

October 26, 1977

MEMORANDUM FOR: Ernst Volgenau, Director
Office of Inspection & Enforcement, HQ

FROM: E. Morris Howard, Director, Region IV, IE

SUBJECT: LICENSEE INSPECTION AND ENFORCEMENT INDICATORS UPDATE

Enclosed are four figures depicting inspection and enforcement indicators, based solely on noncompliance, covering the periods January 1, 1976 through June 30, 1977 and January 1, 1977 through June 30, 1977, for both BWR's and PWR's.

It is interesting to note that unusually low or high indicators in the long term (January 1, 1976 through June 30, 1977) are not off-set by drastically improved performance in the short term. Indian Point is an excellent example of short term improvement with the long term record continuing to reflect the unusually bad record in Calendar Year 1976. The long run trend is a valuable tool in determining the improvement or degradation of a site's record when compared with a short term evaluation. These trends might also be used to determine the effect of significant enforcement action, which is what occurred at Indian Point and Zion in the second-half of 1976, with Indian Point showing marked improvement in the first-half of 1977 and Zion showing a marked down trend in the same period. It will be interesting to determine the effect of the IE enforcement activities on Zion's record in subsequent evaluations.

There are unlimited possibilities which could be investigated with a strong possibility that reasonable, statistically supportable, conclusions could be reached concerning the licensee's activities, program effectiveness, and regional inspection performance.

There may also be a hint as to how the inspectors perceive the licensee management attitudes, particularly where there is a low subjective rating and only a single deficiency for over four hundred hours of inspection effort. The converse also occurred.

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It is possible to draw conclusions over the individual functional areas, most clearly by inference from the total score for each functional area.

I will be glad to discuss any or all of these areas at your convenience.

Original Signed By

E. Morris Howard

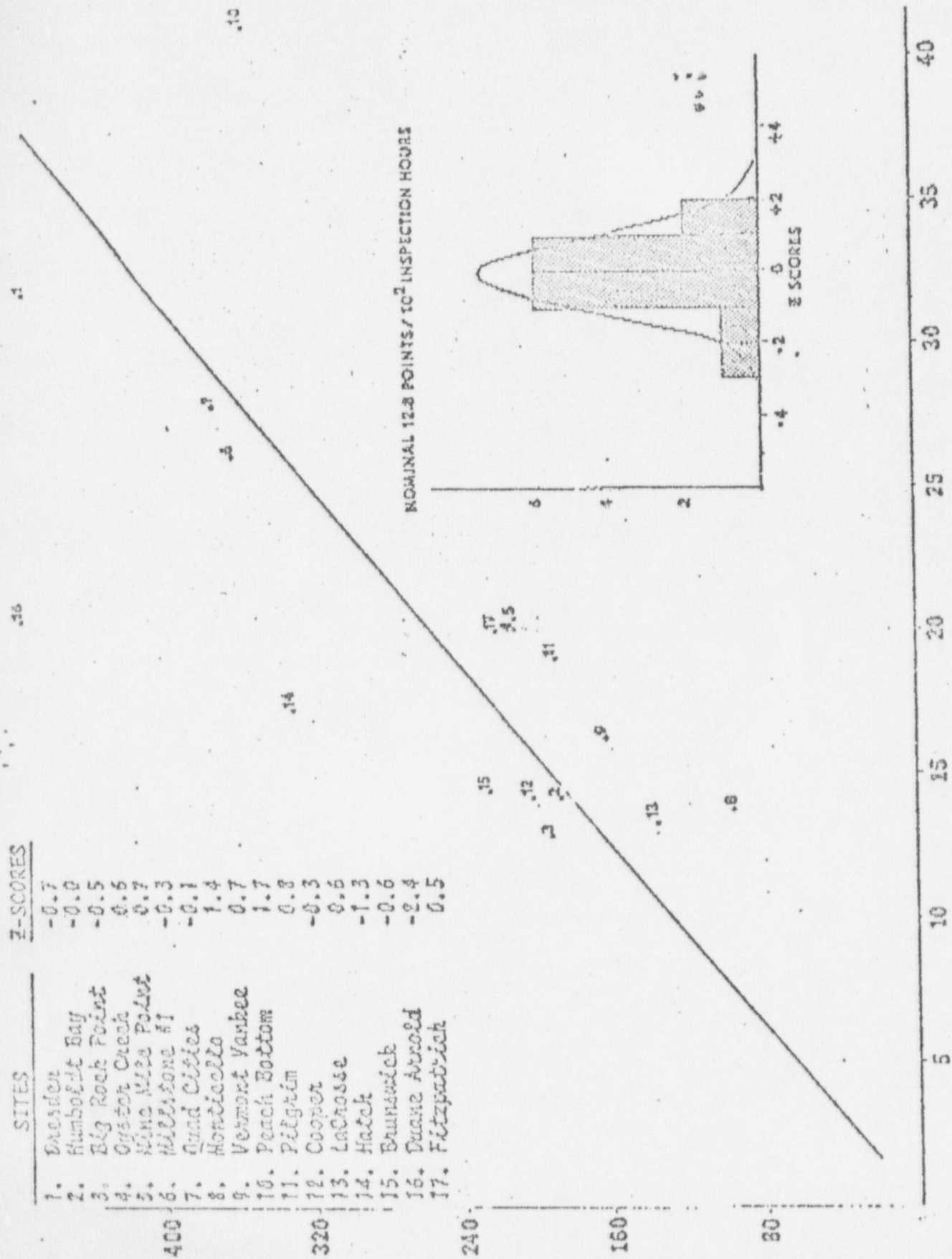
E. Morris Howard

Director

Enclosures:

1. Boiling Water Reactors - January 1, 1976 Thru June 30, 1977
2. Boiling Water Reactors - First Half 1977
3. Pressurized Water Reactors - January 1, 1976 Thru June 30, 1977
4. Pressurized Water Reactors - First Half 1977

cc: J. G. Davis, IE:HQ, w/enclosures

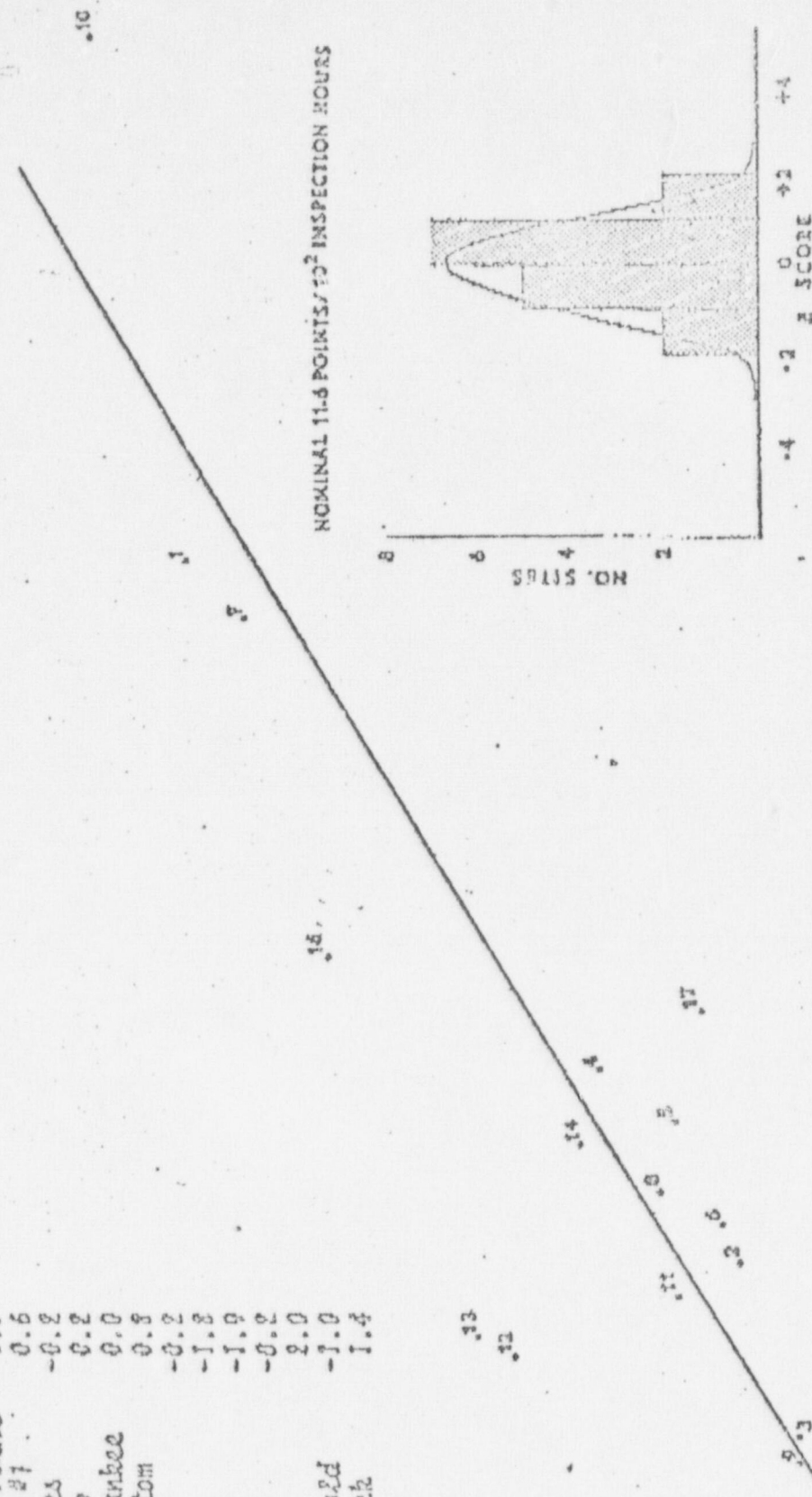


BOILING WATER REACTORS - JANUARY 1, 1976 THRU JUNE 30, 1977

Z-SCORES

SITES

1.	Dresden	-0.3
2.	Humboldt	0.6
3.	Big Rock	0.1
4.	Oyster Creek	0.3
5.	Nine Mile Point	0.7
6.	Milestone #1	0.6
7.	Quad Cities	-0.2
8.	Monticello	0.2
9.	Vermont Yankee	0.0
10.	Peach Bottom	0.8
11.	Pilgrim	-0.2
12.	Cooper	-1.8
13.	LaCrosse	-1.9
14.	Hatch	-0.2
15.	Brunswick	2.0
16.	Duane Arnold	-1.0
17.	Fitzpatrick	1.4



10² INSPECTION HOURS
BOILING WATER REACTORS - FIRST HALF 1977

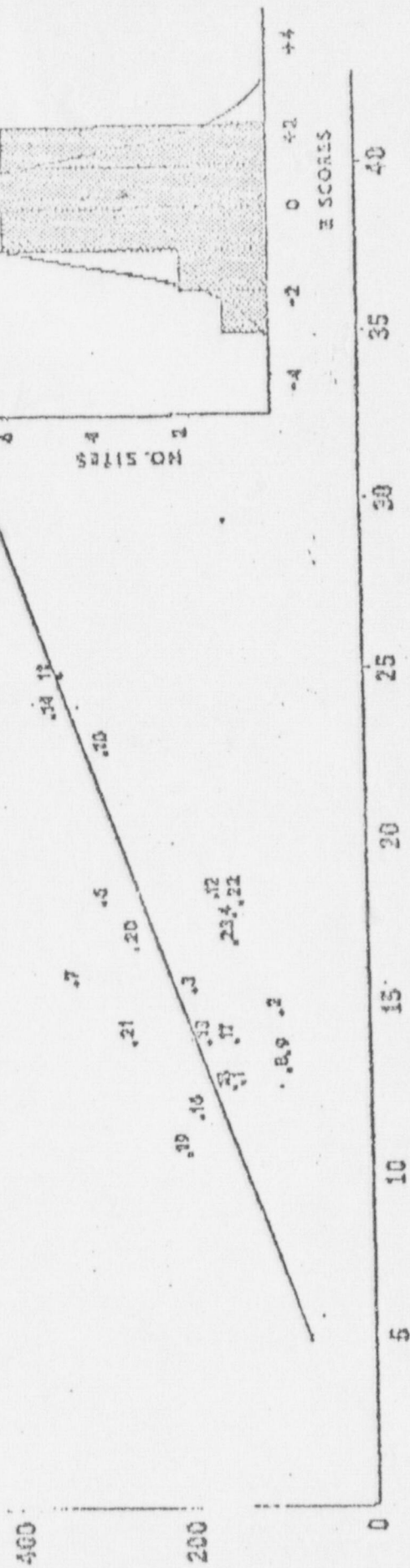
Z-SCORES

10. Cook
 21. Calverton Cpld
 22. Millstone RE
 23. Trojan

SITES	Z-SCORES
1. Vanhook Rowe	0.4
2. San Onofre	1.6
3. Com. Yankee	0.2
4. Olmita	1.3
5. Indian Point #2 & #3	-2.2
6. Turkey Point	-0.5
7. Palisades	-1.2
8. H. B. Robinson	1.4
9. Point Beach	1.5
10. Oconee	0.3
11. Surry	0.1
12. Prairie Island	1.1
13. Ft. Calhoun	0.2
14. Three Mile Island #1	-0.2
15. Zion	-1.5
16. Kewaunee	-0.4
17. Maine Yankee	0.6
18. Rancho Seco	0.4
19. Athens	-0.7

-0.3
 -0.8
 1.4
 1.9

NOMINAL 14.0 POINTS/10² INSPECTION HOURS



INSPECTION HOURS

X 10²

PRESSURIZED WATER REACTORS - JANUARY 1, 1976 THRU JUNE 30, 1977

WEIGHTED NONCOMPLIANCE

Z-Scores

Sites

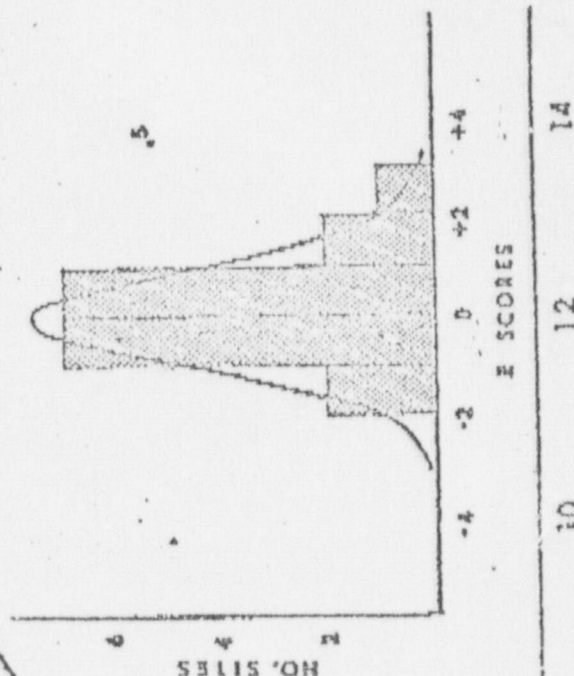
1.	Vanhee Rowe	0.6
2.	San Onofre	2.3
3.	Conn. Vanhee	0.4
4.	Ginn	0.6
5.	Indian Point #2 & #3	2.0
6.	Turkey Point	-1.1
7.	Pedlands	0.2
8.	H. B. Robinson	2.6
9.	Point Beach	2.0
10.	Oconee	-0.5
11.	Savoy	0.0
12.	Pacific Island	1.1
13.	Ft. Calhoun	0.1
14.	Three Mile Island #1	-0.7
15.	Zion	-1.5
16.	Kemmerer	-0.9
17.	Naure Vanhee	0.8
18.	Rancho Seco	-0.4
19.	Arkansas	-0.7
20.	Cook	-0.3

21. Calvert Cliffs
22. Millstone #2
23. Trojan

-0.3
3.5
2.1

.15

NOMINAL 11.9 POINTS/10³ INSPECTION HOURS
(Sites 2, 8, 9, & 22 not included in calculations)



INSPECTION HOURS
X 10²

PRESSURIZED WATER REACTORS - FIRST HALF 1977