MISSISSIPPI POWER & LIGHT COMPANY
Helping Build Mississippi
P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

NUCLEAR PRODUCTION DEPARTMENT

October 19, 1982

U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417
License No. NPF-13
File 0260/L-814.2/M-001.0
SQRT Qualification of the
Hydraulic Control Units
Affected by Variable Pool
Swell Loads - SSER 3,
Section 3.10
AECM-82/494

References: 1. AECM-82/272, dated June 11, 1982
2. AECM-82/285, dated June 12, 1982

During meetings held with the Equipment Qualification Branch on June 2 and 7, 1982, Mississippi Power & Light Company (MP&L) agreed to reevaluate the qualification of the hydraulic control units (HCUs) considering the effects of the variable pool swell phenomenon. As committed to in AECM-82/285, the variable pool swell impact acceleration response spectra (attached to AECM-82/272) were amplified by 25% to account for the local load effect on the HCUs. The resulting evaluation showed that, for the faulted condition, the bounding load combination was the safe shutdown earthquake in combination with a LOCA (pool chugging) and a safety relief valve discharge from automatic depressurization; hence, the amplified pool swell response spectra did not change the required response spectra (RRS) for HCU qualification.

The attached figures show that the HCU RRS is enveloped by the test response spectra (TRS). Only figures for the horizontal directions are provided for the upper attachment point because the HCUs are relatively stiff in the vertical direction and minimal TRS amplification is expected.

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MISSISSIPPI POWER & LIGHT COMPANY

MP&L feels that the submission of the attached TRS-RRS comparison closes the HCU qualification concern in SSER 3, Section 3.10. If you have any further questions, please do not hesitate to contact us.

Yours truly,

L. F. Dale
Manager of Nuclear Services

MJD/JDR:lm

Attachments: HCU TRS-RRS Comparisons (Figures 1-5)

cc: Mr. N. L. Stampley (w/a)
Mr. R. B. McGehee (w/o)
Mr. T. B. Conner (w/o)
Mr. G. B. Taylor (w/o)

Mr. Richard C. DeYoung, Director (w/a)
Office of Inspection & Enforcement
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Washington, D.C. 20555

Mr. J. P. O'Reilly, Regional Administrator (w/a)
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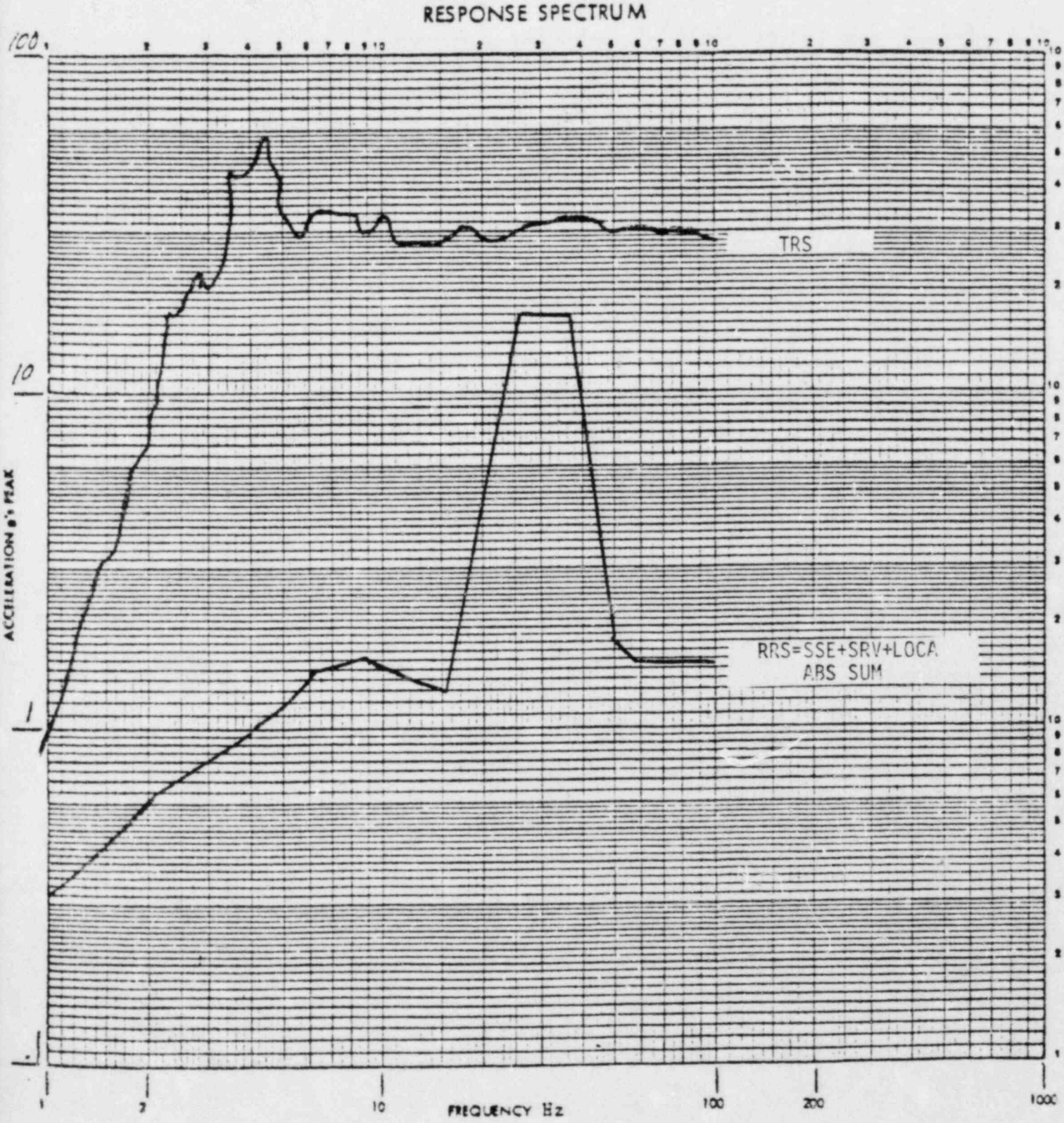

Figure 1, TRS and RRS in the vertical direction at HCU floor for Faulted condition

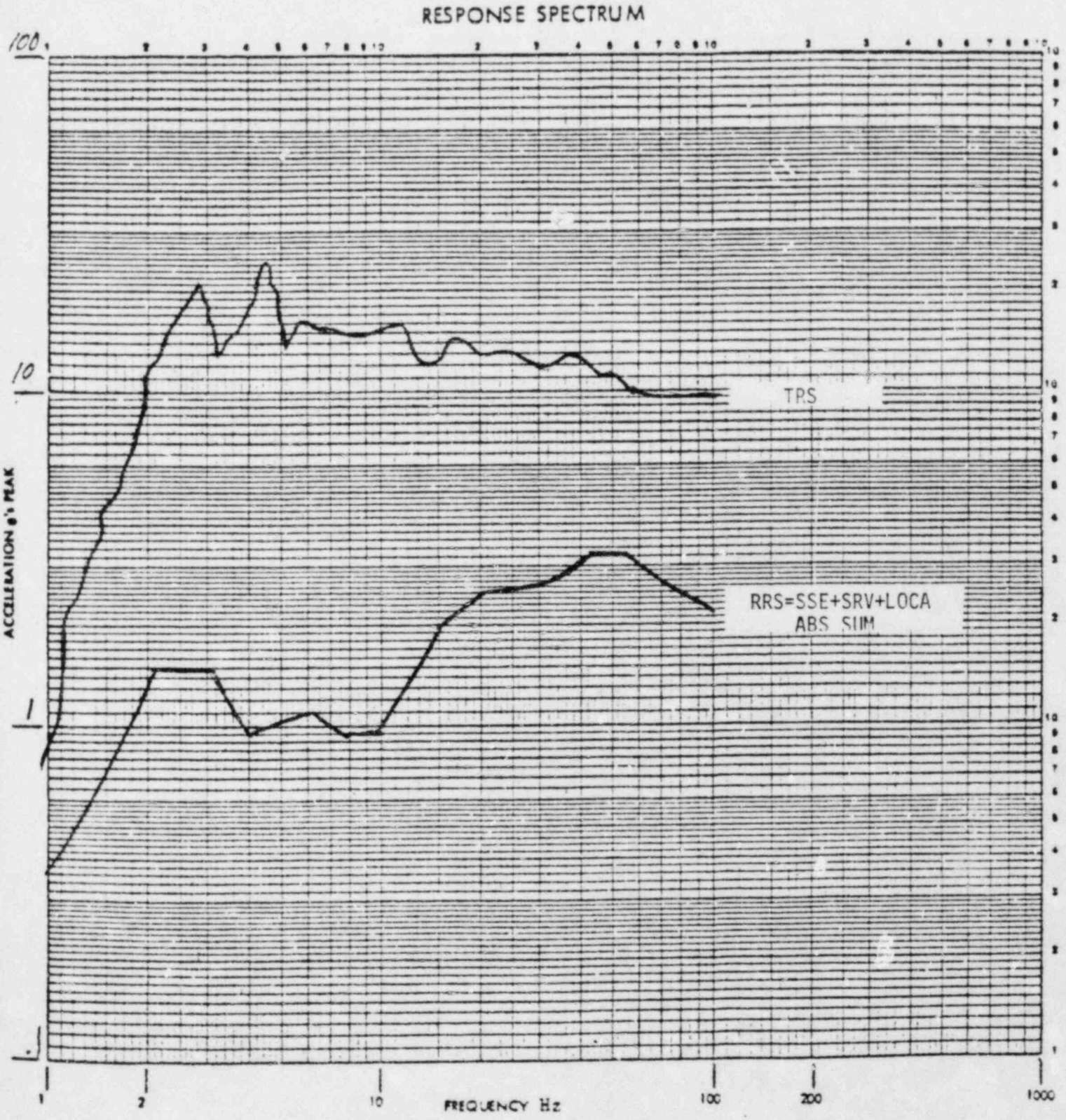

Figure 2, TRS and RRS in Front to Back direction at HCU floor for Faulted condition

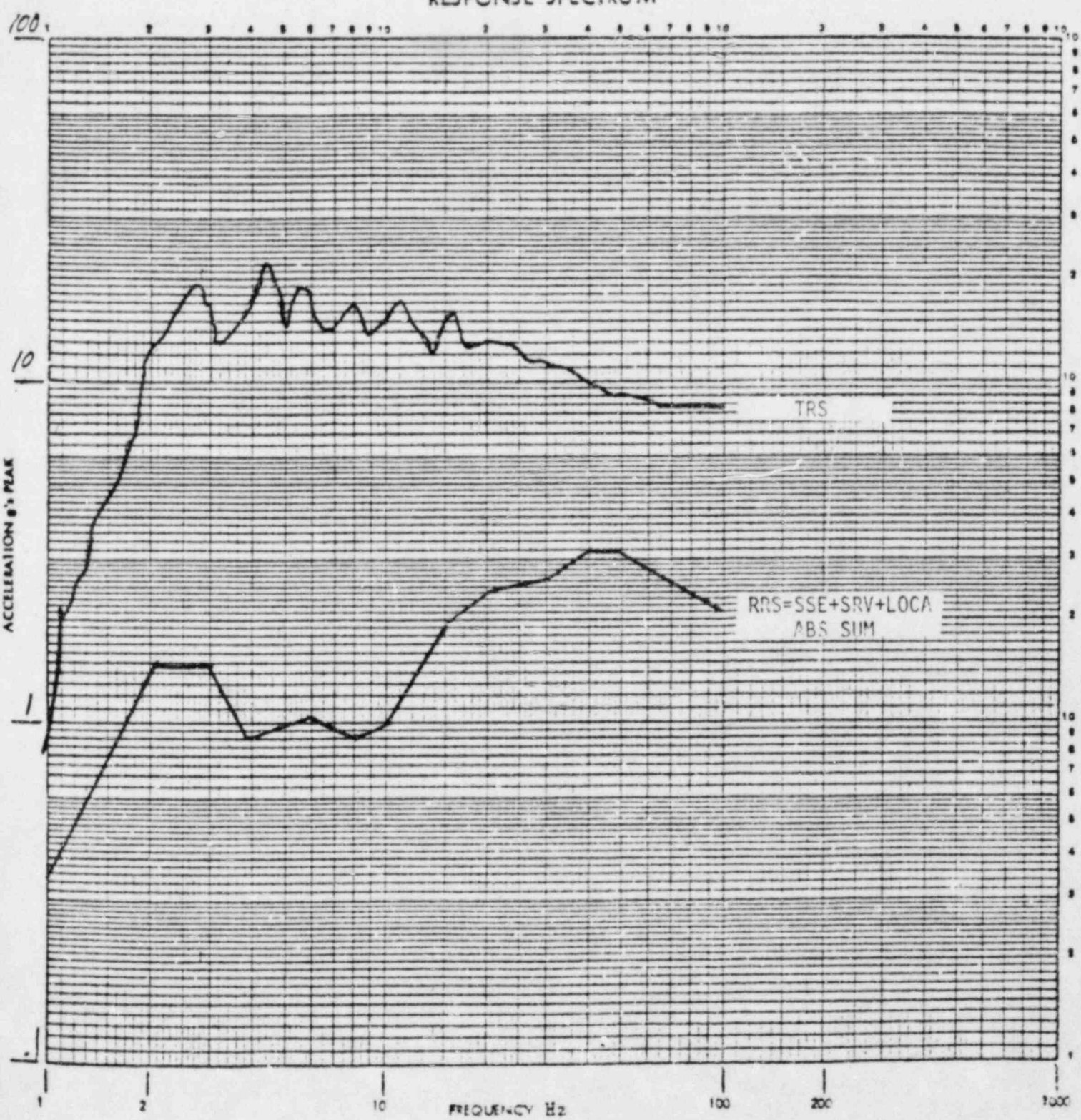

Figure 3, TRS and RRS in Side to Side direction at HCU floor for Faulted condition

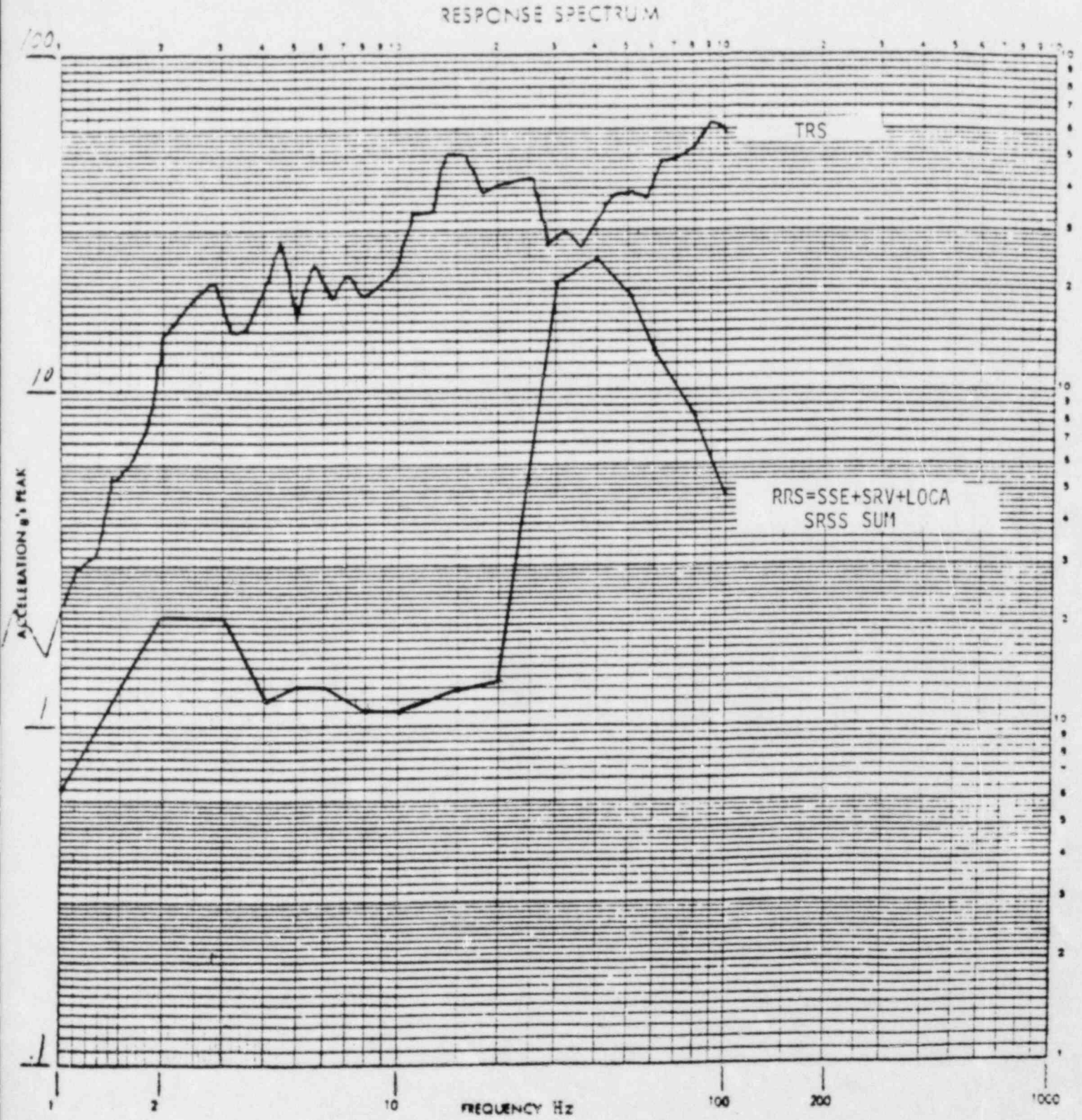

Figure 4 , TRS and RRS in Front to Back direction at HCU Upper Attachment for Faulted condition

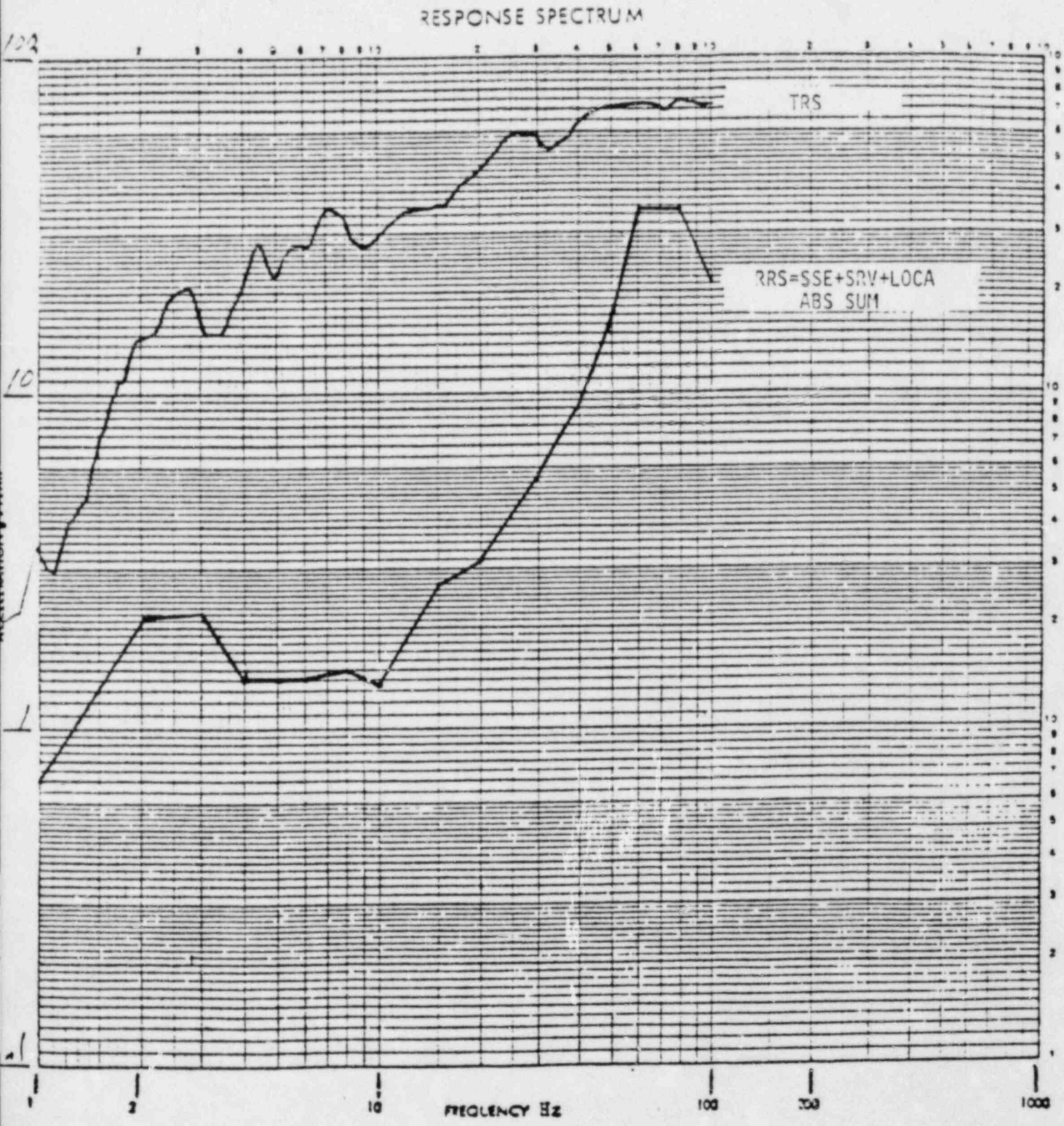

Figure 5 , TRS and RRS in Side to Side direction at HCU Upper Attachment for Faulted condition