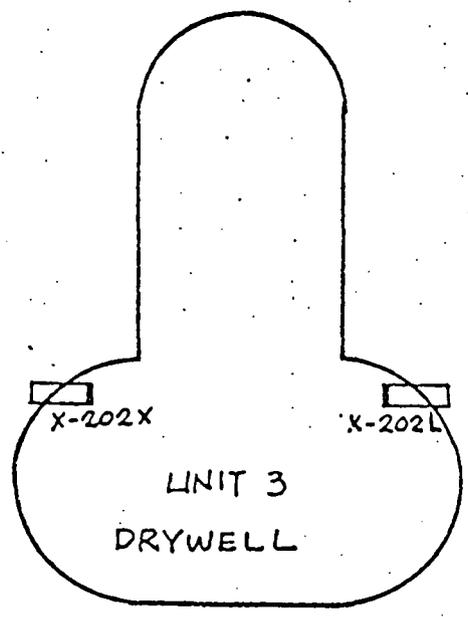
- b. Welding Material Test Reports
- c. Weld Data Travelers
- d. Field Fabrication Sketches
- e. Hydrostatic or Pneumatic Test Reports
- f. Report of Welder Qualifications
- g. Applicable Code Data Reports
- h. Index to permanent record file
- i. Certified Design Specification K-3178
- j. Stress Report
- k. Construction Drawings

D. Additional Notes

1. Stamping - This modification will not require stamping.

RTS/em  
Attachment

MODIFICATIONS TO CONTAINMENT  
DRYWELL & TORUS PENETRATIONS

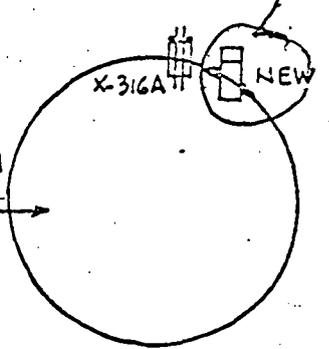
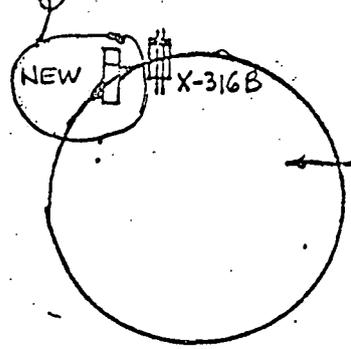
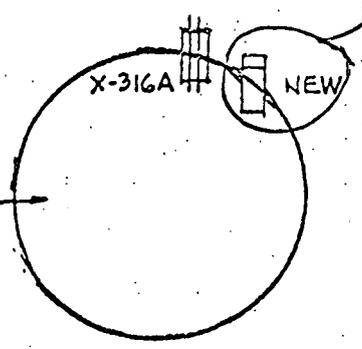
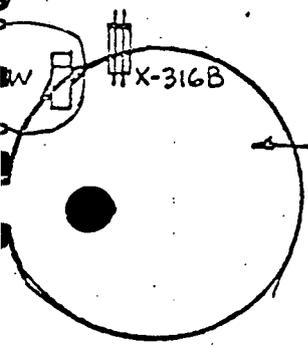


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SUPPRESSION CHAMBER

SUPPRESSION CHAMBER

- ADD END PLATE TO INSIDE END OF EXISTING 12" PENETRATION (FOR RADIATION SENSOR)
- ~~▤ ADD NEW 12" ELECT. PENETRATION SLEEVE INCLUDING WELD NECK FLANGE & REINFORCEMENT PLATE~~
- ▤ ADD 4-1" S.S. PIPES INCLUDING END PLATE TO EXISTING 10" PENETRATION (FOR ACAD & H<sub>2</sub> LINES)
- ▤ ADD 6-1" S.S. PIPES INCLUDING END PLATE TO EXISTING 12" PENETRATION (FOR ACAD, H<sub>2</sub>, & PX LINES)

SKETCH OF CAM/ACAD PENETRATIONS

September 17, 1976

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*Kenneth H. Brandt for R.T.S.*  
R.T. Steen

Approved:

*One Systems for WHK*  
Dressed/CC Project Engineer 9-16.

RTS/eng