



Westinghouse
Electric Corporation

Water Reactor
Divisions

PWR Systems Division

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NS-TMA-2236

April 24, 1980

Mr. Uldis Potapovs, Chief
Vendor Inspection Branch
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76011

- Ref a) NRC letter (from Uldis Potapovs),
to W (W. M. Jacobi) dated 4/26/79
- Ref b) W letter (from W. M. Jacobi) to
NRC (Uldis Potapovs) dated 5/24/79
- Ref c) NRC letter (from Uldis Potapovs)
to W (W. M. Jacobi) dated 4/28/79

SUBJECT: Status Report on Valve Weights

Dear Mr. Potapovs:

In connection with NRC I&E Bulletin 79-04, "Incorrect Weights for Swing Check Valves Manufactured by Velan Engineering Corporation" the NRC conducted inspections of Westinghouse (Reference (a) and (b)) in April, 1979. During these inspections the actions taken by Westinghouse in response to this issue were reviewed and found acceptable. Since the identification of the initial valve weight problem, Westinghouse has begun a program of monitoring valve weights, and no generic questions in this regard have been identified. However, in conjunction with an Applicant's request for information, it has come to our attention that discrepancies exist in the weight and location of the center of gravity for certain Copes Vulcan valves. Upon receipt of this information Westinghouse initiated an investigation of this issue as an adjunct to our on-going program to monitor valve weight (Reference (a) and (b)).

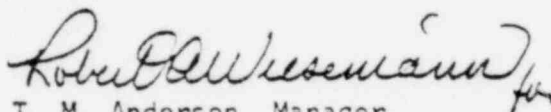
The purpose of this letter is to provide the Staff with a status report on this investigation. The valves in question are three inch and under, air operated valves. To date, approximately 40 Copes Vulcan valves have been identified with discrepancies between information on as-built drawings and actual valve weights and centers of gravity. In general, the discrepancies in valve weight are small with only 5 valves being overweight by more than 20%. With respect to the centers of gravity, discrepancies generally varied from 8 to 12 inches. A tabulation of the as-built drawing information and the revised weights and centers of gravity for the 40 Copes Vulcan valves is attached. In our investigation, it has been determined that these errors resulted from calculational techniques used by Copes Vulcan at that time. This error has recently been corrected and the new techniques verified by actual tests.

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Subsequent to obtaining the revised valve weight and center of gravity information, Westinghouse performed piping reanalysis for a system in Westinghouse scope with one of the Copes Vulcan valves. The results from this one analysis confirm the previous conclusion in Reference (a) that reanalyzed stresses are below the allowable limit. Reanalyses are underway for those systems for which the original analysis was in Westinghouse scope and in which other subject Copes Vulcan valves are installed. Should any overstress conditions exist, the customers will be informed and design modifications recommended.

Westinghouse has informed all of our utility customers of the existence of this discrepancy. As additional information becomes available from the corrective actions described in the References, it will be provided to you. Should you have any questions on this information, please contact Mr. R. J. Sero (412-373-4189).

Very truly yours,



T. M. Anderson, Manager
Nuclear Safety Department

JJM/RJS/keg

cc: V. Noonan, NRC Bethesda
J. P. Knight, NRC Bethesda
H. J. Wong, NRC Bethesda
R. G. Lagrange, NRC Bethesda

<u>VALVE I. D. *</u>	<u>NEW WEIGHT</u>	<u>NEW C. G.</u>	<u>OLD WEIGHT</u>	<u>OLD C. G.</u>
1-IA78RE	220	19-3/16	180	19-3/16
3-RA54DD	250	17-7/8	240	17-7/8
3-RA76RE	345	19-3/8	320	9-1/2
3-RA76DE	325	19-3/8	320	9-1/2
3-IA76RE	335	19-3/8	540	9-1/2
1-RA78RD	140	17-3/4	175	5-13/16
2-IA78DG	200	21	240	6-17/32
1-IA76RES	215	19-3/16	180	5-13/16
1-IA78RE	215	19-3/16	180	5-13/16
1-IA78RE	215	19-3/16	180	5-13/16
2-IA88RE	260	19	260	6-17/32
3/4-IA78RE	215	19-13/16	170	5-15/16
3-IA78DG	395	19-3/8	540	9-1/2
2-RA32RE	220	19	245	19
2-IA32RD	145	12-1/2	180	4-7/8
2-IA37RG	315	22	410	19
2-RA37RG	330	22-1/2	430	19
2-IA67RG	315	22	410	19
1-RA58DG	285	21-3/4	260	19
2-RA76DD	185	17-1/2	225	6-1/4
3/4-IA78RE	215	19-3/16	170	19-3/16
2-IA78RG	345	22-5/16	240	21
3-IA76RE	340	19-3/8	465	21-3/8
2-IA67RG	315	22	410	19

* NOTE: Valves with the same I.D. number may appear more than once because there may be more than one drawing for the same type valve.

<u>VALVE I.D.</u>	<u>NEW WEIGHT</u>	<u>NEW C.G.</u>	<u>OLD WEIGHT</u>	<u>OLD C.G.</u>
1-IA78RE	220	19-3/16	180	19-3/16
3-RA54DD	250	17-7/8	240	17-7/8
3-RA76RE	345	19-3/8	320	9-1/2
3-RA76DE	325	19-3/8	320	9-1/2
3-IA76RE	335	19-3/8	540	9-1/2
1-RA78RD	140	17-3/4	175	5-13/16
2-IA78DG	300	21	240	6-17/32
1-IA76RES	215	19-3/16	180	5-13/16
1-IA78RE	215	19-3/16	180	5-13/16
1-IA78RE	215	19-3/16	180	5-13/16
2-IA88RE	260	19	260	6-17-32
3/4-IA78RE	215	19-3/16	170	5-15/16
3-IA78DG	395	19-3/8	540	9-1/2
3-IA88RG	440	21-5/8	540	9-1/2
3-IA88RG	440	21-3/8	540	9-1/2
3/4-IA78RE	215	19-3/16	170	5-15/16
2RA42DD	155	13	225	5-3/16