

POWER AUTHORITY OF THE STATE OF NEW YORK

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August 7, 1979
IPN-79-56

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
I. E. Bulletin 79-14, Revision 1

References: (1) P. J. Early to A. Schwencer, IPN-79-26,
dated May 22, 1979 (copy to Region I)
(2) P. J. Early to A. Schwencer, IPN-79-29,
dated May 31, 1979 (copy to Region I)
(3) P. J. Early to A. Schwencer, IPN-79-42,
dated June 29, 1979 (copy to Region I)

Dear Sir:

This letter is in response to Item 1 of the subject item requesting information relevant to the as-built configuration of safety-related piping systems seismically analyzed by a dynamic computer code. The Authority had previously committed to the NRC to perform an as-built verification program of piping systems and supports as part of its response to I.E. Bulletin 79-07 (Reference 1).

The inspection elements to be used to verify that the seismic analysis input information conforms to the actual configuration of safety-related systems is contained in IP-3 plant procedure 3PT-V14 Rev. 2 entitled "As-Built Verification of Seismic Class I and II Pipe Supports." (See Attachment 1 to this letter.)

As part of the analytical effort required by I.E. Bulletin 79-07, the Authority's Architect-Engineer has assembled line packages for each of the safety-related lines to be reanalyzed. Attachment 3 to Reference 3 is a representative list of design input documents that form a complete reanalyzed line package.

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These packages can be made available for inspection by Region I.

The systems or portions of systems that are planned to be inspected are contained in Attachment 1 to Reference 1, which lists the lines both inside and outside containment that are to be reanalyzed as part of the Authority's response to I. E. Bulletin 79-07.

To date 73 lines containing 680 supports have been field walked. Dimensional deviations in location of hangers are within the measurement tolerance of inches and the piping geometry is in good agreement with the isometrics. None of the differences noted in these lines have resulted in creation of any unsafe conditions.

The repair program to correct minor differences is being vigorously pursued.

The Authority plans to provide the as-built information requested by Items 2 and 3 of the subject bulletin per the following schedule:

Attached	Status report to date of all lines field-verified in normally accessible areas (See Attachment 2 to this letter).
September 15, 1979	Final report of all lines field-verified in normally accessible areas.
End of Refueling Outage - Approximately December 15, 1979	Final report of all lines field-verified in normally inaccessible areas.

In a phone conversation on July 18, 1979 between Mr. R. McGaughy of your staff and Mr. G. Wilverding of the Authority's staff, it was agreed that the dates for the reporting of the field-verification of the normally accessible areas were acceptable to Region I. However, Region I requested that the reporting of the field verification of the normally inaccessible lines be submitted prior to restart of IP-3 from the refueling outage. The Authority takes exception to this requirement as Bulletin 79-14 does not require permission from the NRC for restart after shutdown for the inspections detailed by this bulletin. Also, the Authority's commitment with respect to its as-built verification program is contained in Reference 2.

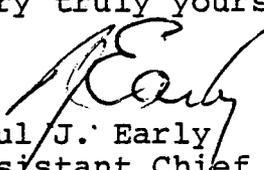
Also, in a phone conversation on July 16, 1979 between Mr. McGaughy and Mr. Wilverding, the Authority questioned whether I. E. Bulletin 79-14 applied only to those safety-related lines analyzed by a dynamic computer code or to all safety-related lines either analyzed dynamically or by the use of static span tables.

Mr. McGaughy indicated that I. E. Bulletin 79-14 applied only to those lines that were dynamically analyzed by computer code. However, subsequent to this in a phone conversation on July 31, 1979, your Mr. McGaughy indicated to our Mr. Wilverding that I. E. Bulletin 79-14 applied to all safety-related lines regardless of analysis method.

Since March 13, 1979 the Authority has been actively engaged in reanalyzing seismic loads in safety-related piping systems. In numerous discussions with NRC staff concerning both the James A. FitzPatrick Nuclear Power Plant and the Indian Point 3 Nuclear Power Plant, the issue of field verification of safety-related piping systems was defined by NRC staff guidance as concerning only those piping systems dynamically analyzed by computer. Thus, when I. E. Bulletin 79-14 was originally issued and when Revision 1 was issued, the Authority questioned Region I staff concerning the interpretation. The guidance was consistent with the original determination.

The Authority questions this interpretation of I. E. Bulletin 79-14 since Revision 0 uses the words "computer code" profusely throughout its text. In addition, the Authority's interpretation of Revision 1 to the bulletin is not in agreement with the information given us by Mr. McGaughy. The Authority requests the NRC to provide an official revision of this bulletin to clarify and confirm the NRC's present position.

Very truly yours,


Paul J. Early
Assistant Chief Engineer-
Projects

cc: Office of Inspection and Enforcement
Division of Reactor Construction Inspection
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Office of Nuclear Reactor Regulation
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
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ATTACHMENT 1
IE BULLETIN 79-14
SEISMIC ANALYSIS FOR AS-BUILT
SAFETY-RELATED PIPING SYSTEMS

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
AUGUST 1, 1979

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NO. 3 NUCLEAR POWER PLANT



3PT-V14 Rev. 2

AS-BUILT VERIFICATION OF SEISMIC CLASS I AND II PIPE SUPPORTS

Written by: Walter J. Hutcheon

Reviewed by: Chad L. Gots

PORC Review M. Passena Date 7/26/79

Approved by: JOB Bayne Date 7/26/79

Effective Date 7/26/79

1.0 OBJECTIVE:

To verify that the "As-Built" pipe support detail drawings reflect the installed condition.

2.0 REFERENCES:

The restraint and support design isometric drawings, pipe whip restraint drawings and individual hanger drawings (all latest issue) shall be used as references for each piping line being inspected.

3.0 PREREQUISITES:

Prior to the erection of any temporary ladders, platforms or scaffolds for access to supports, an approved work permit (AP-10) shall be obtained.

Prior to entering into any radiation areas of the plant, all personnel that wish to enter these areas shall wear a radiation monitoring device as required by the radiation exposure authorization (REA) being used and must either be escorted by an individual trained in radiation safety or have received such training (AP-7). If the area is not covered under a blanket radiation exposure authorization, then a specific radiation exposure authorization (AP-10) shall be obtained for each specific area not covered under the blanket REA. In any case, prior to entering a radiation area, notify Health Physics of the area in which work will be performed.

Prior to inspection of operating systems, the Watch Foreman should be notified of the line number and location of supports which will be inspected.

4.0 PRECAUTIONS AND LIMITATIONS:

Personnel working in areas with high noise levels for extended periods of time should wear hearing protection. When working on or near hot systems or equipment, coveralls and gloves should be worn to prevent burns. Hard hats should always be worn unless working in a radiation area where they are optional.

5.0 PROCEDURE:

5.1 Restraint and support design isometric drawing

5.1.1 Note any missing supports and restraints which are shown on isometric. Add any supports and restraints not shown on isometric - either temporary or permanent.

5.1.2 Verify each dimension.

If correct - circle dimension

If Incorrect - line out and letter in new dimension

Add dimensions and material details for any additional supports and restraints found.

5.1.3 When verification is complete, isometric should be signed and dated by the responsible individuals performing the inspections.

5.1.4 Verify isometric for other seismic loading: for example, valves, pipe attachments, etc.

5.1.5 Note clearances on pipe penetrations through floors and walls.

5.1.6 Verify valve operator geometry.

5.2 Individual hanger drawings and pipe whip restraint drawings

5.2.1 Verify that material list agrees with hanger sketch.

5.2.1.1 Verify base plate dimensions - size and thickness

5.2.1.2 Verify base plate anchor bolt pattern and bolt diameter

5.2.1.3 Check to see whether an anchor bolt (expansion bolt) or threaded rod is used on concrete fasteners

a) all anchor or expansion bolts are galvanized or coated whereas threaded rod is carbon steel.

5.2.1.4 Check to see whether stud on nut or machined bolt are used on concrete fasteners.

5.2.2 Verify that hanger sketch agrees with actual hanger.

5.2.2.1 Indicate size, quantity and location of additional or missing material including bolts, nuts, washers, etc.

5.2.2.2 Check that welds are complete and agree dimensionally with drawing. Note any tack welds on threaded components.

- 5.2.2.3 Check that base-plates are flush with mounting surface or grouted. Indicate size and location of any gaps between base-plates and mounting surface.
- 5.2.2.4 Verify by visual inspection that the anchor bolts/nuts are tight and square against the base plate. Verify proper nut thread engagement for each anchor by verifying that the nut is at least flush with the stud.
- 5.2.2.5 Indicate any discrepancies in size of material on existing hanger detail drawings.
- 5.2.2.6 Verify that base plate anchor bolt holes are not enlarged or elongated.
- 5.2.2.7 Visually inspect the concrete around the base plate for any concrete damage or empty anchor holes.
- 5.2.2.8 Visually inspect the concrete around each base plate to identify any concrete edges within 10 inches of any anchor bolt.
- 5.2.2.9 On spring hangers verify that cold setting (or hot setting, if applicable) is correct, record as-found setting. Note that pre-set pins have been removed.
- 5.2.2.10 On hydraulic snubbers, indicate location of any oil leakage.
- 5.2.2.11 Verify that all carbon steel parts are painted unless plated or galvanized.
- 5.2.2.12 Note any parts masked by insulation - Do not remove insulation.
- 5.2.2.13 Note any piping support embedments other than those incorporating concrete fasteners and check for chipping or cracked concrete, bent members, or other damage.

For example - anchor bolts, embedded structural steel, etc.

5.2.3 Verify each dimension including functional clearances.

If correct - circle dimension

If incorrect - line out and letter in new dimension

5.2.4 When verification is complete

5.2.4.1 A sticker should be affixed to the hanger with the following information:

- a) Hanger I.D. Number
- b) Line number
- c) Date inspected
- d) Spring setting (if spring hanger)
- e) Inspectors signature

Note: Do not cover any existing stickers.

5.2.4.2 Sign and date hanger drawing (if a pipe whip restraint - sign and date under the respective restraints on the pipe whip restraint drawing).

ATTACHMENT 2
IE BULLETIN 79-14
SEISMIC ANALYSIS FOR AS-BUILT
SAFETY-RELATED PIPING SYSTEMS

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
AUGUST 1, 1979

DETAILED HANGER REPORT

<u>Line Number</u>	<u>Total Number of Supports</u>
9	19
653	2
654	6
10	13
53A	12
406	9
675	1
52	14
52A	14
1081	4
1082	4
1083	4
1084	4
1085	4
1086	4
3	26
5	10
6	10
7	9
8	10
31	35
337	6
205	8
595	36
270	34
56	11
145	7

DETAILED HANGER REPORT

<u>Line Number</u>	<u>Total Number of Supports</u>
550	16
161	31
284	27
57	4
155	2
190	2
51	19
14	1
13	1
146	11
148	8
11D	0
11C	1
15	20
11A	0
11B	0
11E	2
646	2
515	7
189	4
167	14
321	1
168	15
125	3
181	11
509	3

DETAILED HANGER REPORT

<u>Line Number</u>	<u>Total Number of Supports</u>
327	10
277	3
410	1
18	10
1018	1
329	11
328	10
314	3
2	26
4	21
1022	1
1019	3
16	16
1	25
1020	1
22	6
1161	2
1021	5
1163	2
1162	2
Total 73	680