





#### Figure 2.5-77—{Damping Curves Representing Uncertainty in Damping for Layer 4 (Chesapeake Clay/Silt)}



Figure 2.5-78—{Logarithmic Mean Site Amplification Factor and Standard Deviation at 41' Depth for 10<sup>-4</sup> HF Input Motion}







prof. 1

prof. 3

prof. 5

prof. 7

prof. 9

prof. 11

prof. 13

prof 15

prof. 17

prof. 19

prof. 21

prof. 23

prof. 25

prof. 27

prof. 29

prof. 31

prof. 33

prof. 35

prof. 37

prof. 39

prof. 41

prof. 43

prof. 45

prof. 47

prof. 49

prof. 51

prof. 53

prof. 55

prof. 57

prof. 59

logarithmic sigma



Figure 2.5-81—{Maximum Strains vs. Depth for 10<sup>-4</sup> LF Input Motion}





















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NOTE: HAZARD FROM EVENTS FARTHER THAN 400 km IS PLOTTED IN THE 405 km BINS. THESE CONTRIBUTIONS ARE FROM THE CHARLESTON SOURCES, WHICH ARE APPROXIMATELY 650 km FROM THE CONPP UNIT 3 SITE.























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Figure 2.5-99—{Mean and Fractile Rock Hazard Curves for 2.5 Hz}

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0.85

hazard

mean

hazard

median

hazard

hazard

0.15







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#### Figure 2.5-102—{CCNPP Unit 3 10 Generic Soil Profiles}





### Figure 2.5-103—{Subsurface Investigation Location Plan}

![](_page_28_Figure_0.jpeg)

#### Figure 2.5-104—{Subsurface Investigation Location Plan (Powerblock) <u>CCNPP Unit 3</u>}

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![](_page_29_Figure_0.jpeg)

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![](_page_30_Figure_2.jpeg)

### Figure 2.5-106—{Subsurface Profile Legend}

Notes - Boring locations & elevations were obtained from as-built survey Soil strata boundaries are inferred from boring locations & may differ from actual soil conditions.

![](_page_31_Figure_0.jpeg)

![](_page_31_Figure_3.jpeg)

#### Figure 2.5-107—{Inferred Subsurface Profile NS-1}

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![](_page_32_Figure_0.jpeg)

![](_page_32_Figure_3.jpeg)

![](_page_32_Figure_4.jpeg)

Rev. 5

![](_page_33_Figure_0.jpeg)

Rev. 5

![](_page_33_Figure_2.jpeg)

## Figure 2.5-109—{Inferred Subsurface Profile NS-3}

![](_page_33_Figure_4.jpeg)

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![](_page_34_Figure_2.jpeg)

![](_page_34_Figure_3.jpeg)

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![](_page_35_Figure_0.jpeg)

#### 400 800 120 100 © 2007 UniStar Nuclear Services, LLC. All rights reserved. COPYRIGHT PROTECTED gw -Fill ELEVATION, FT B-781 B-701 B-780B B-771 B-774 B-775 18 28 28 18\_\_\_\_ 21 8 1000 8 -20 2\_8 1 19\_8 18 8 UD24" 15 8 10/17 15 8 UD24" -40 15 \*\_8 1 -60 19 UD/247 21 -80

# Figure 2.5-111—{Inferred Subsurface profile IDP-1}

![](_page_35_Figure_4.jpeg)

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![](_page_36_Figure_2.jpeg)

# Figure 2.5-112—{Measured Standard Penetration Test N-Values}

![](_page_37_Figure_2.jpeg)

![](_page_37_Figure_3.jpeg)

![](_page_38_Figure_2.jpeg)

![](_page_38_Figure_3.jpeg)