Explanation

Contour intervals, % g

200
175
150
125
100
90
75
60
50
40
30
25
20
15
10
8
6
4
2
0

Note: contours are irregularly spaced

Areas with a constant spectral response acceleration of 60% g

6.2 — Point value of spectral response acceleration expressed as a percent of gravity

Contours of spectral response acceleration expressed as a percent of gravity. Hachures point in direction of decreasing values.

248 — Locations of faults (see DISCUSSION). The number on the fault is the median spectral response acceleration times 1.5, expressed as a percent of gravity.

International boundary

State boundary

County boundary

Selected major highways

DISCUSSION

The acceleration values contoured are the random horizontal component. For design purposes, the reference site condition for the map is to be taken as NEHRP site class B.

A line shown as a fault location is the projection to the earth's surface of the edge of the fault rupture area located closest to the earth's surface. The fault location is shown as solid and/or dashed. The fault is shown solid when deterministic values control over probabilistic values and dashed when probabilistic values control over deterministic values. The number on the fault is the deterministic median spectral response acceleration times 1.5. The values on the fault portion shown solid may be used for interpolation purposes. When the fault is shown dashed it is for the purpose of information only and should not be used for interpolation.

Selected contours near faults have been deleted for clarity. In these instances, interpolation may be done using fault values and the nearest adjacent contour.

REFERENCES

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1996, National Seismic-Hazard Maps: Documentation June 1996: U.S. Geological Survey Open-File Report 96-532, 110 p.

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Petersen, M., Bryant, W., Cramer, C., Cao, T., Reichle, M., Frankel, A., Lienkaemper, J., McCrory, P., and Schwartz, D., 1996, Probabilistic Seismic Hazard Assessment for the State of California: California Division of Mines and Geology Open-File Report 96-08, 66 p., and U.S. Geological Survey Open-File Report 96-706, 66 p.

Index map showing location of study area

Scale 1:1,500,000

50 0 50 100 150 200 250 MILES

50 0 50 100 150 200 250 KILOMETERS

MAP 12

Maximum Considered Earthquake Ground Motion for Salt Lake City and the Intermountain Area of 1.0 sec Spectral Response Acceleration (5% of Critical Damping) Site Class B

Digital data prepared with ARC / INFO 7.1.1 running under Solaris 2.5 on a UNIX workstation

Albers Equal-Area Conic Projection
Standard Parallels 29.5° N and 45.5° N
Central Meridian 112.5° W

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