FERC GUIDELINES FOR DEVELOPMENT OF SEISMIC LOADING

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These guidelines will incorporate and draw on the contents of the report on

"EVALUATION OF EARTHQUAKE GROUND MOTIONS"

Which is being prepared on behalf of FERC.

EVALUATION OF EARTHQUAKE GROUND MOTIONS

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Development of a scenario event

$$\overline{M} \qquad \overline{R} \qquad \overline{\varepsilon}$$

USE OF THE USGS WEB SITE FOR ESTIMATING EARTHQUAKE GROUND MOTIONS

http://eqint.cr.usgs.gov/eq-men/html/lookup-2002-interp-06.html

The report by Idriss-Archuleta-Abrahamson states:

- **It is important to keep in mind that the values available from this web site are not site specific.**
- **Nevertheless, it is valuable to consult this web site for a specific project.**

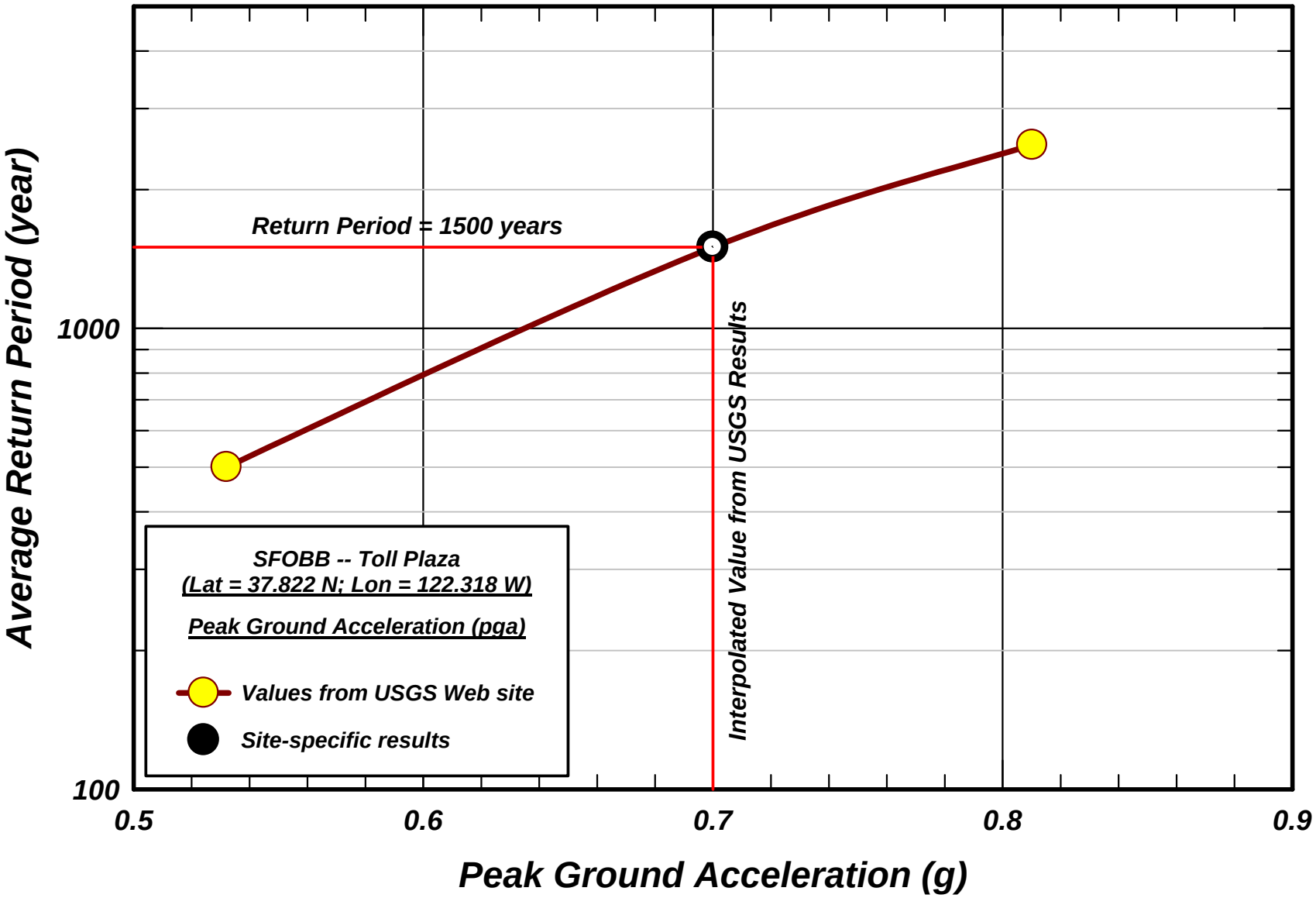
USE OF THE USGS WEB SITE FOR ESTIMATING EARTHQUAKE GROUND MOTIONS

Comparison with site-specific probabilistic seismic hazard evaluations show that the results can be:

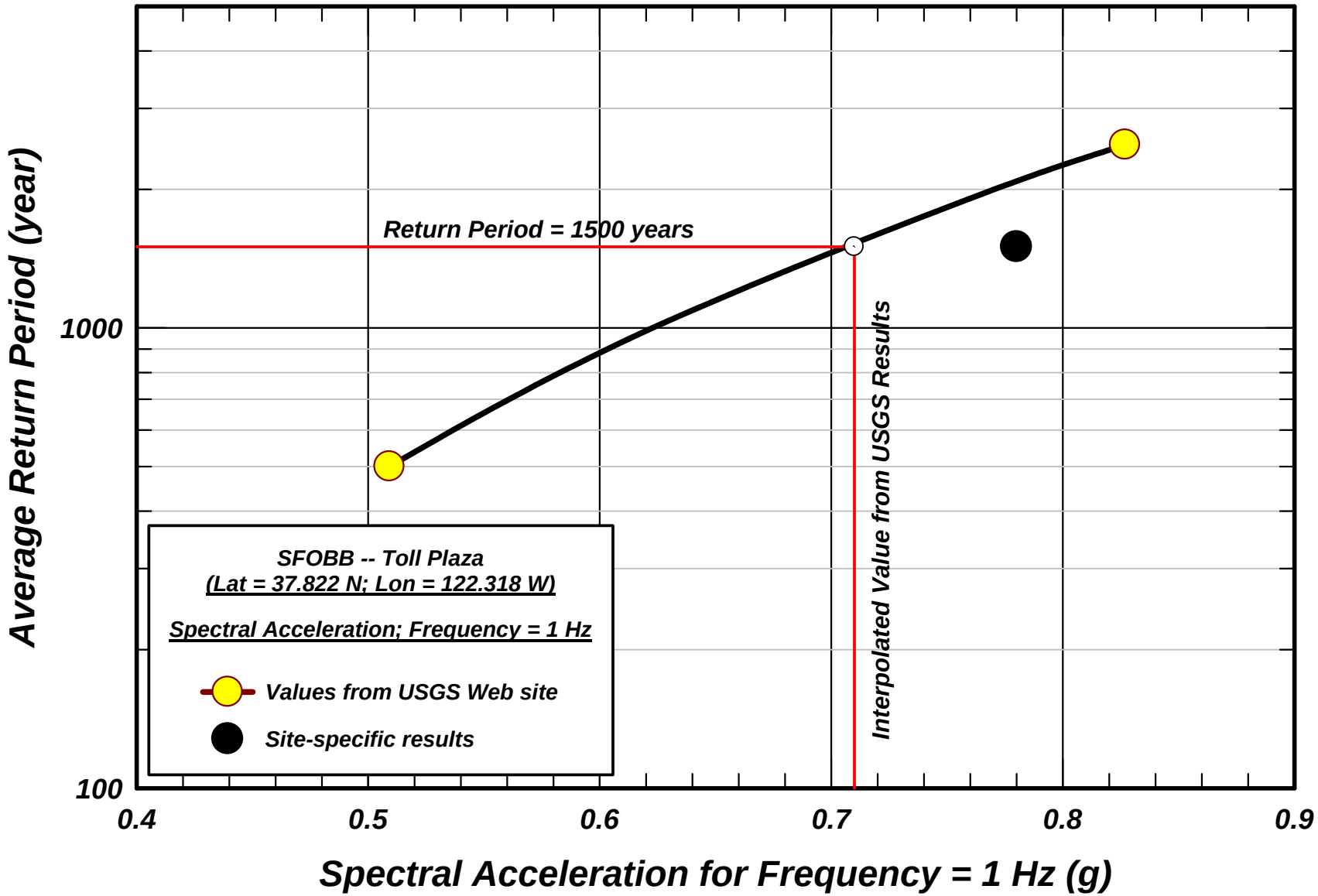
Site specific results ≈ results from USGS

Site specific results > results from USGS

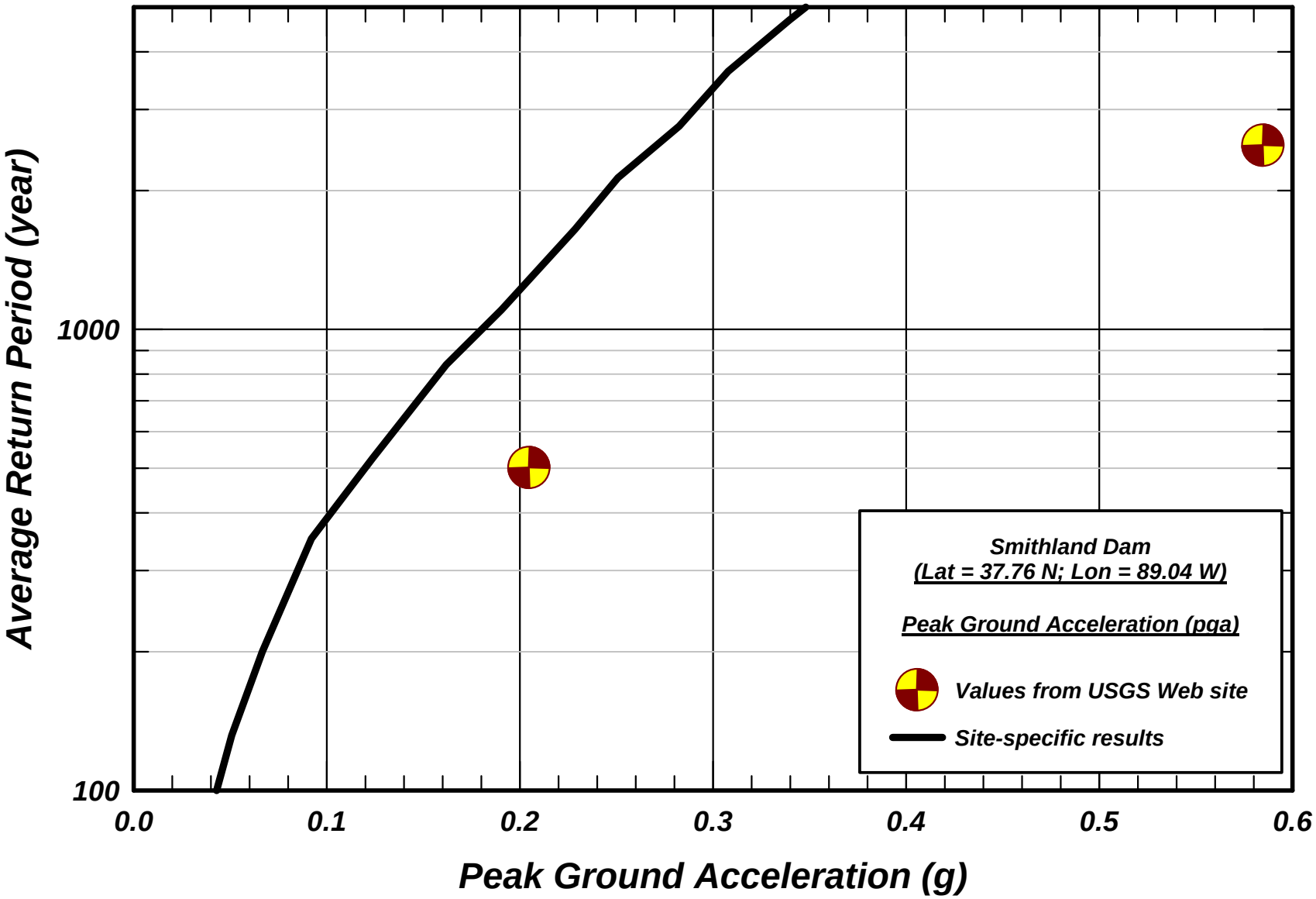
Site specific results < results from USGS



Example of: ***Site specific results ≈ results from USGS***



Example of: ***Site specific results > results from USGS***



Example of: ***Site specific results < results from USGS***

The comparisons of the values available from the USGS Web site with site specific values suggest that the former could be larger, equal to, or less than the site specific values.

Therefore, as noted in FERC's Draft Guidelines, it is useful to obtain the values available from the USGS Web site for a specific location.

Until more comparisons, as those presented here, are completed, however, it is suggested that the values from the USGS Web site <u>not be used directly</u> for selecting seismic design parameters for a critical water retention structure.

THANK YOU