



ASLBP #: 15-943-01-ESP-BD01

Docket #: 05200043

Exhibit #: PSEG004L-MA-BD01

Admitted: 03/24/2016

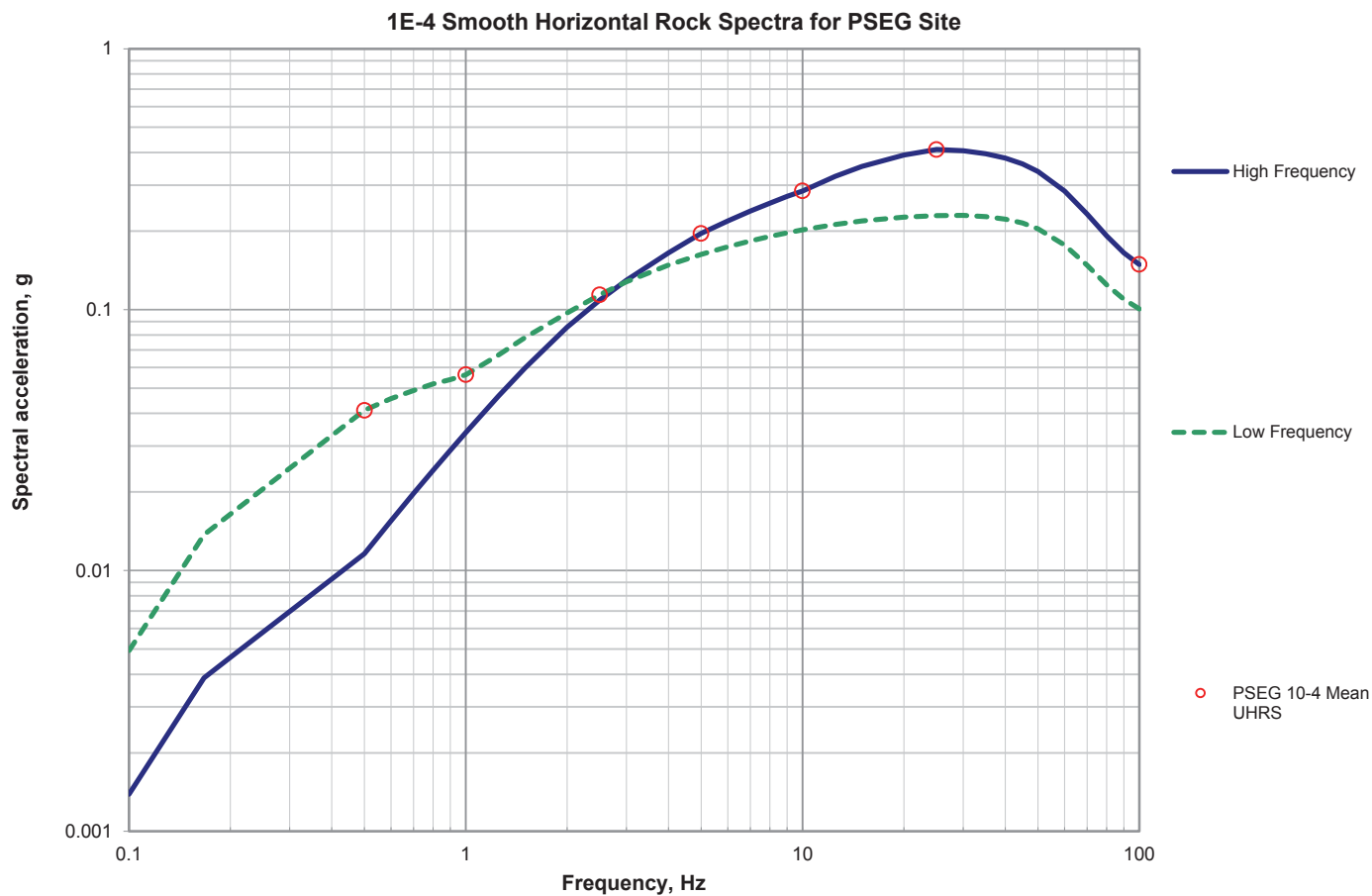
Rejected:

Other:

Identified: 03/24/2016

Withdrawn:

Stricken:



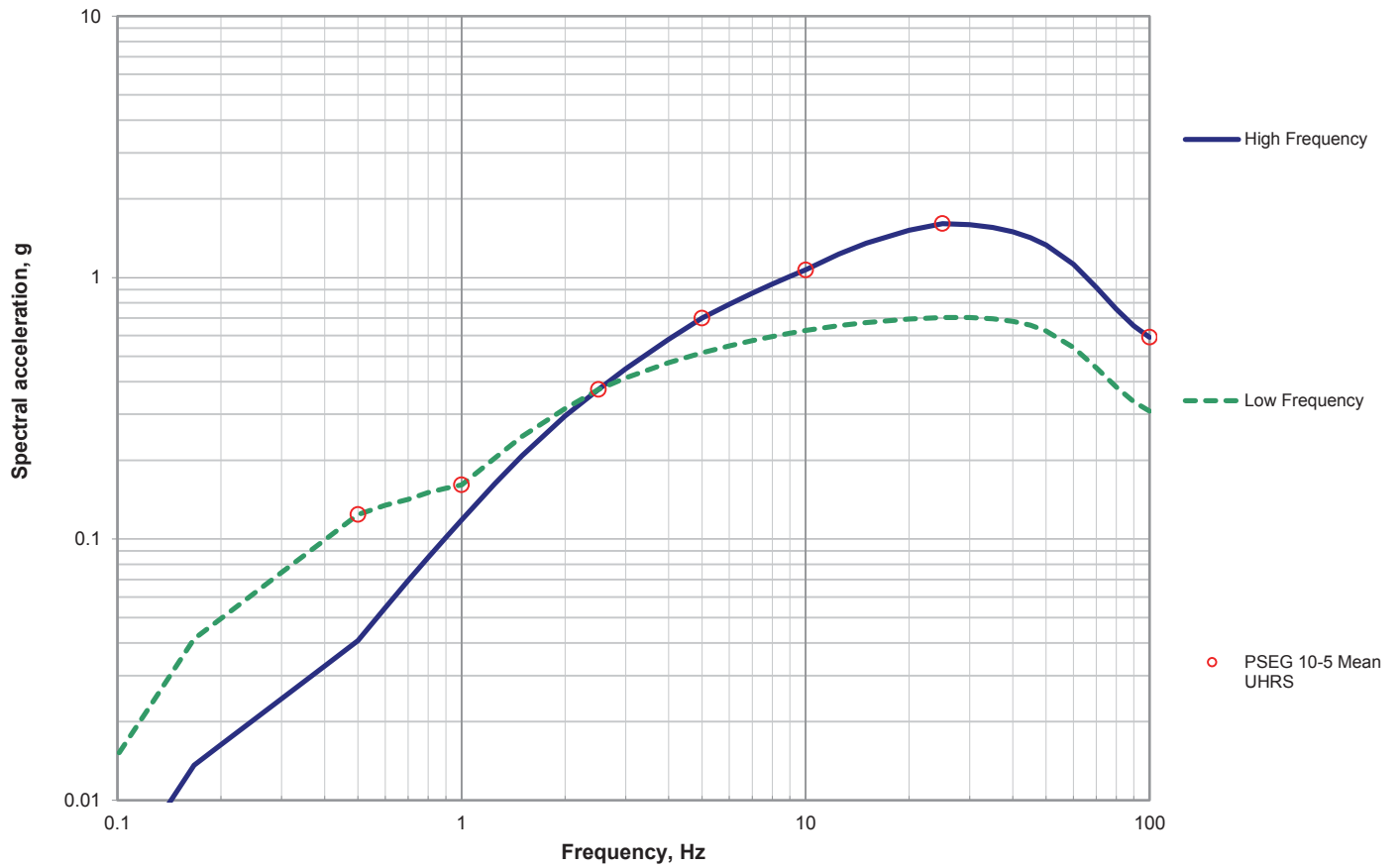
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis ReportHigh- and Low-frequency
Rock Spectra for 10⁻⁴,
with 10⁻⁴ UHRS Amplitudes

FIGURE 2.5.2-31

Rev 1

1E-5 Smooth Horizontal Rock Spectra for the PSEG Site



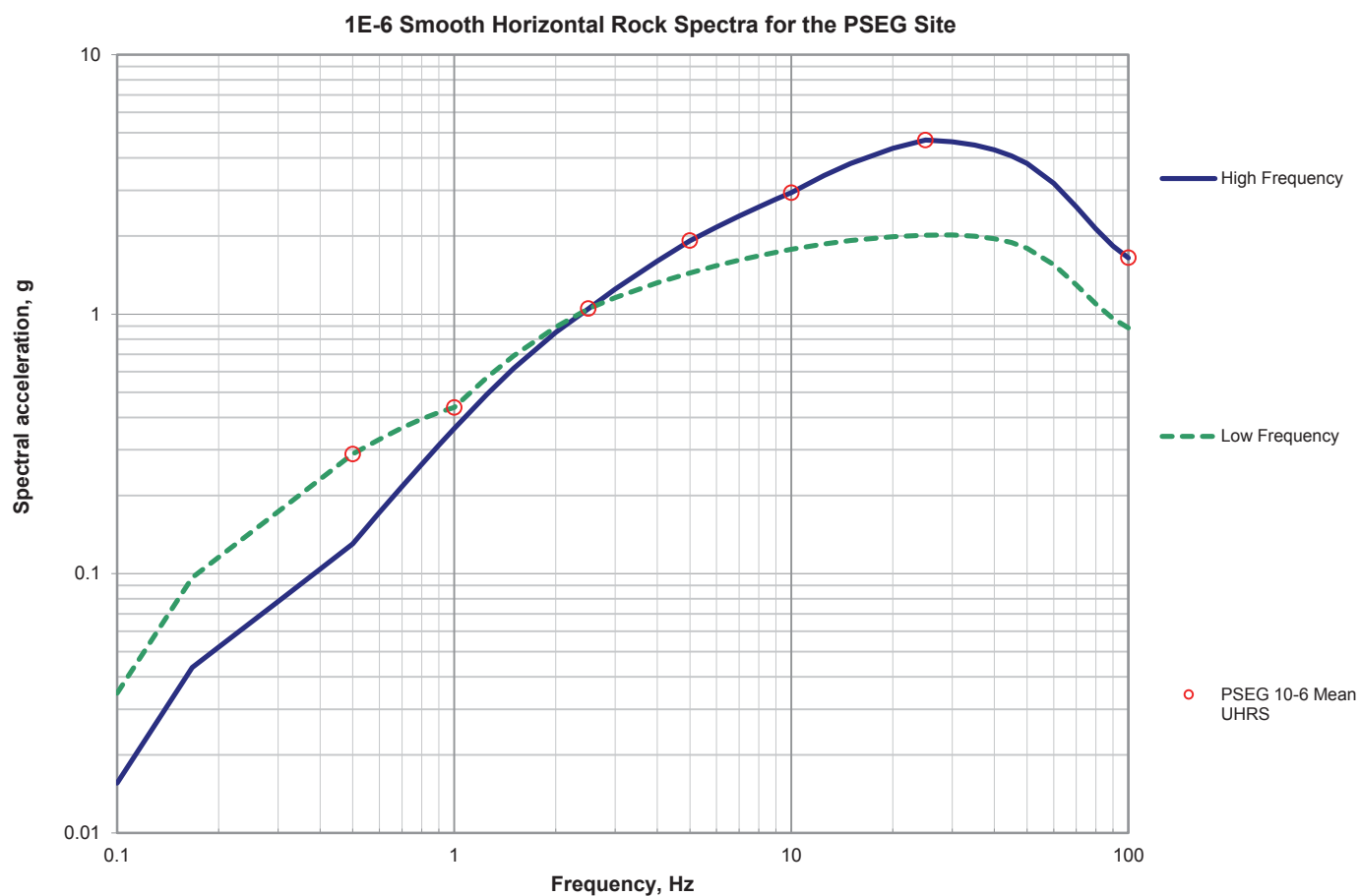
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

High- and Low-frequency
Rock Spectra for 10⁻⁵,
with 10⁻⁵ UHRS Amplitudes

FIGURE 2.5.2-32

Rev 1



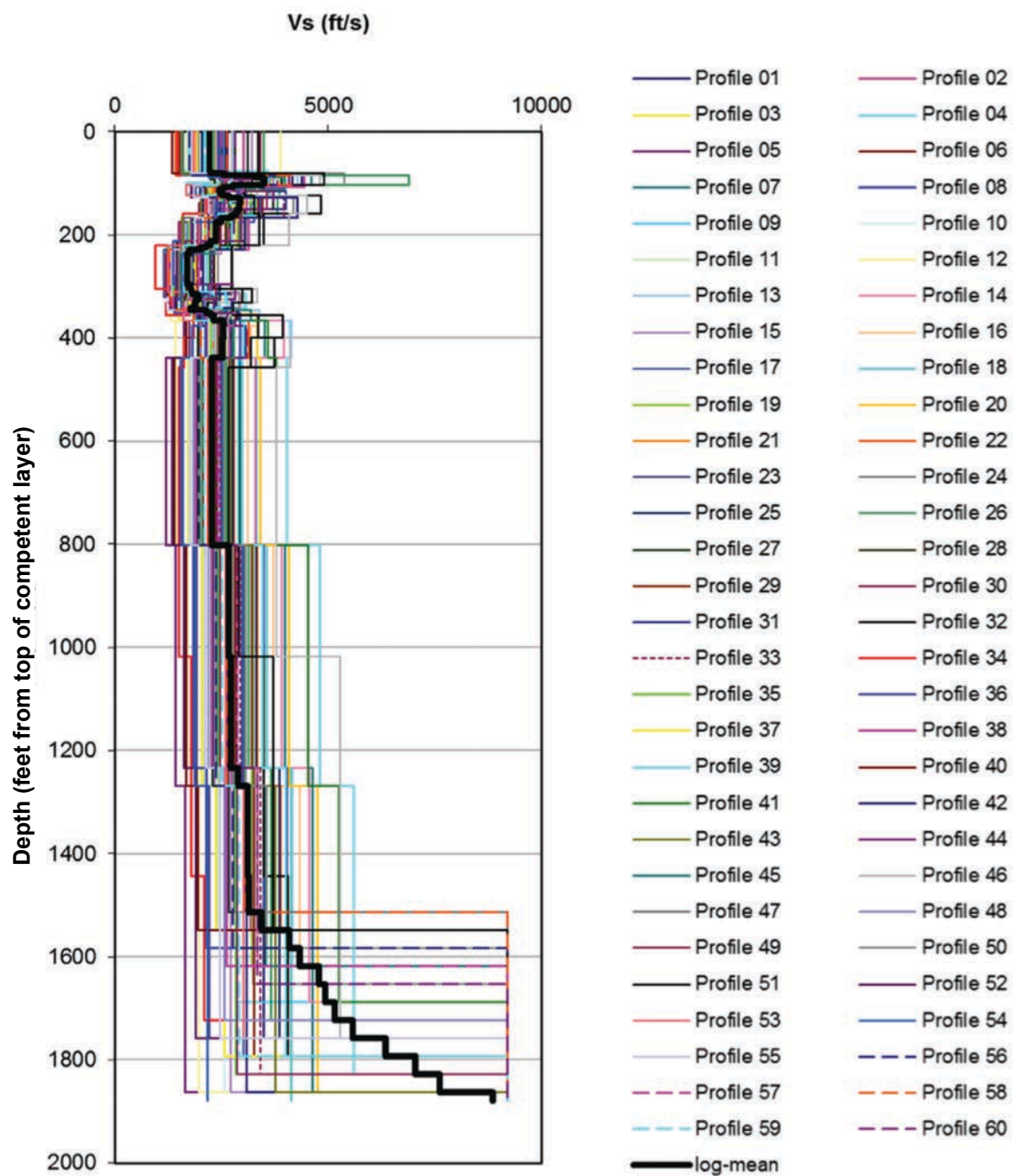
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

High- and Low-frequency
Rock Spectra for 10^{-6} ,
with 10^{-6} UHRS Amplitudes

FIGURE 2.5.2-33

Rev 1



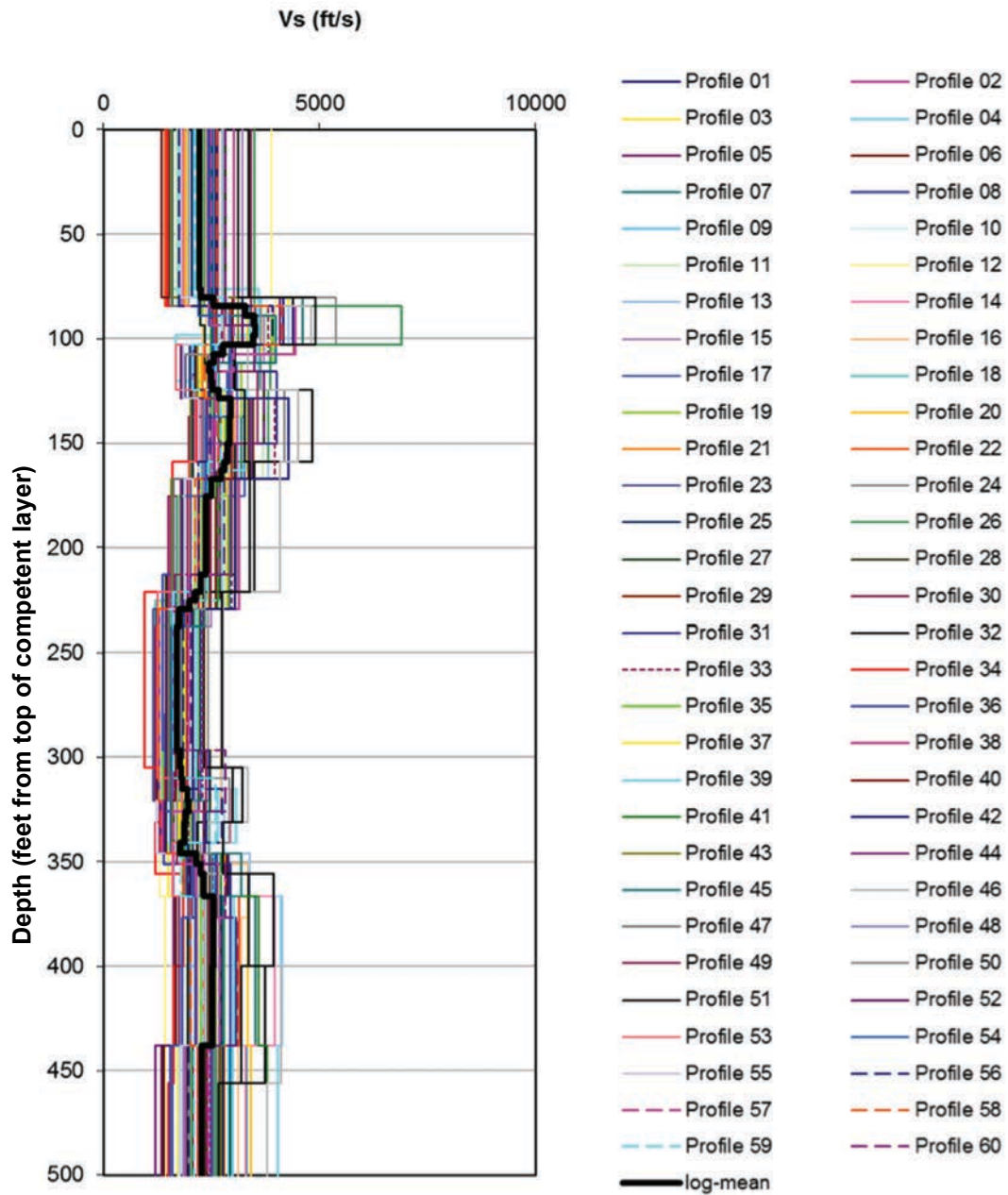
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Synthetic Vs Profiles
(Entire Profile)

FIGURE 2.5.2-34

Rev 1



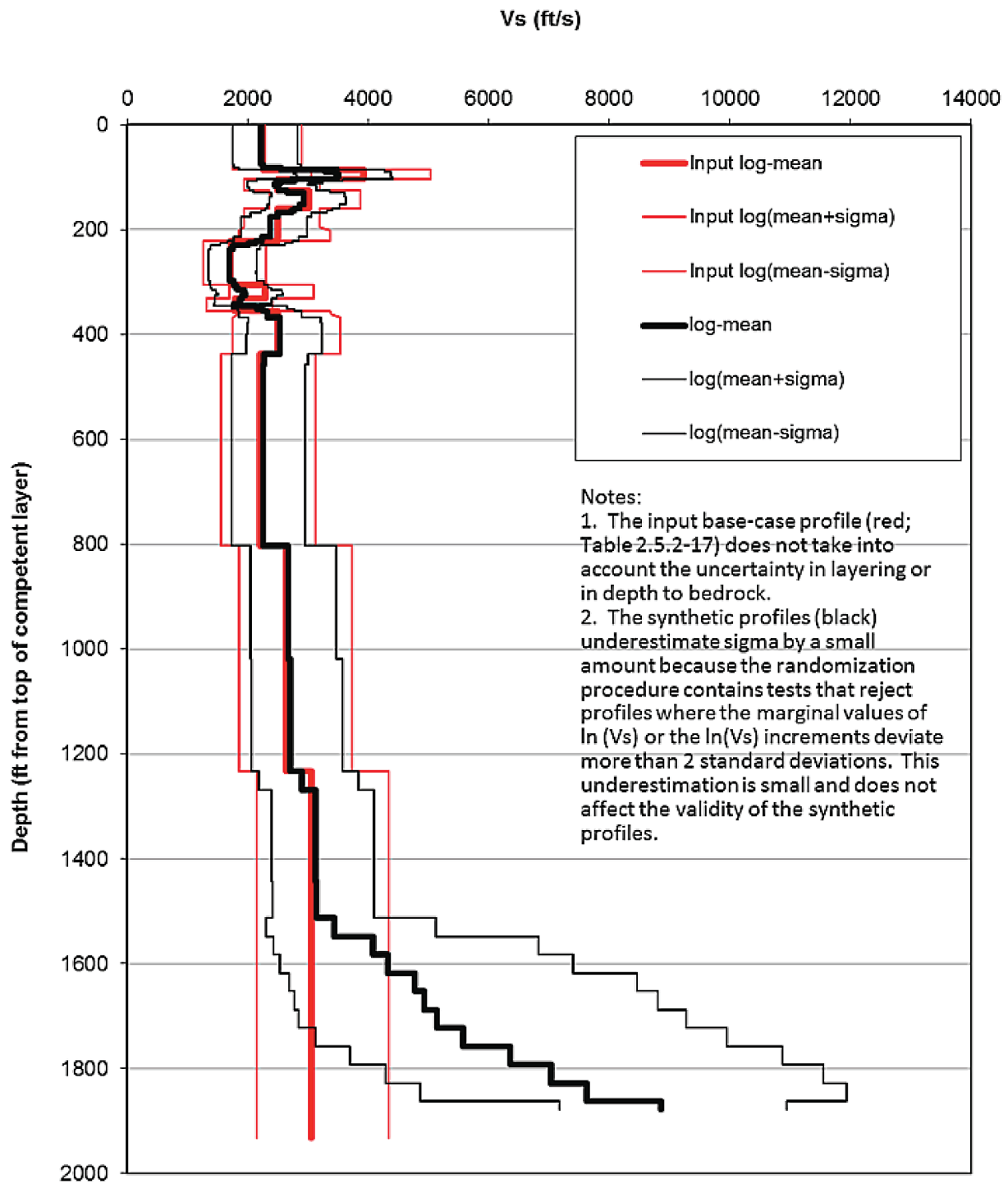
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Synthetic Vs Profiles (Shallow Portion)

FIGURE 2.5.2-35

Rev 1



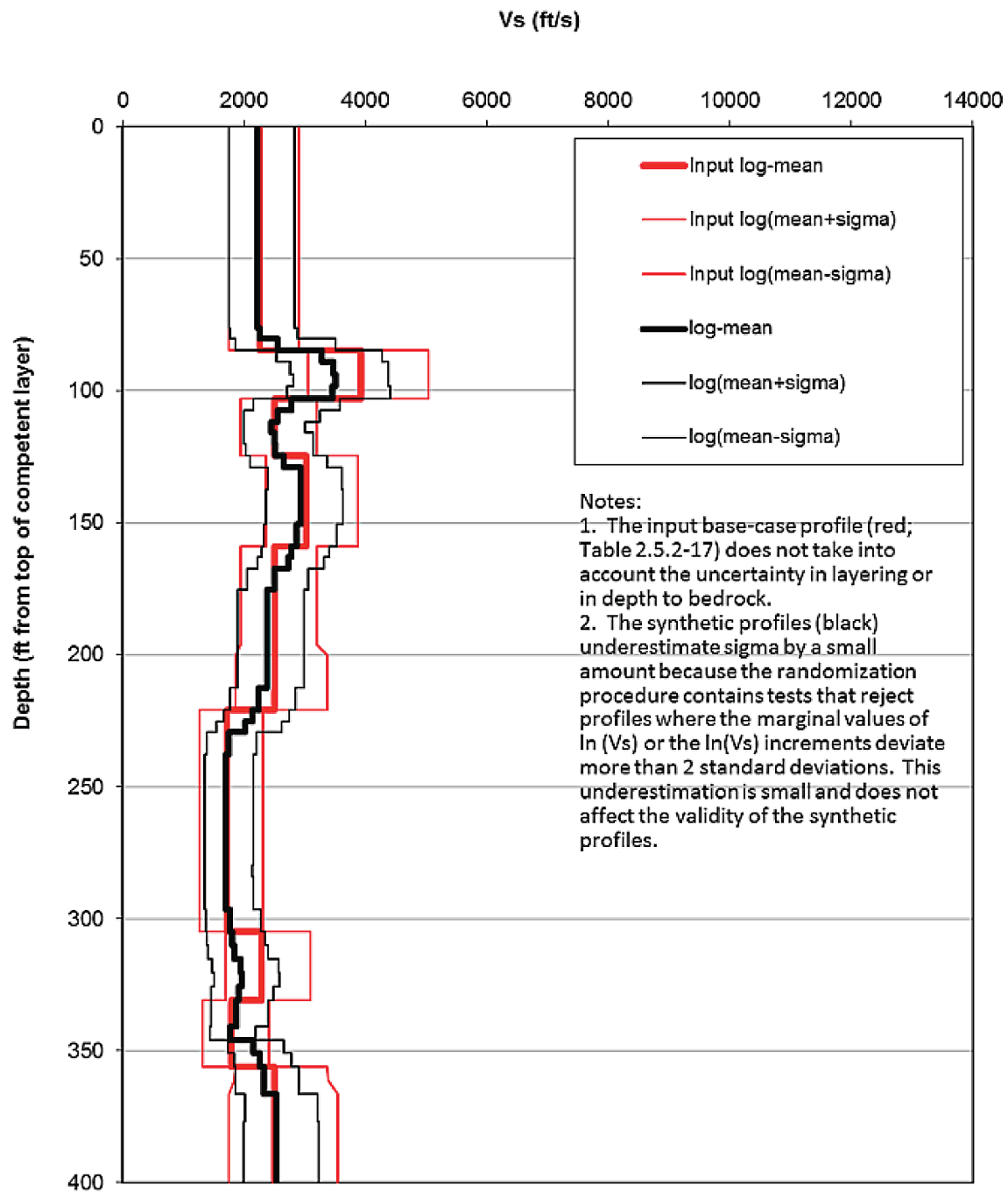
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Comparison of Input and
Modeled Velocity Profiles
(Entire Profile)

FIGURE 2.5.2-36

Rev 1



PSEG Power, LLC

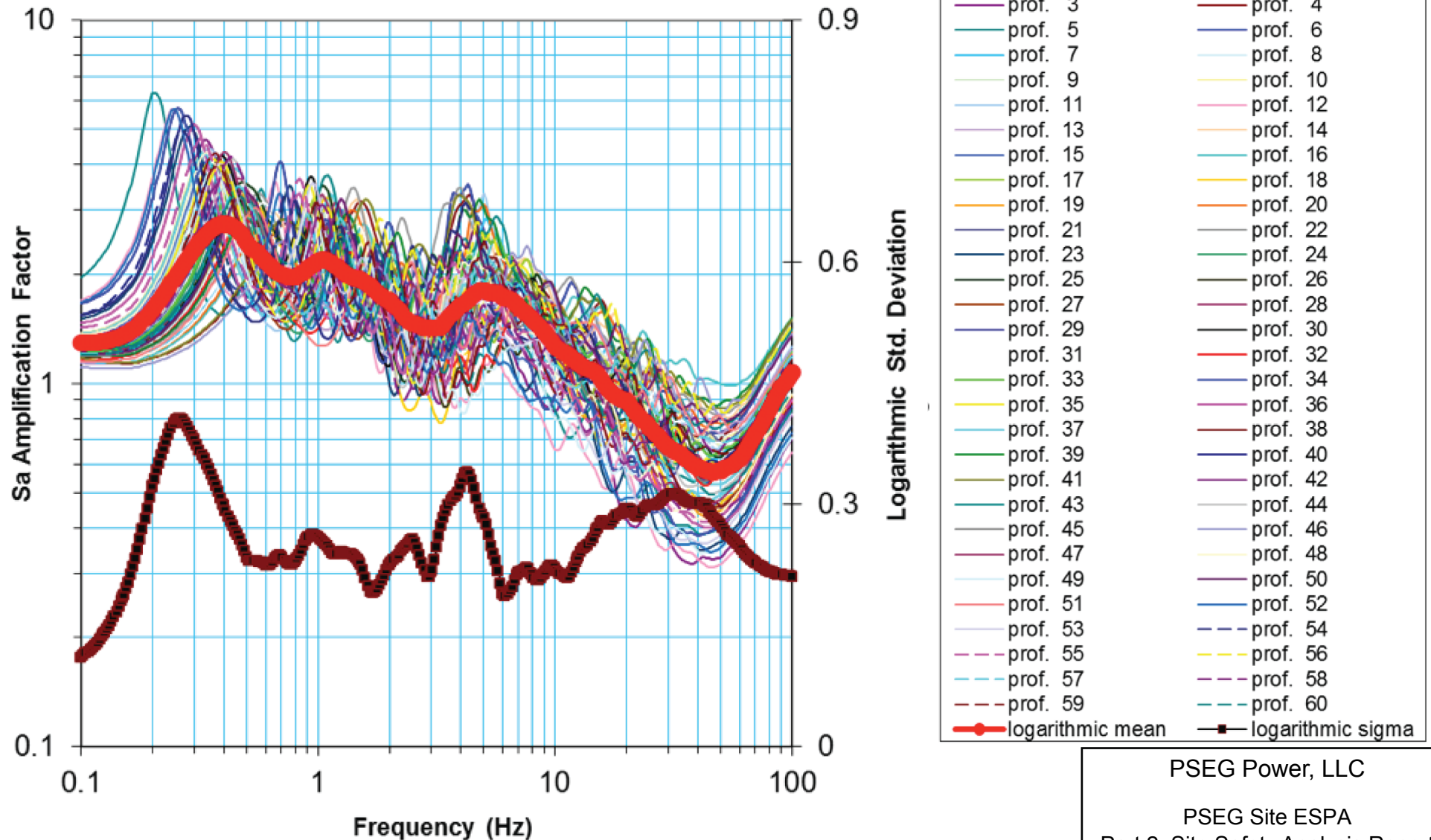
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Comparison of Input and
Modeled Velocity Profiles
(Shallow Portion)

FIGURE 2.5.2-37

Rev 1

PSEG Site - 1E-4 HF Site Response
Sa amplification factor at depth (ft) = 0.0 (Top of Competent Layer)



PSEG Power, LLC

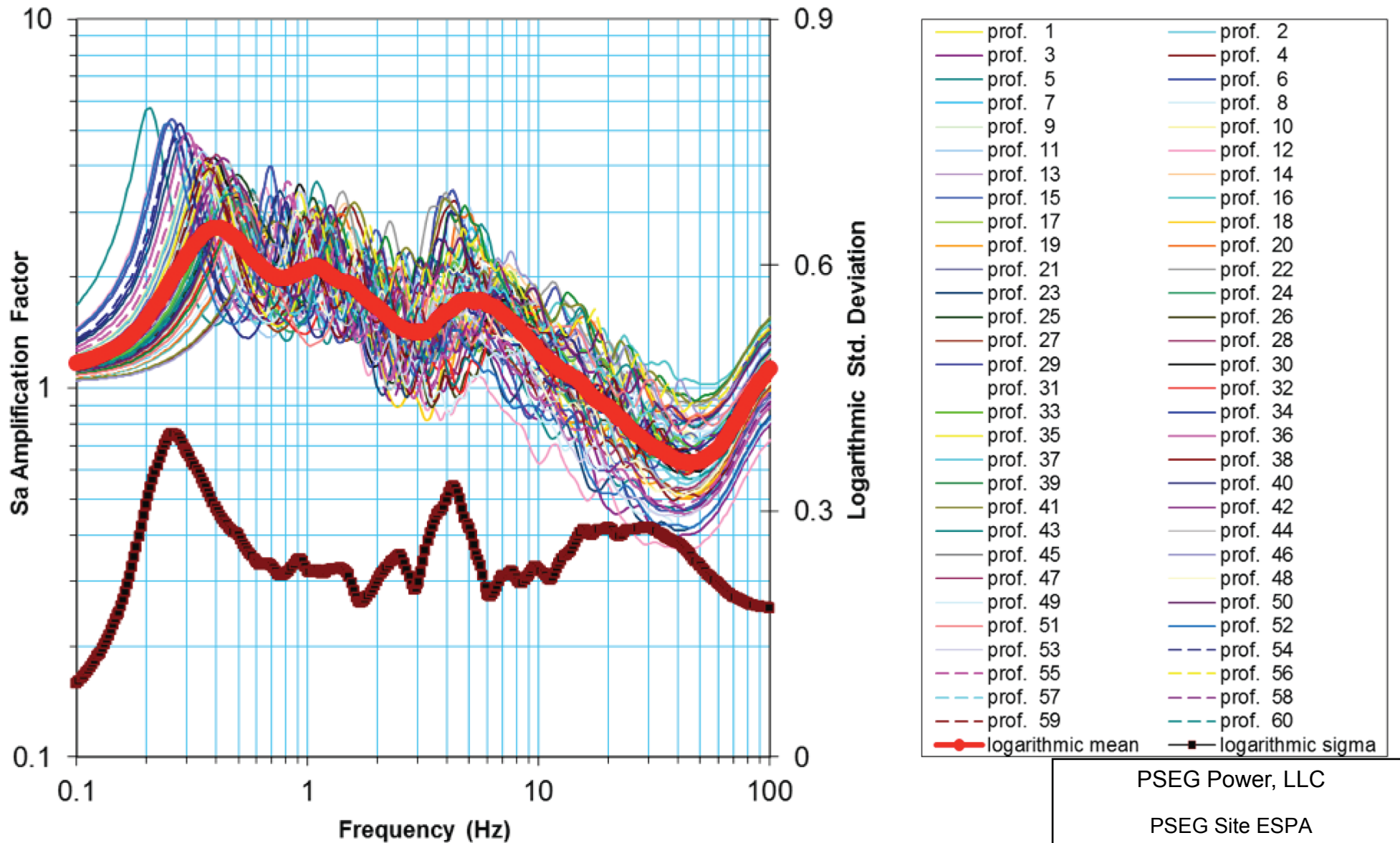
PSEG Site ESPA
 Part 2, Site Safety Analysis Report

Amplification Factors Calculated
 with the 60 Synthetic Profiles
 for the 10⁻⁴ High-Frequency Rock Input

FIGURE 2.5.2-40

Rev 1

PSEG Site - 1E-4 LF Site Response
Sa amplification factor at depth (ft) = 0.0 (Top of Competent Layer)



PSEG Power, LLC

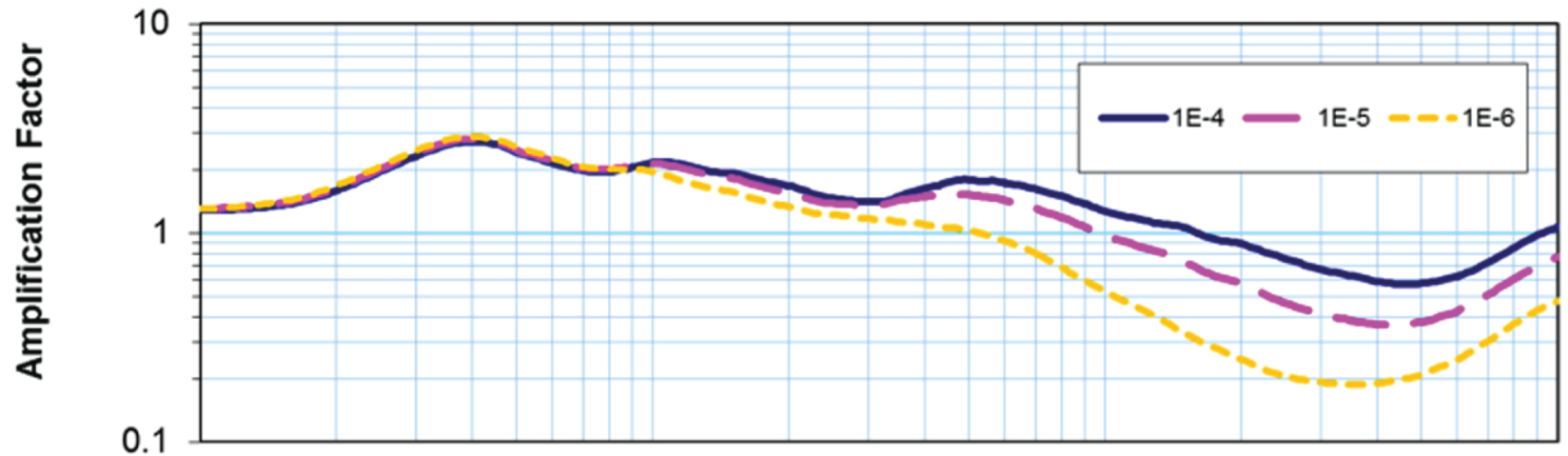
PSEG Site ESPA
 Part 2, Site Safety Analysis Report

Amplification Factors Calculated
 with the 60 Synthetic Profiles
 for the 10⁻⁴ Low-Frequency Rock Input

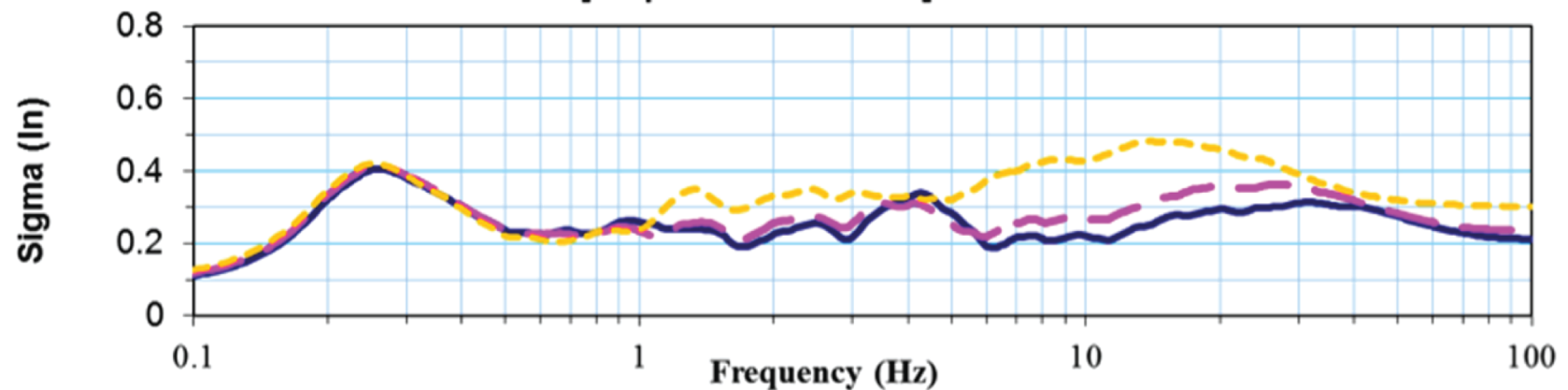
FIGURE 2.5.2-41

Rev 1

Median Amplification Factors for the PSEG Site GMRS HF



Std. Dev. of ln[Amplification Factor] for the PSEG Site GMRS HF



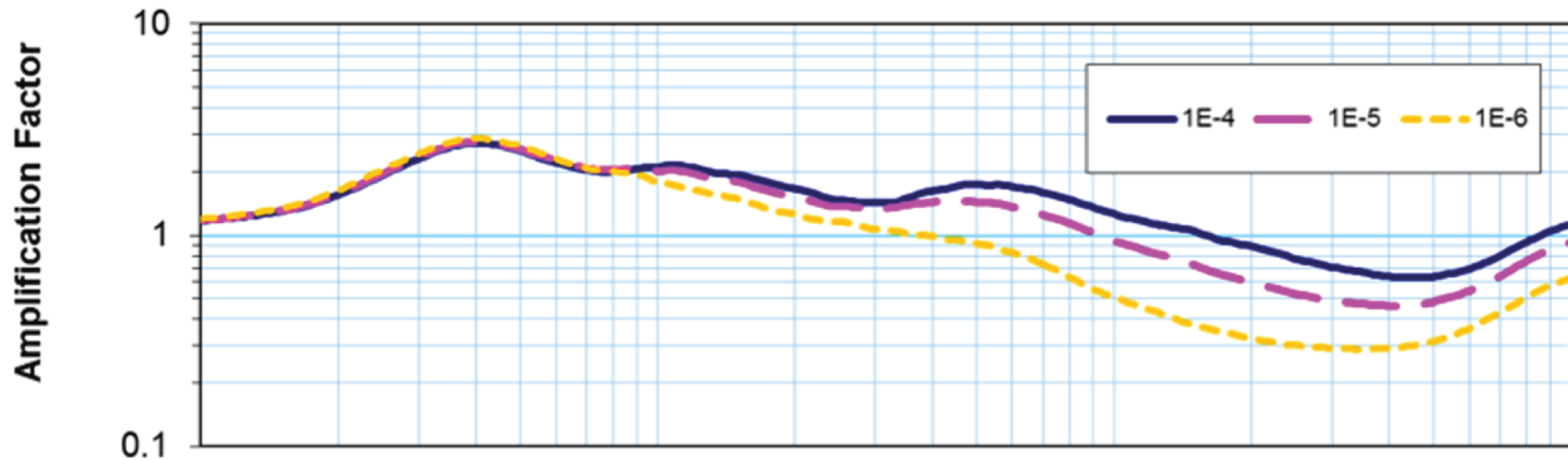
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

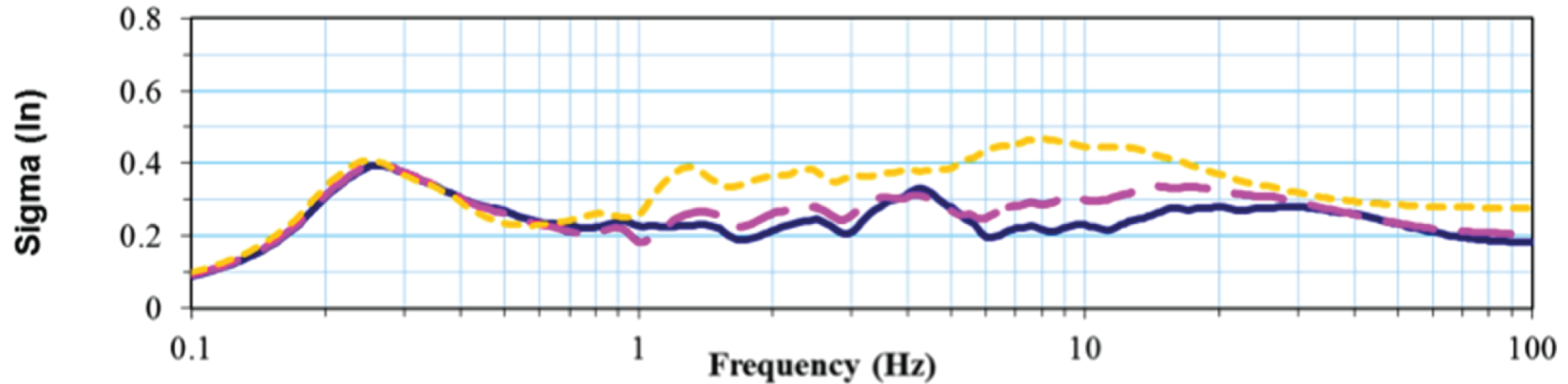
Logarithmic Mean Amplification
Factors for High-Frequency (HF) Rock
Inputs and Associated Logarithmic
Standard Deviations

FIGURE 2.5.2-42 Rev 1

Median Amplification Factors for the PSEG Site GMRS LF



Std. Dev. of $\ln[\text{Amplification Factor}]$ for the PSEG Site GMRS LF



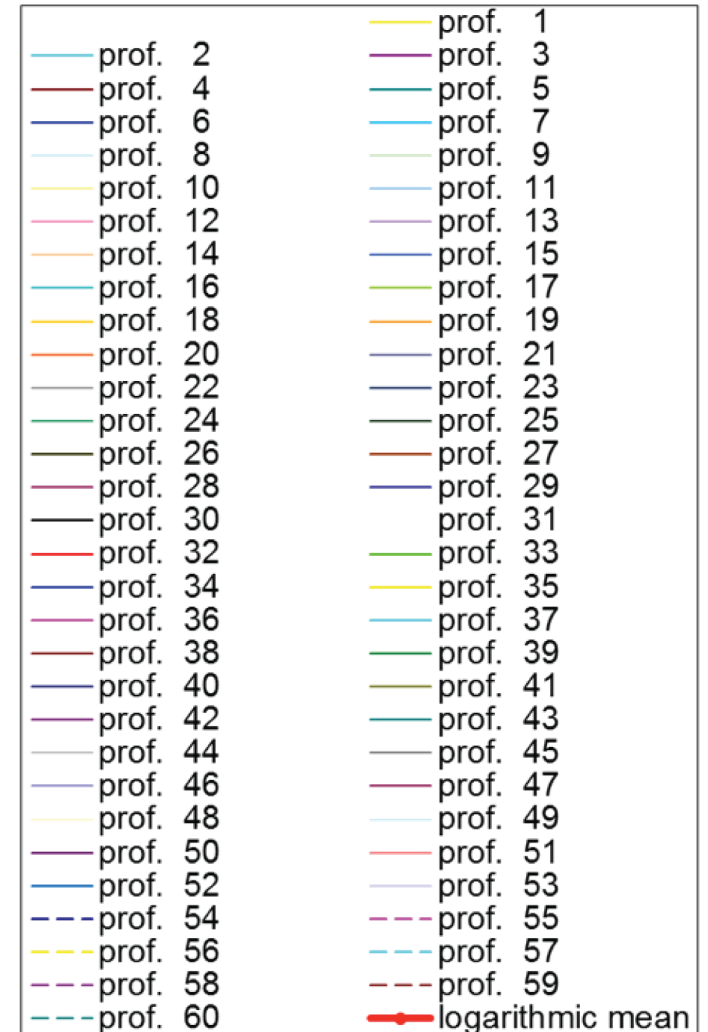
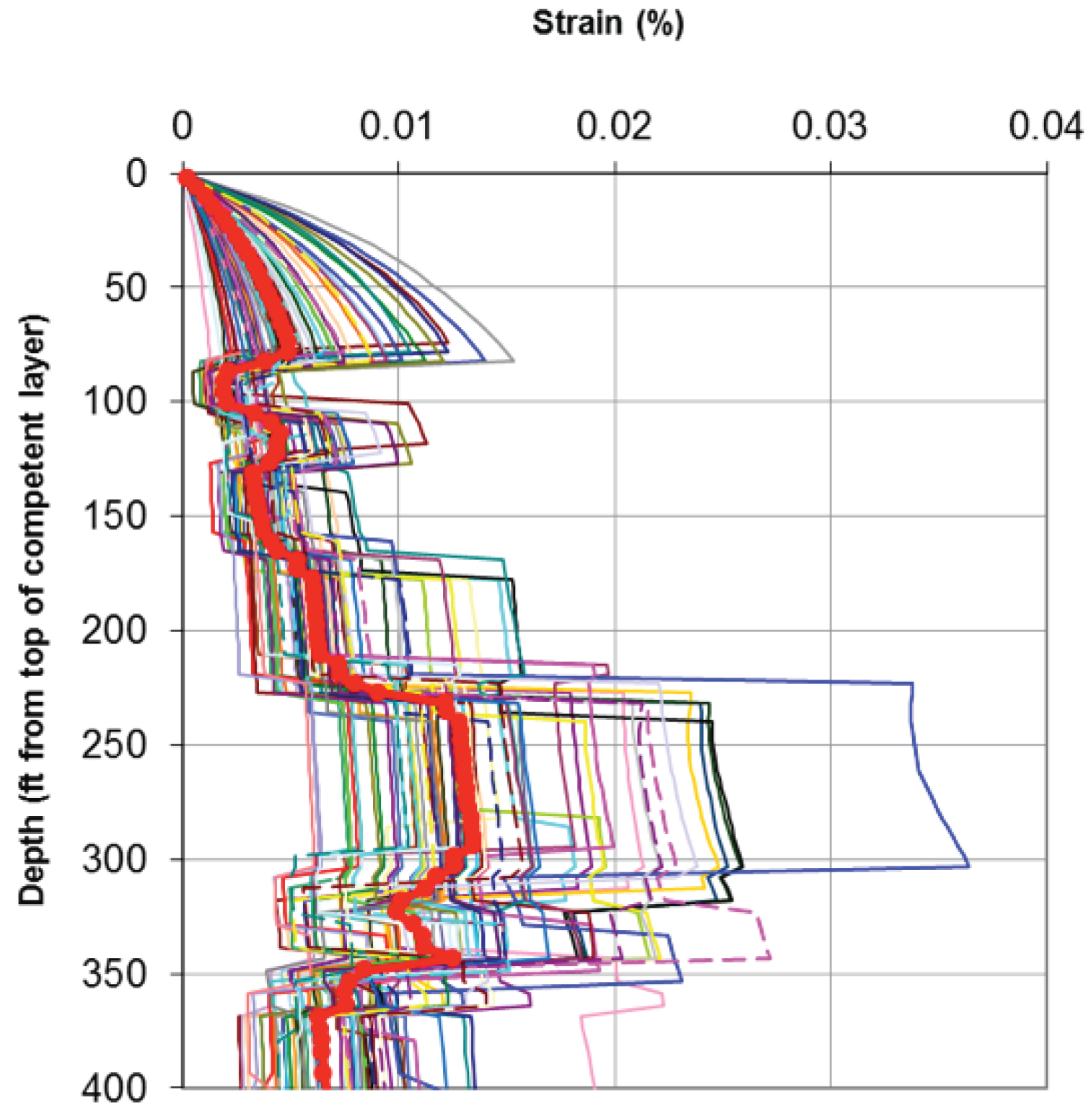
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Logarithmic Mean Amplification
Factors for Low-Frequency (LF) Rock
Inputs and Associated Logarithmic
Standard Deviations

FIGURE 2.5.2-43 Rev 1

PSEG Site - 1E-4 HF Site Response Maximum Strain



PSEG Power, LLC

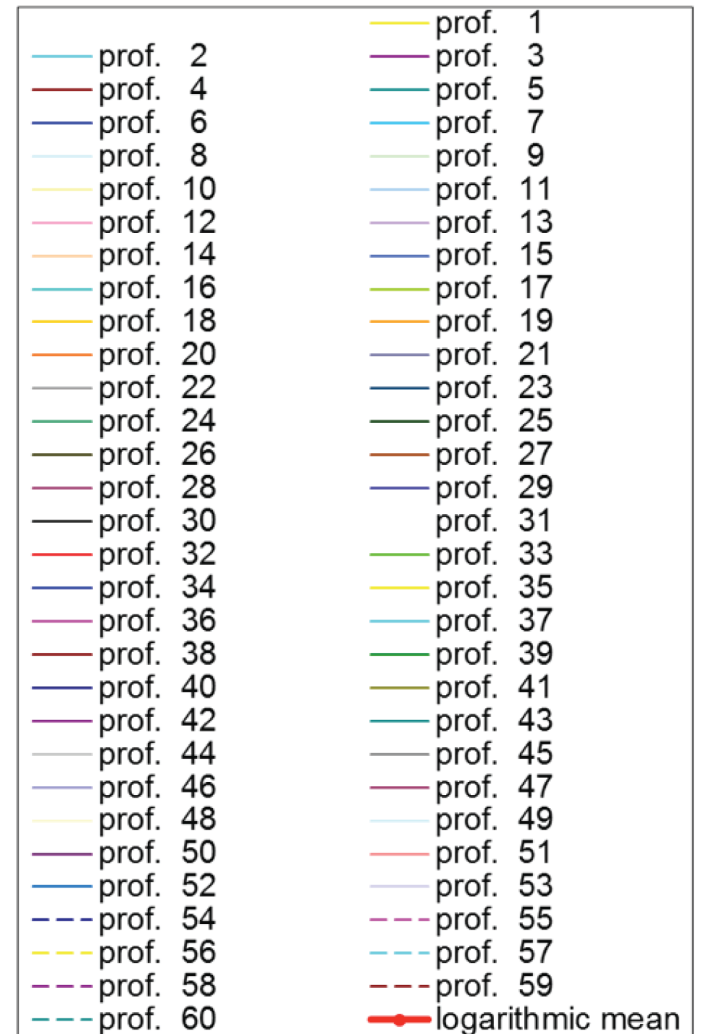
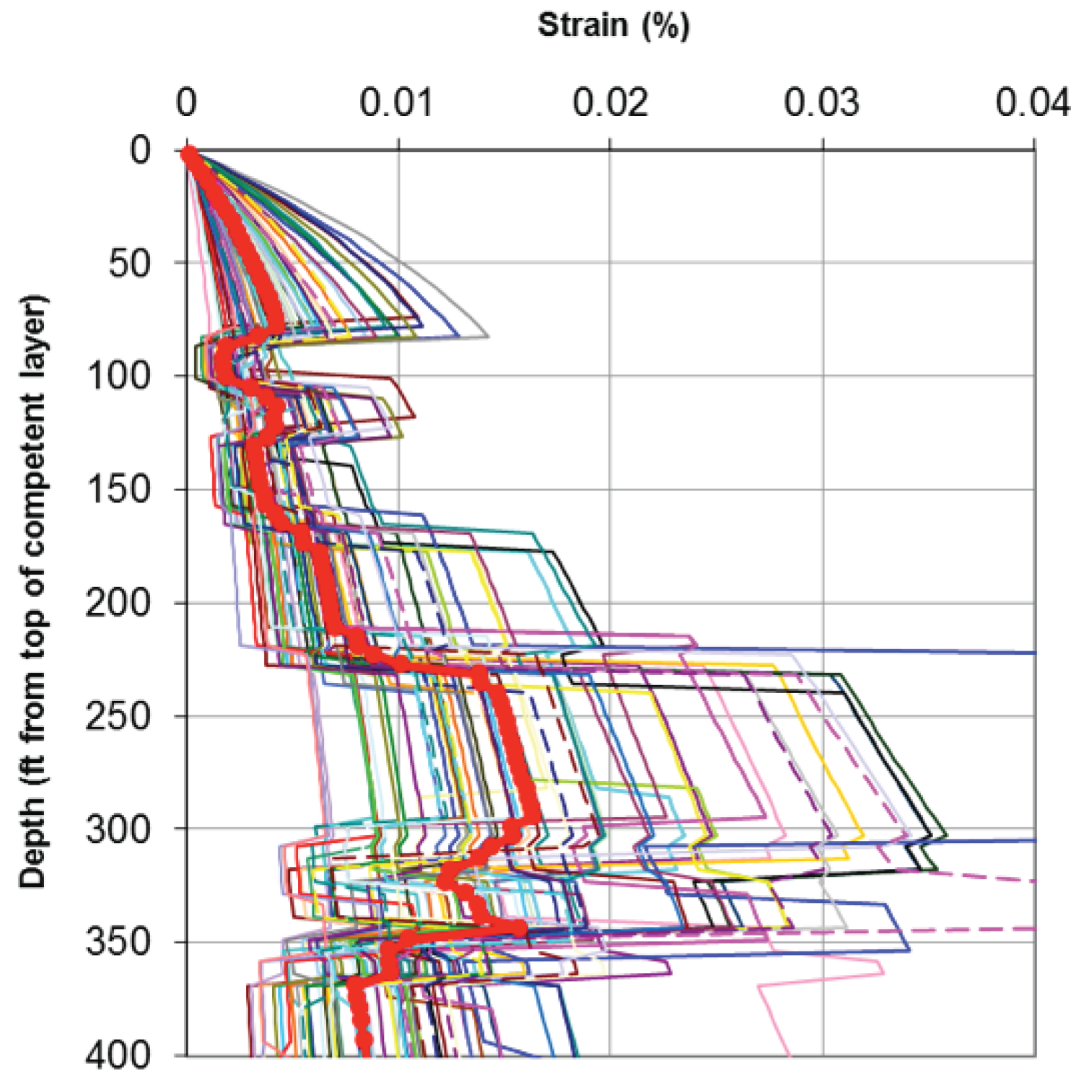
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Strain as a Function of Depth for the
10⁻⁴ High-Frequency (HF) Rock Input
(Shallow Portion of Profile)

FIGURE 2.5.2-44

Rev 1

PSEG Site - 1E-4 LF Site Response Maximum Strain



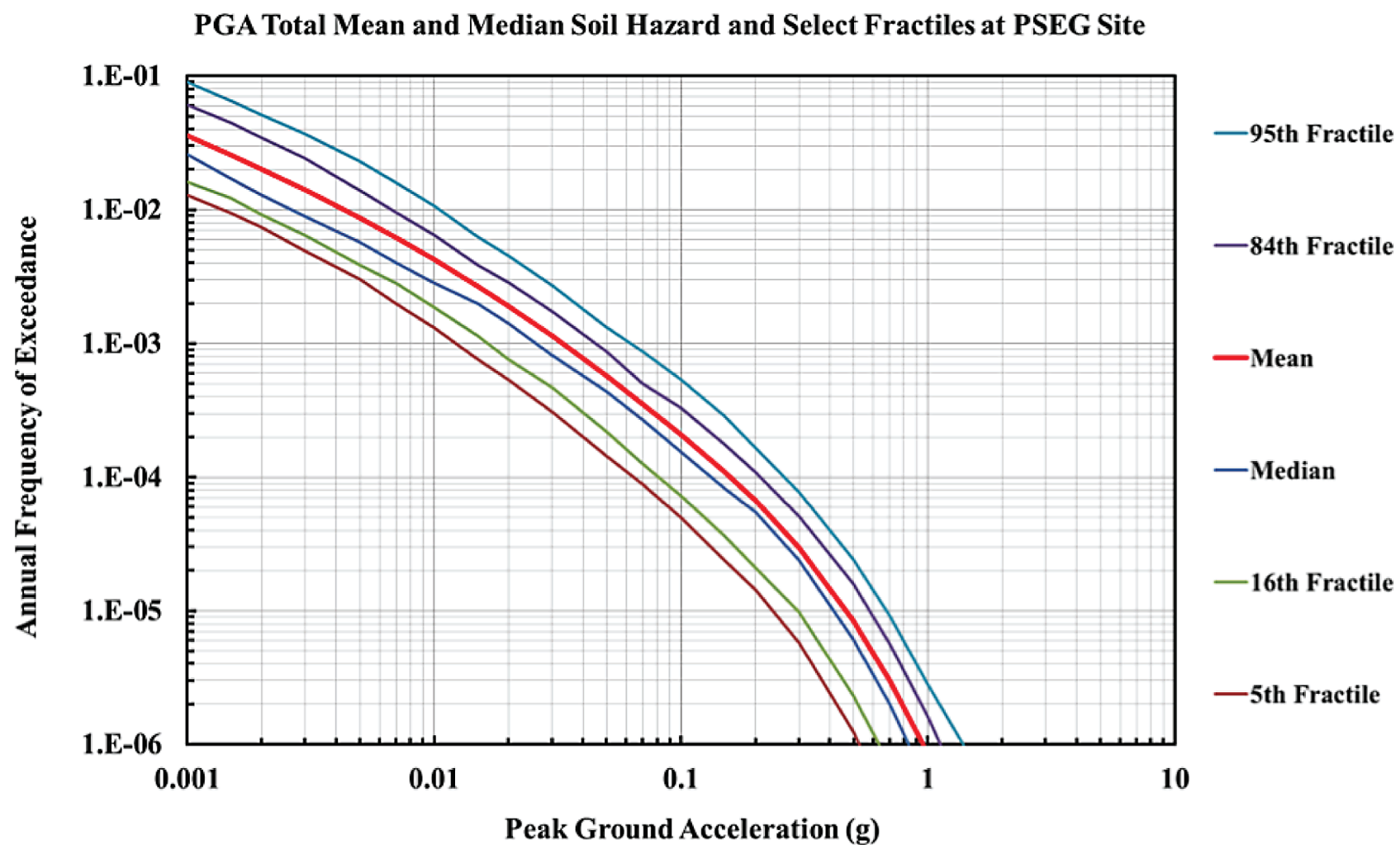
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Strain as a Function of Depth for the
10⁻⁴ Low-Frequency (LF) Rock Input
(Shallow Portion of Profile)

FIGURE 2.5.2-45

Rev 1



PSEG Power, LLC

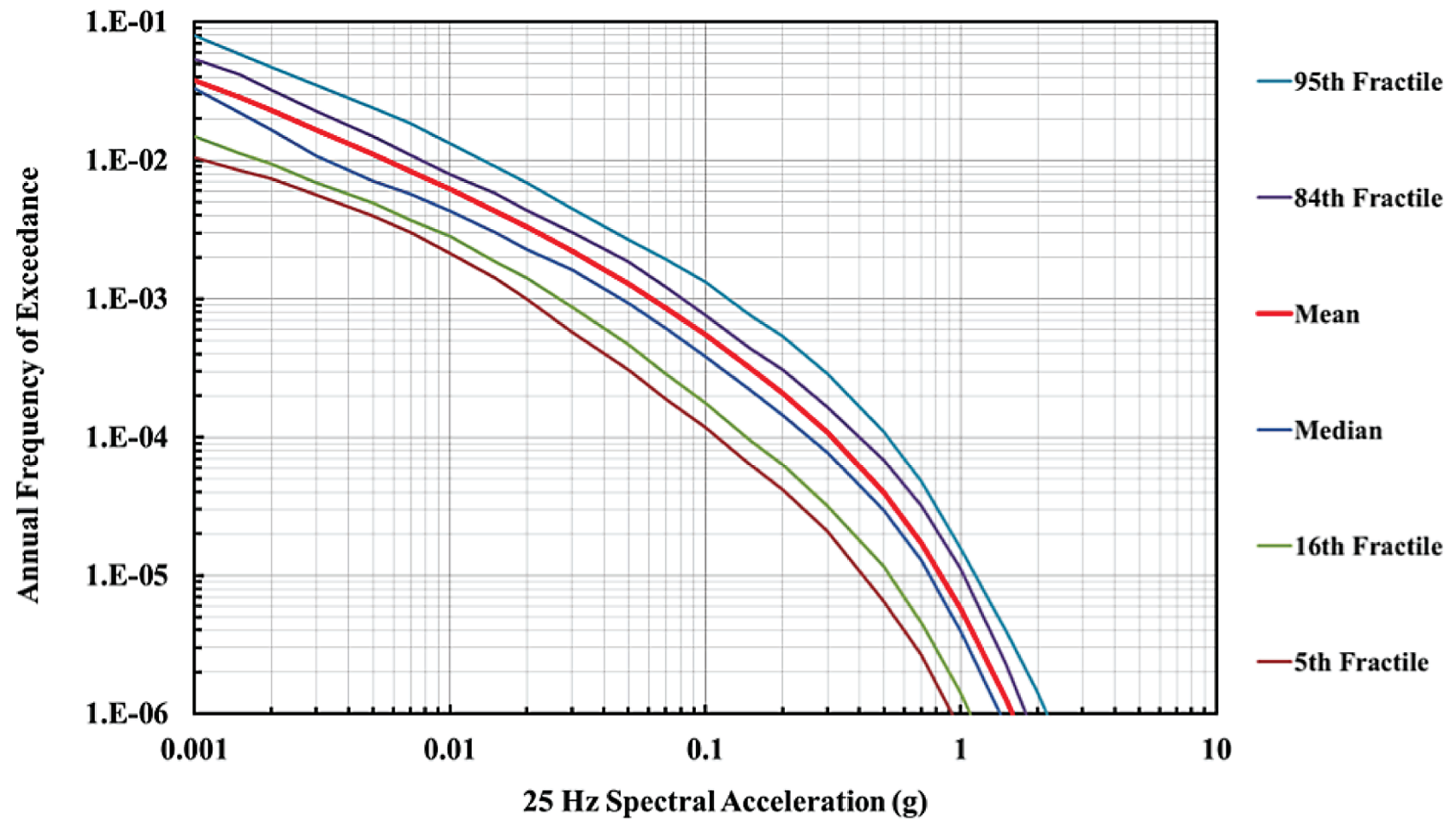
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 100 Hz (PGA) Spectral Acceleration

FIGURE 2.5.2-46

Rev 1

25 Hz Total Mean and Median Soil Hazard and Select Fractiles at PSEG Site



PSEG Power, LLC

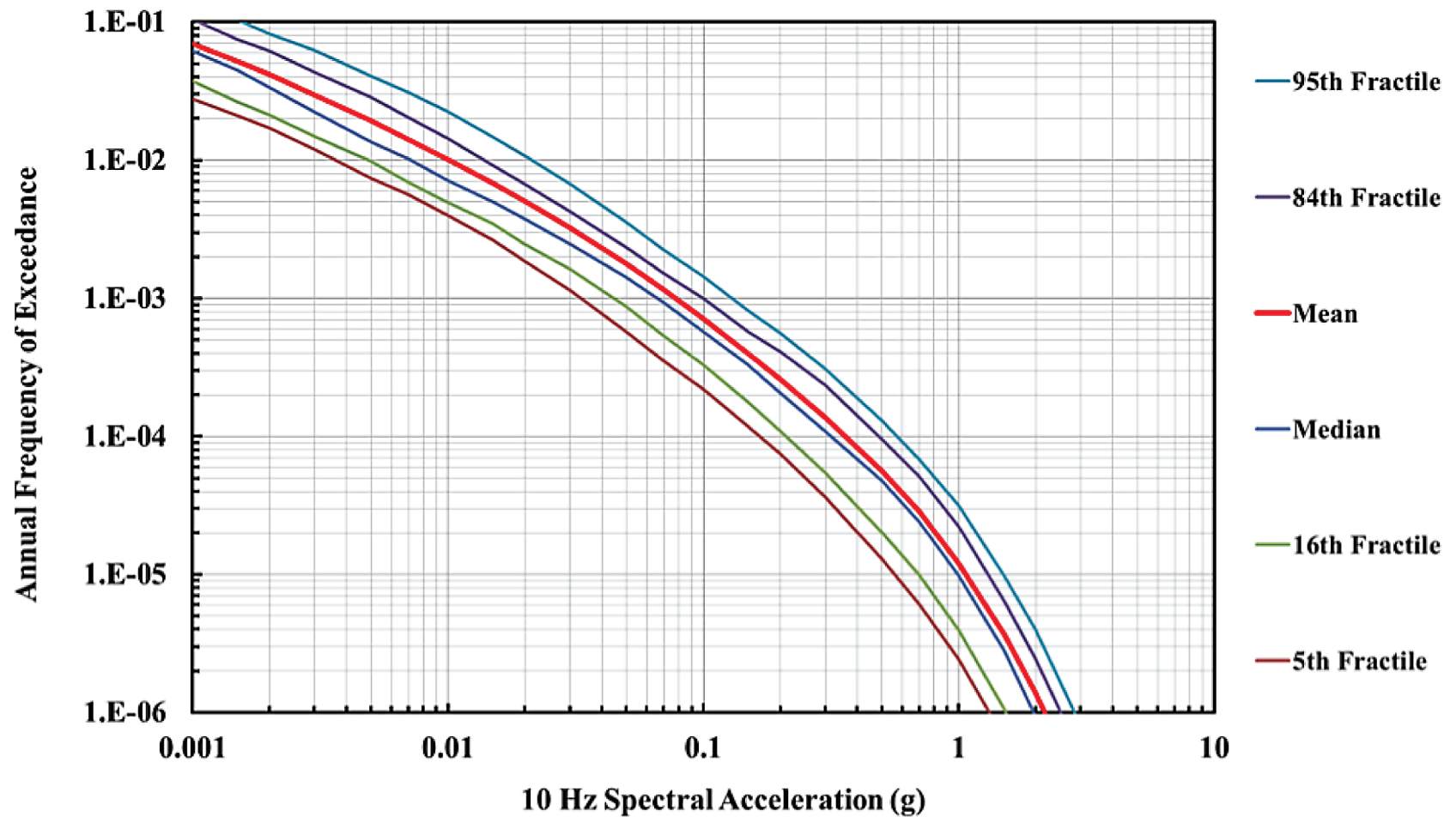
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 25 Hz Spectral Acceleration

FIGURE 2.5.2-47

Rev 1

10 Hz Total Mean and Median Soil Hazard and Select Fractiles at PSEG Site



PSEG Power, LLC

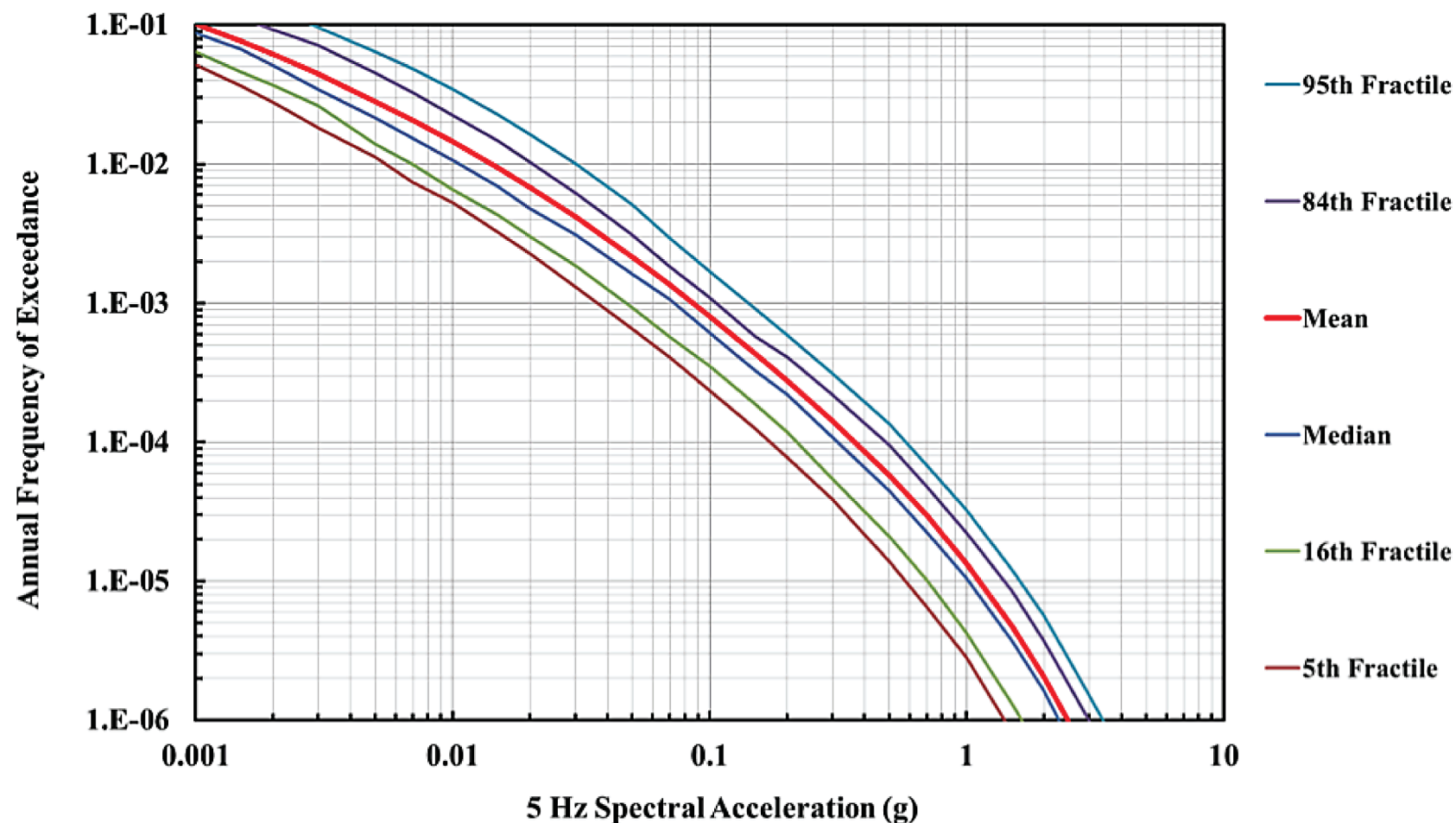
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 10 Hz Spectral Acceleration

FIGURE 2.5.2-48

Rev 1

5 Hz Total Mean and Median Soil Hazard and Select Fractiles at PSEG Site



PSEG Power, LLC

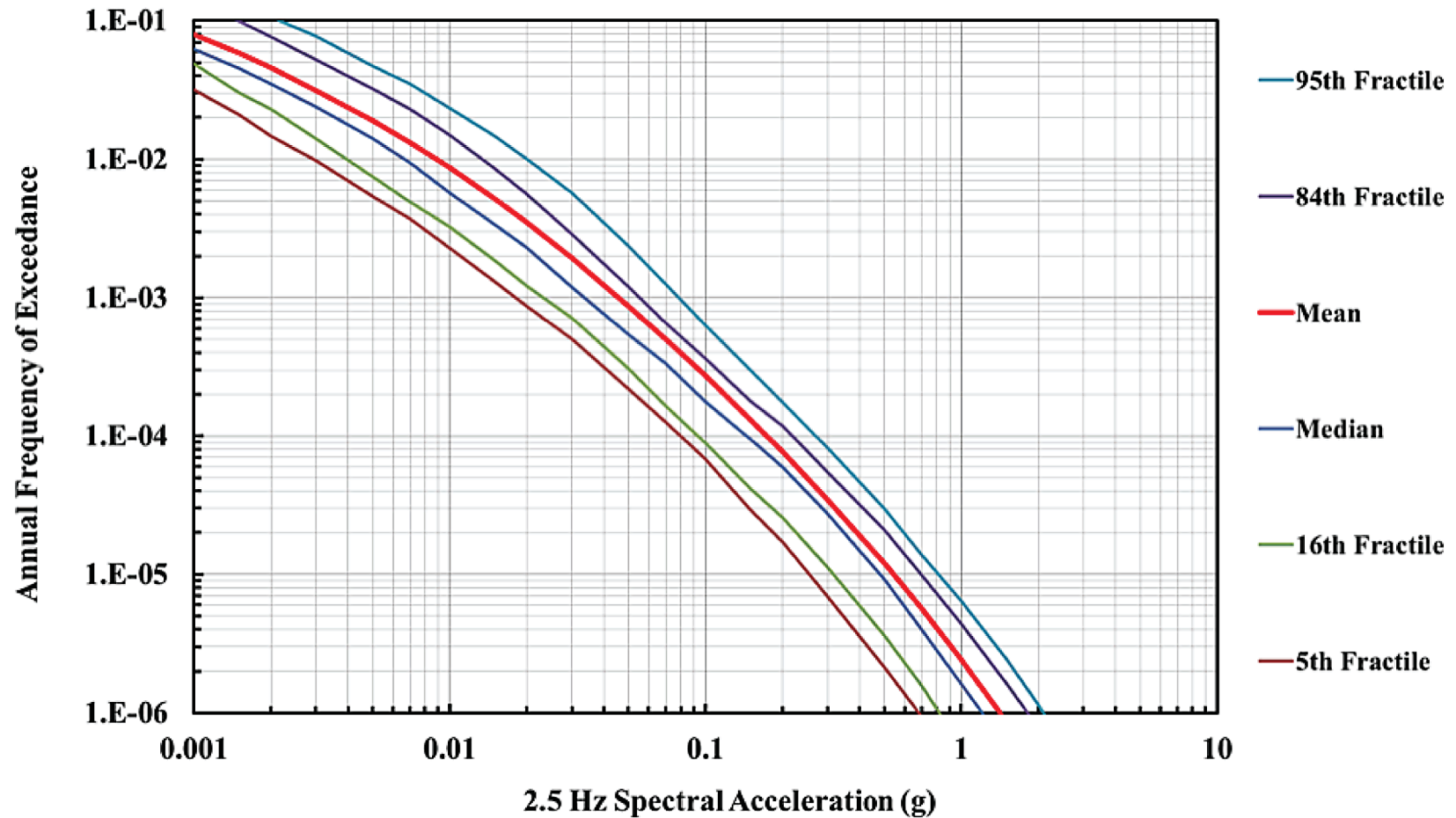
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 5 Hz Spectral Acceleration

FIGURE 2.5.2-49

Rev 1

2.5 Hz Total Mean and Median Soil Hazard and Select Fractiles at PSEG Site



PSEG Power, LLC

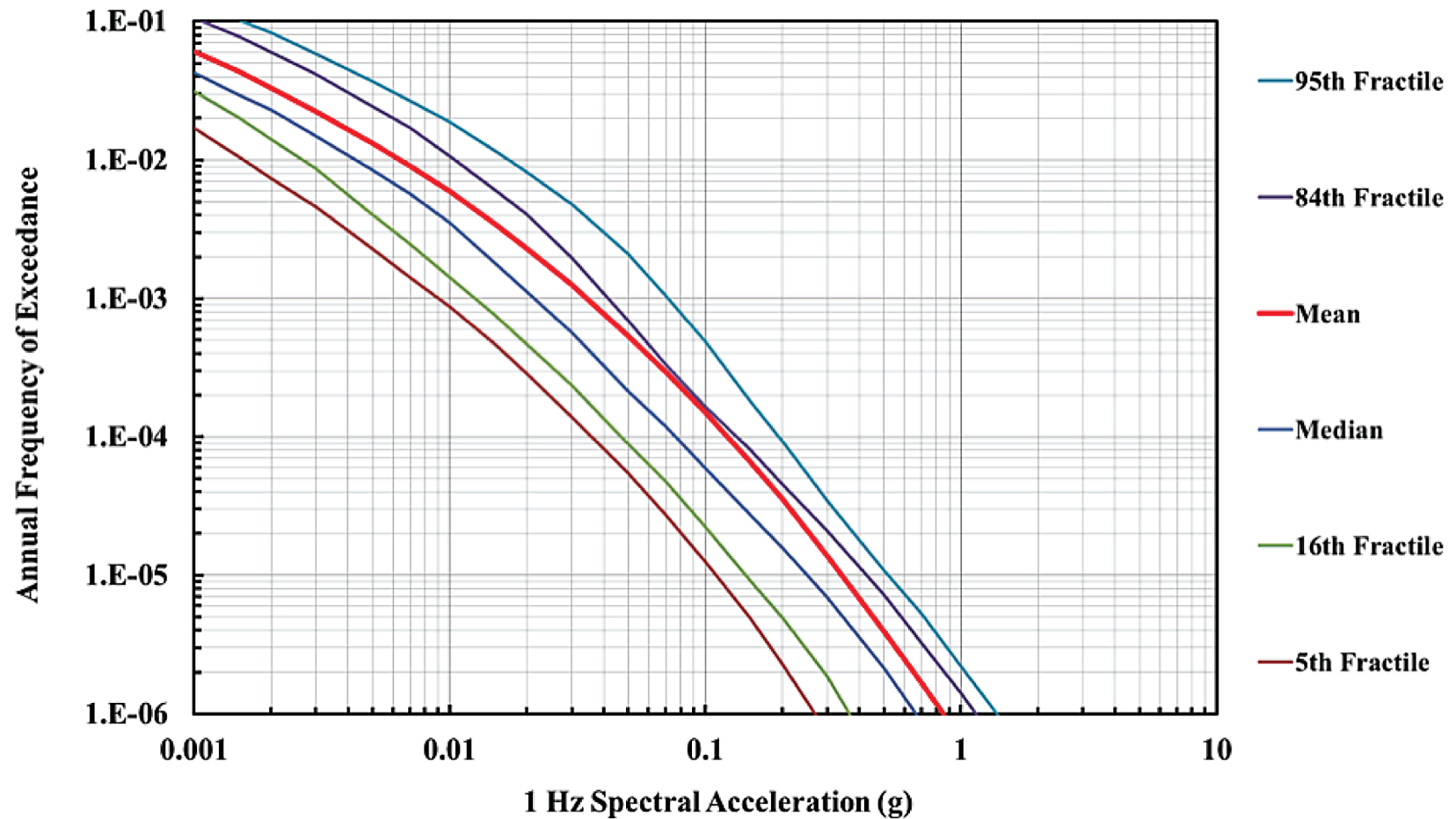
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 2.5 Hz Spectral Acceleration

FIGURE 2.5.2-50

Rev 1

1 Hz Total Mean and Median Soil Hazard and Select Fractiles at PSEG Site



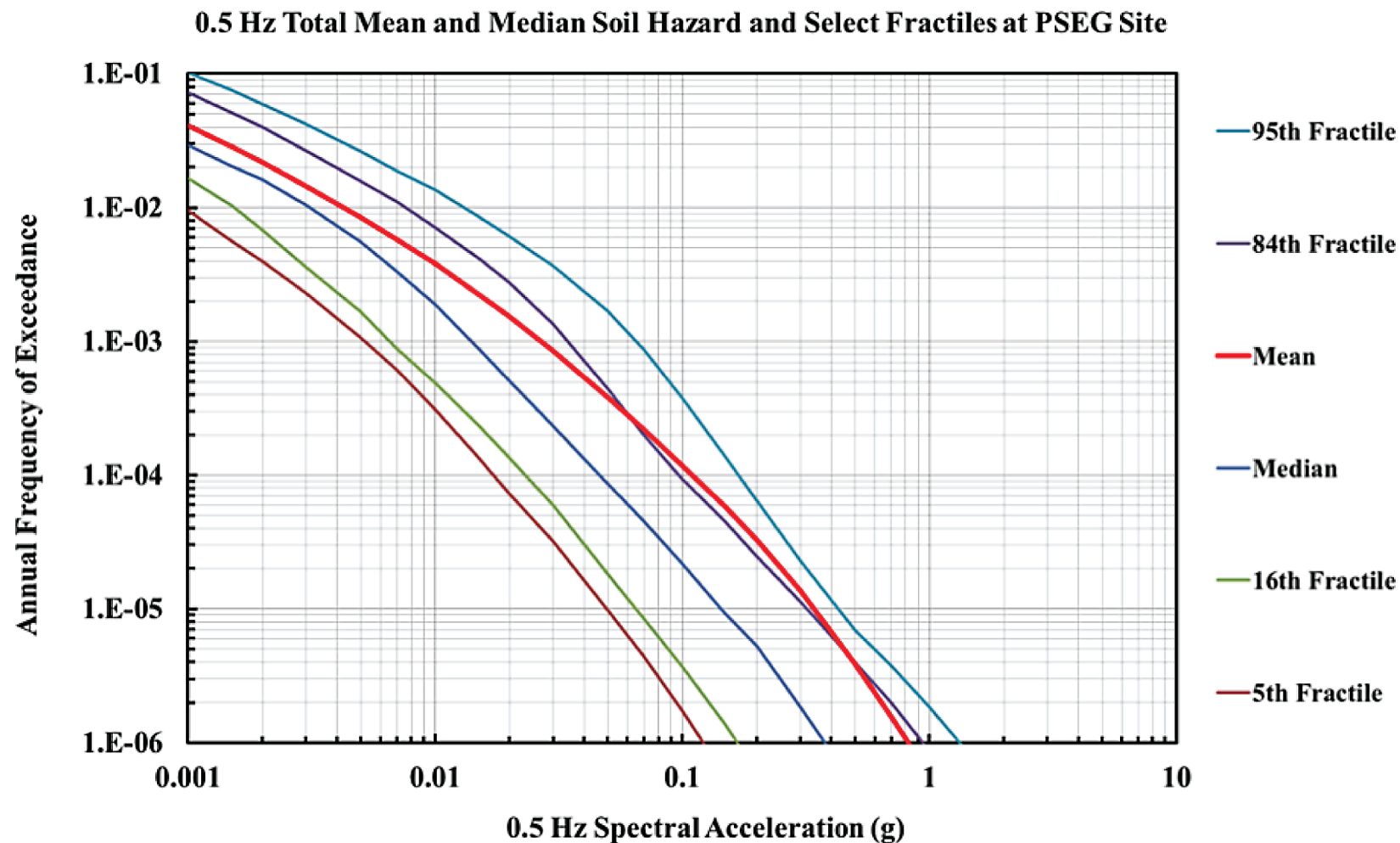
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 1 Hz Spectral Acceleration

FIGURE 2.5.2-51

Rev 1



PSEG Power, LLC

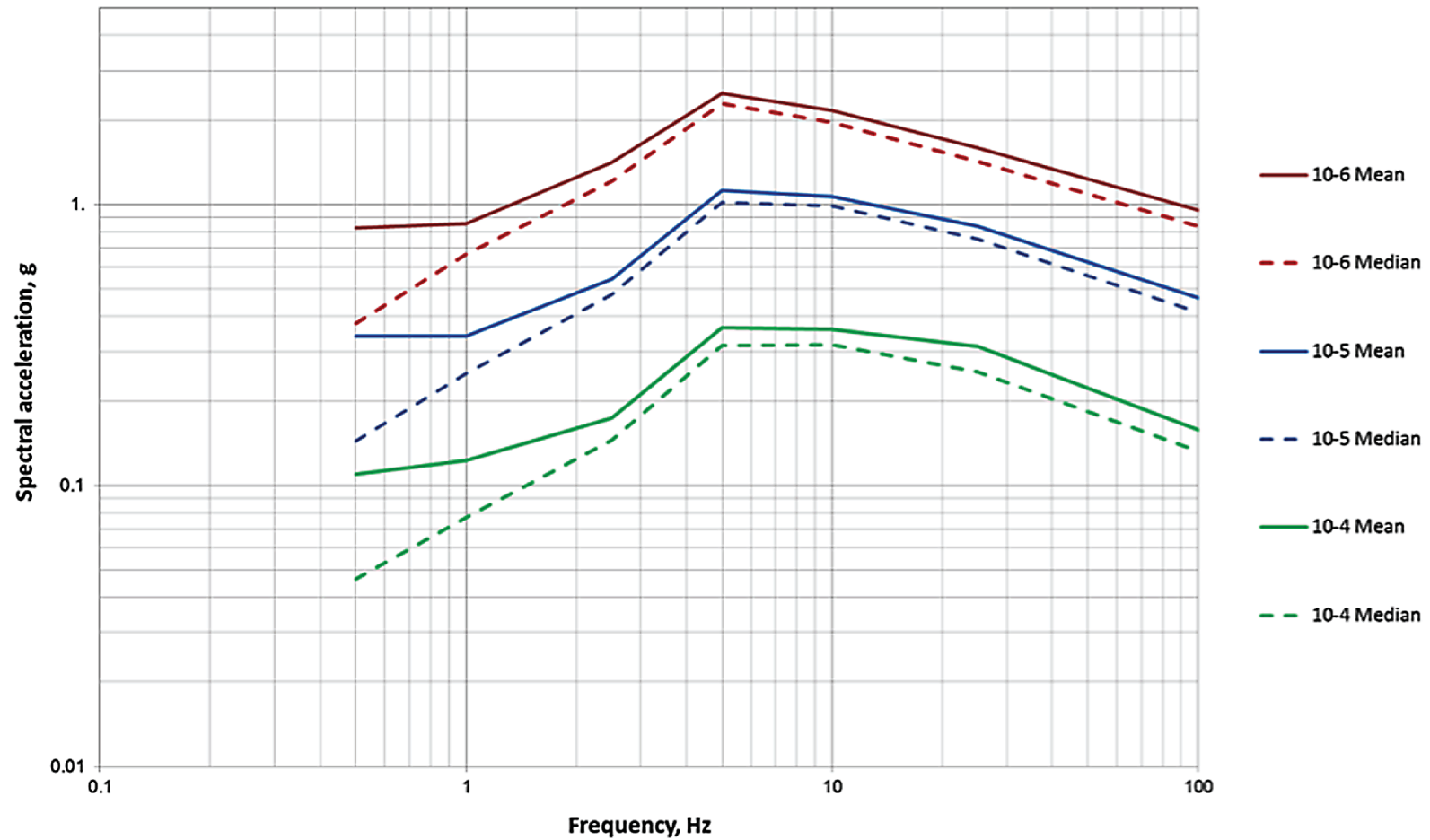
PSEG Site ESPA
Part 2, Site Safety Analysis Report

Mean and Fractile Soil Seismic
Hazard Curves at the GMRS Elevation
for 0.5 Hz Spectral Acceleration

FIGURE 2.5.2-52

Rev 1

PSEG Site Mean and Median Soil UHRS for 10^{-4} , 10^{-5} , and 10^{-6} AFE



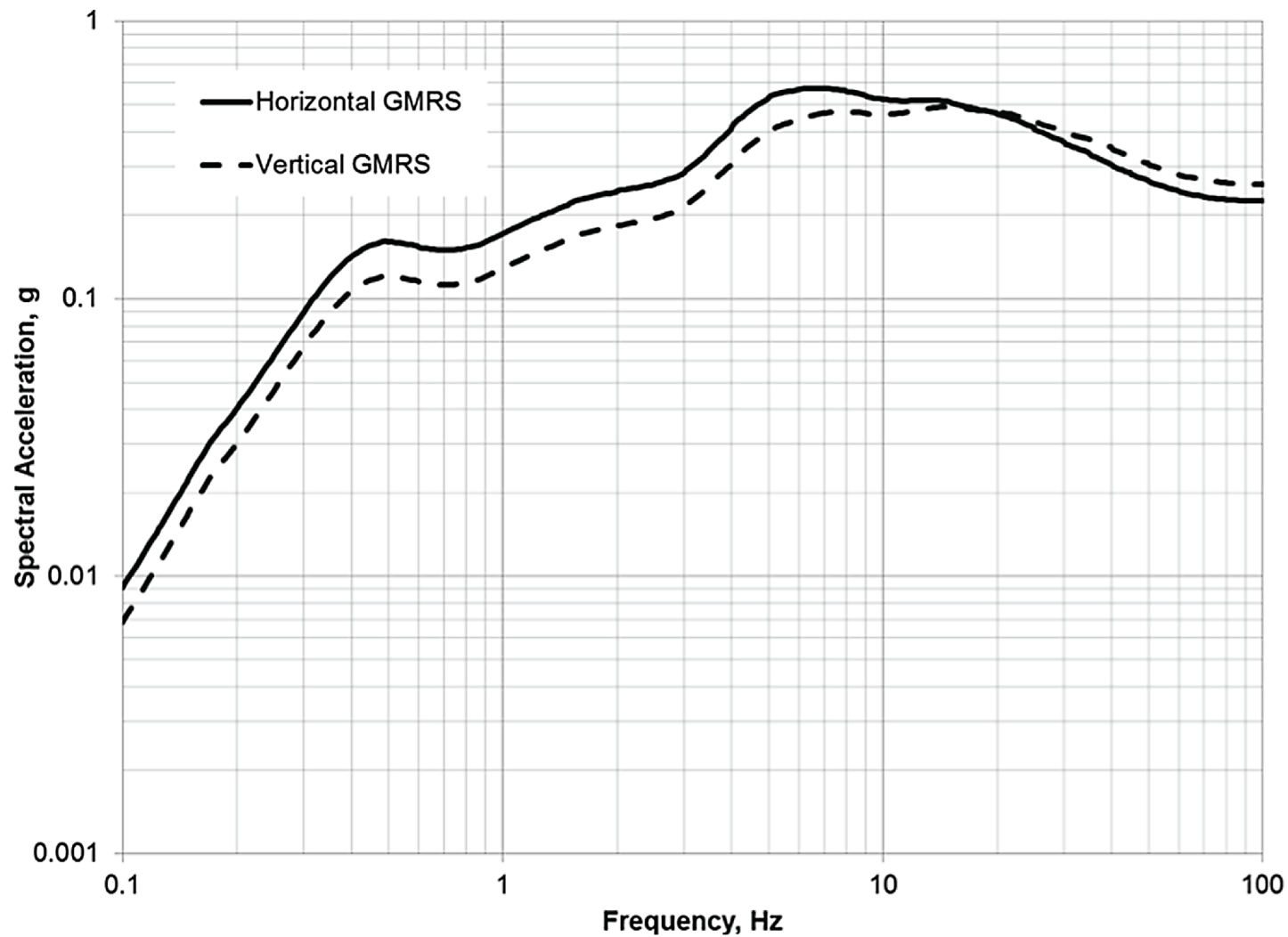
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Horizontal Soil UHRS

FIGURE 2.5.2-53

Rev 1



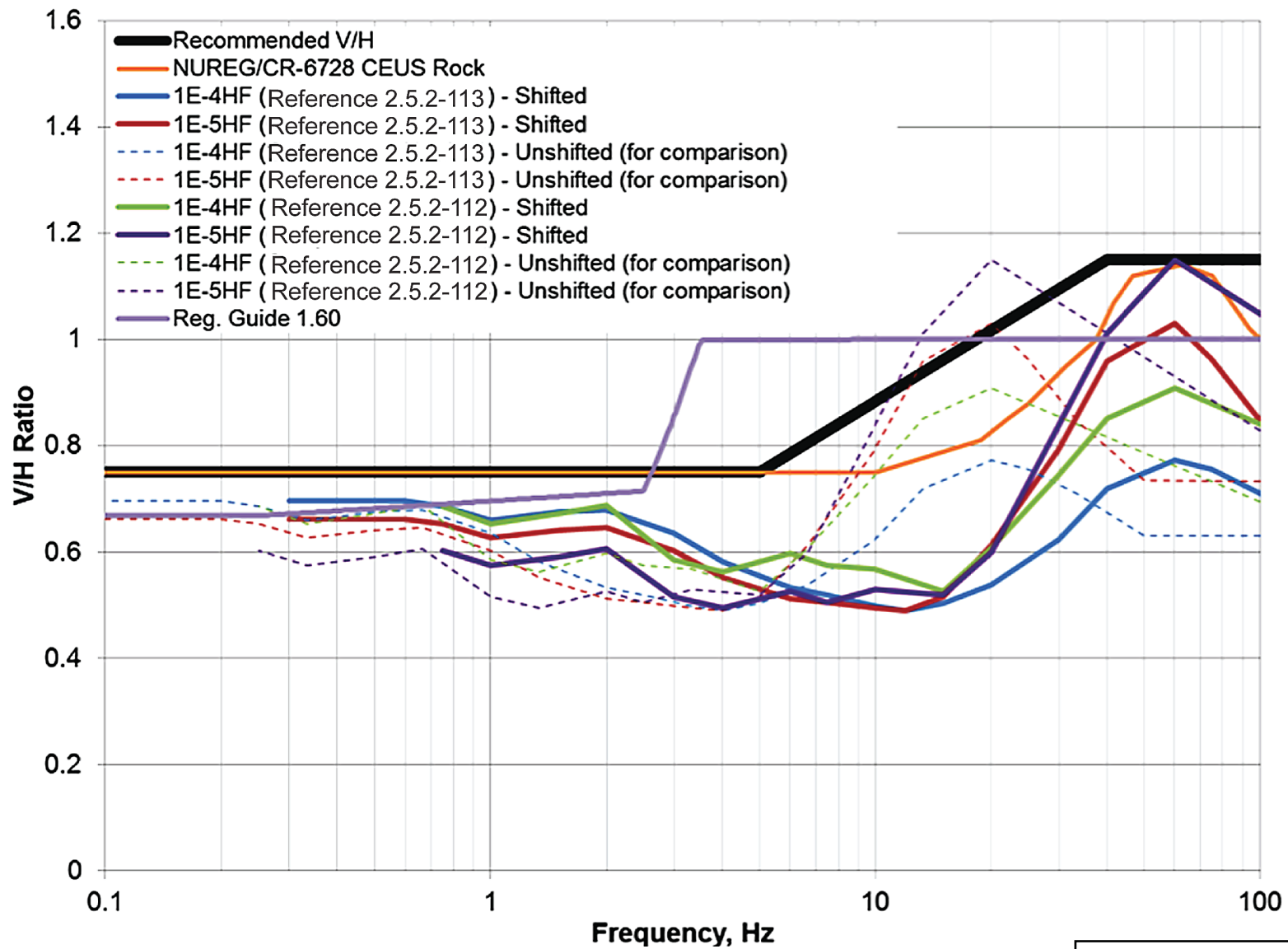
PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Horizontal and Vertical Soil GMRS

FIGURE 2.5.2-54

Rev 1



PSEG Power, LLC

PSEG Site ESPA
Part 2, Site Safety Analysis Report

Recommended V/H Ratios

FIGURE 2.5.2-55

Rev 1