The following figures have been corrected and replaced as of June 27, 2012
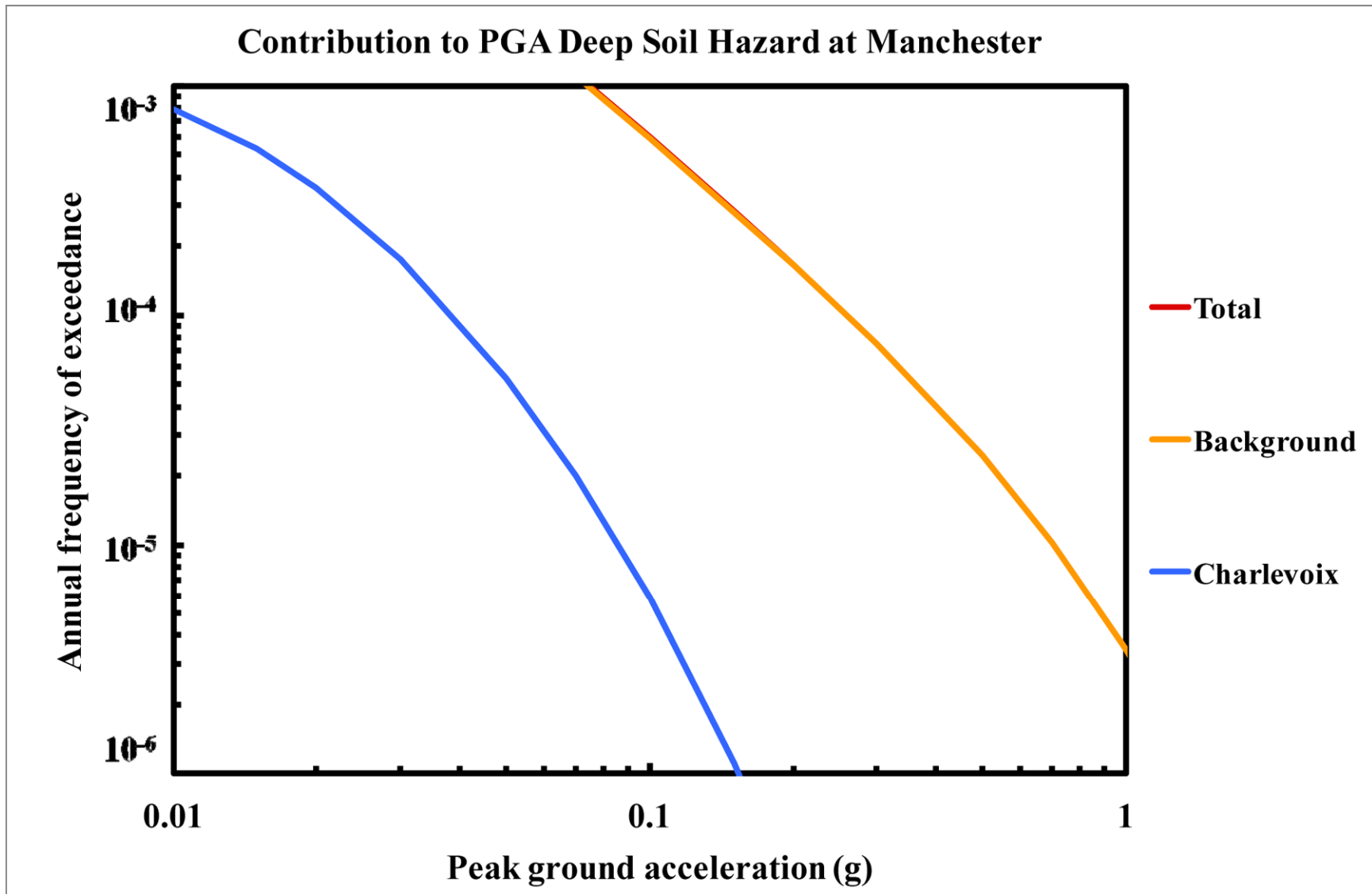

Figure 8.2-5r
Manchester PGA deep soil hazard: total and contribution by RLME and background. Corrected on June 27, 2012.

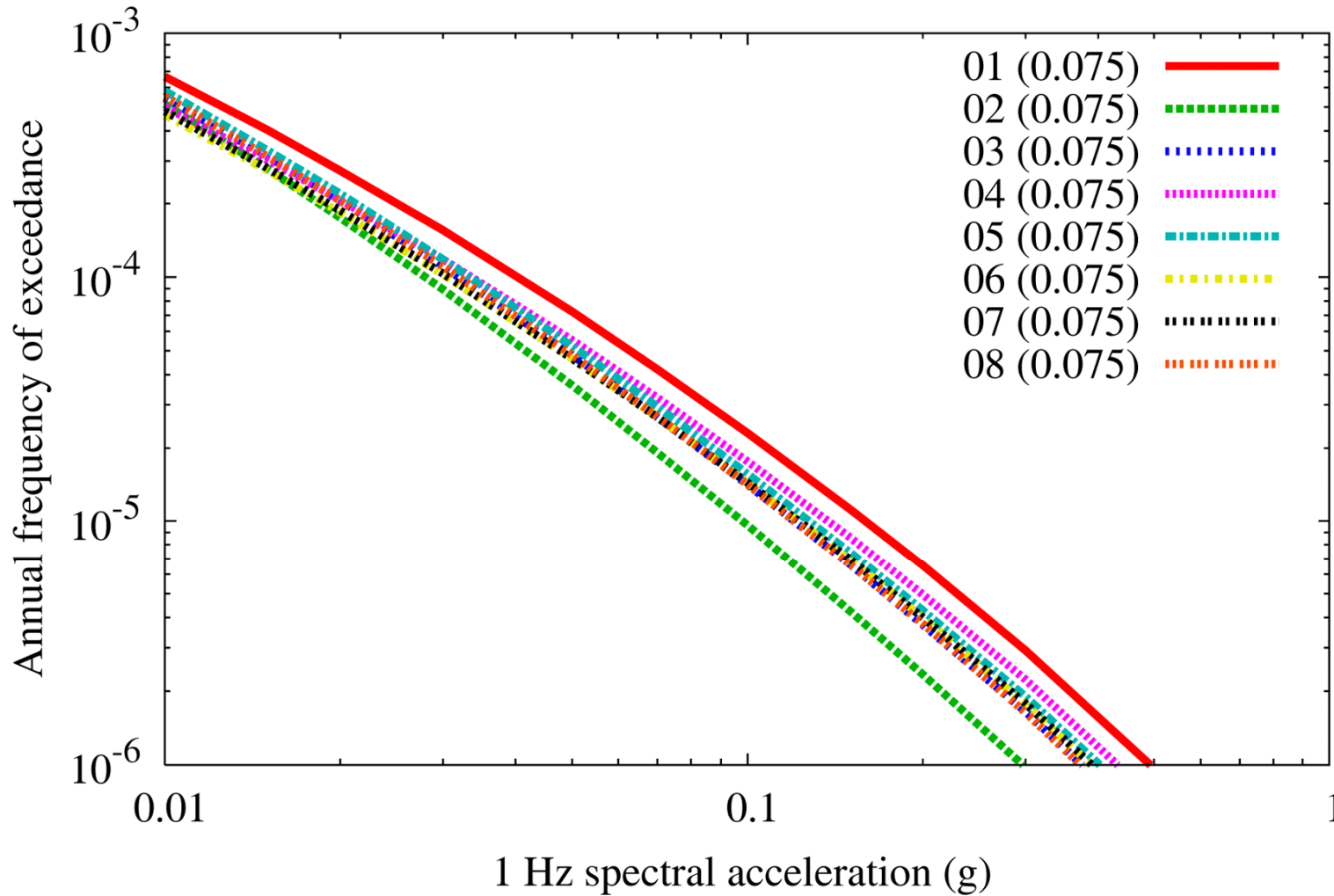**Figure 8.2-5gg**
Manchester 1 Hz rock hazard: sensitivity to eight realizations for source NAP, Case E. Correctedon June 27, 2012.
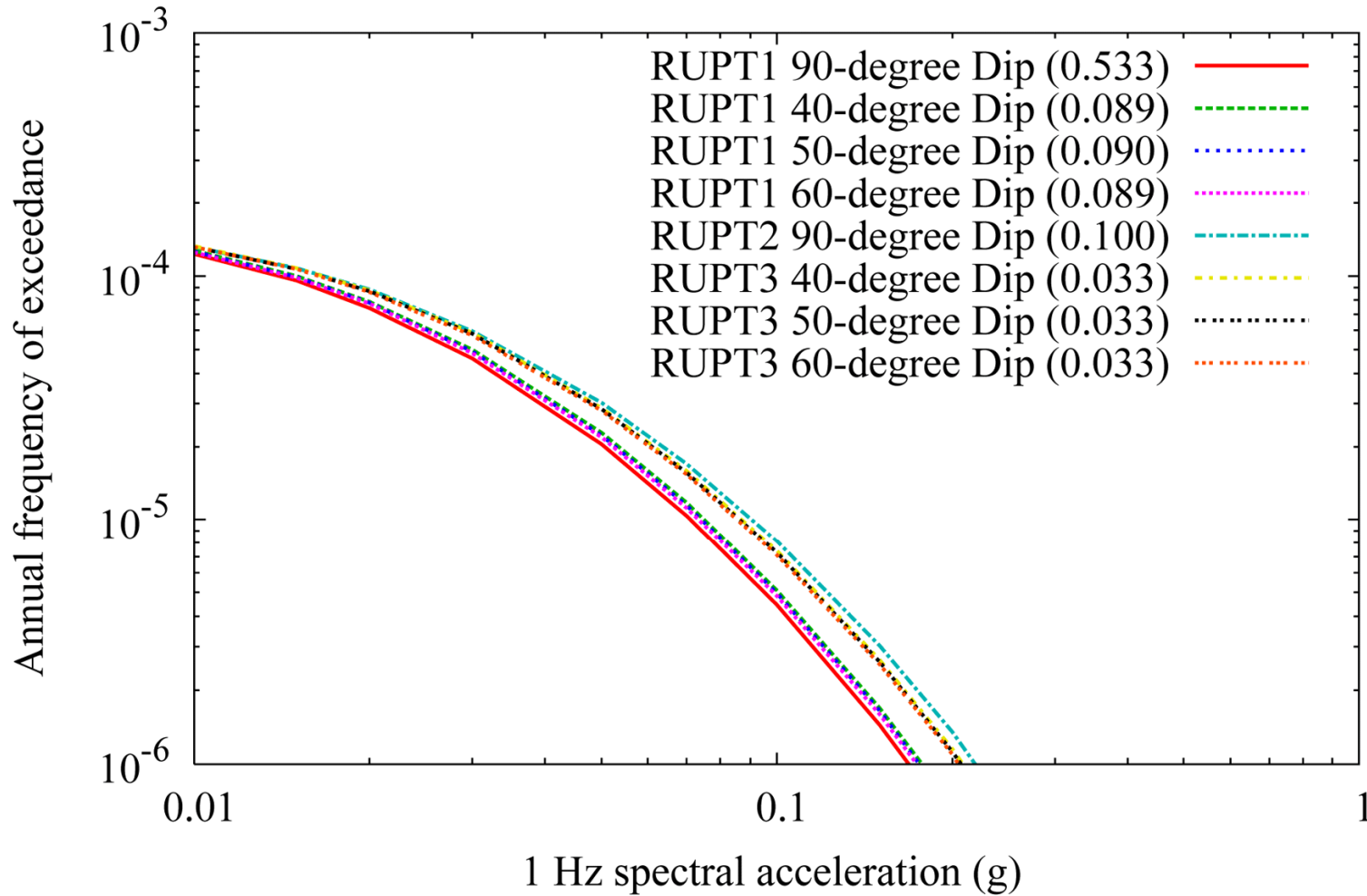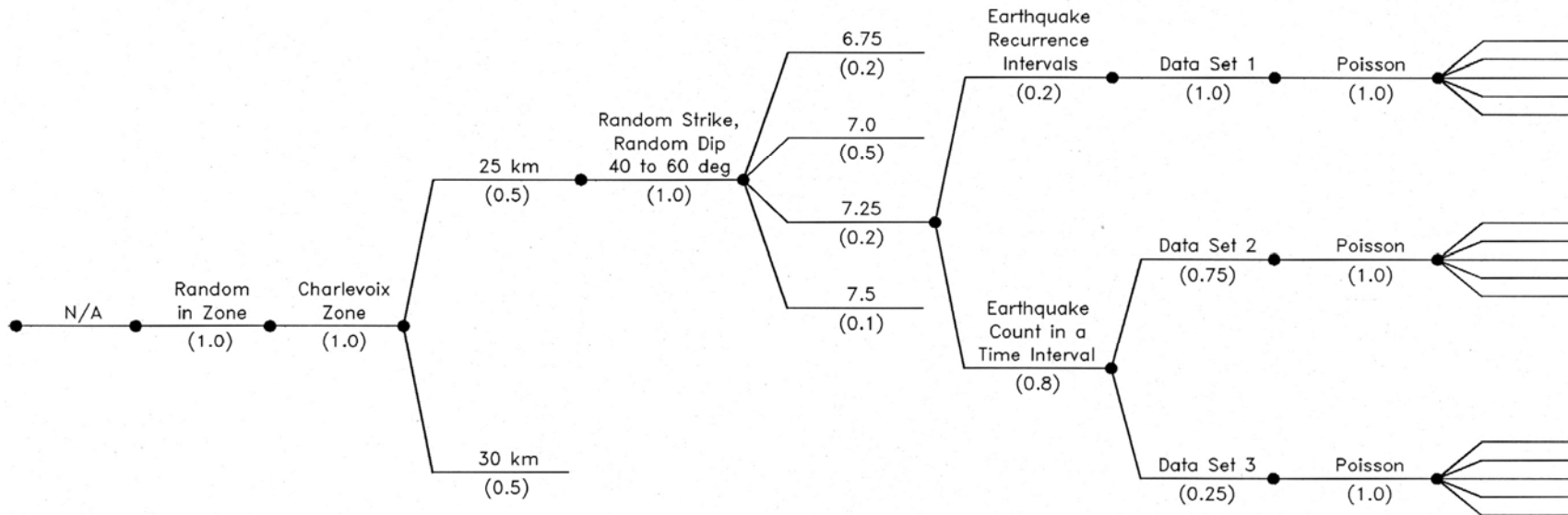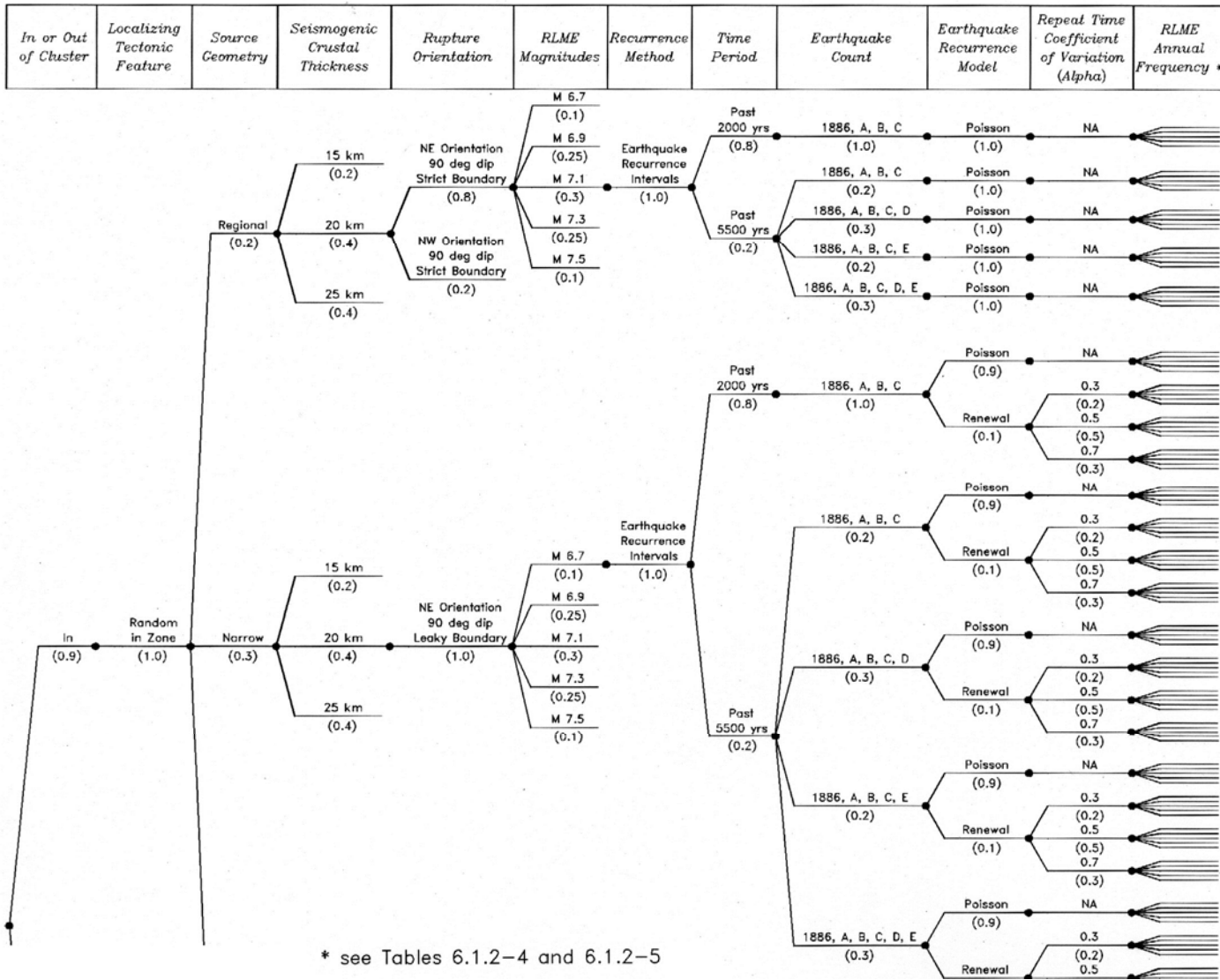
Figure 9.3-37
1 Hz sensitivity to rupture orientation (dip) at Central Illinois for the Wabash Valley area source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Reccurrence Model	RLME Annual Frequency *

Figure 6.1.1-1
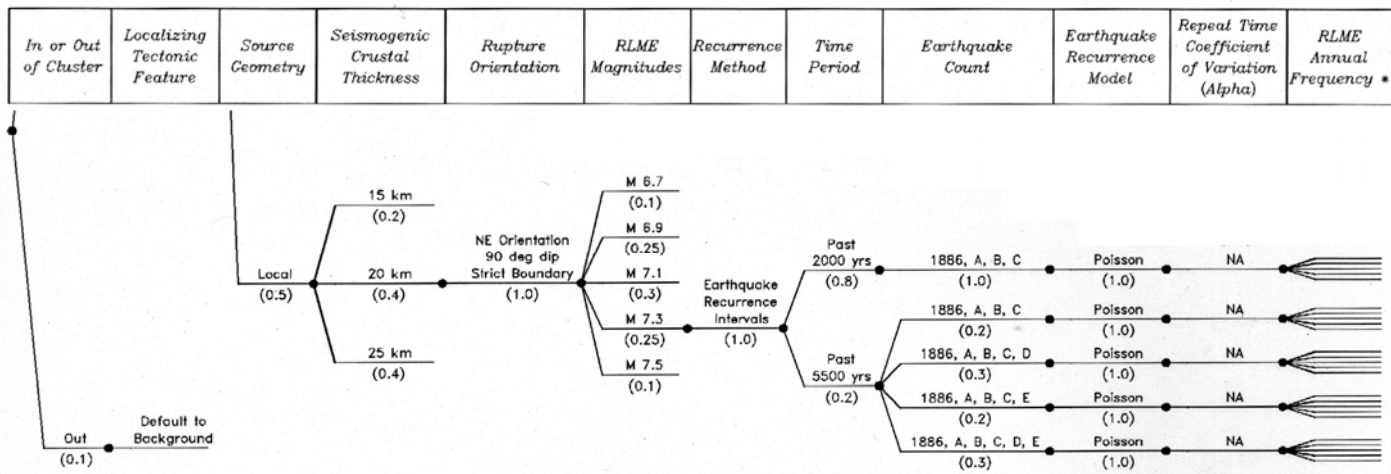**Logic tree for the Charlevoix RLME source. Corrected on June 27, 2012.**

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitudes	Recurrence Method	Time Period	Earthquake Count	Earthquake Recurrence Model	Repeat Time Coefficient of Variation (Alpha)	RLME Annual Frequency *

Regional branch (0.2):

- 15 km (0.2)
- 20 km (0.4)
- 25 km (0.4)

NE Orientation 90 deg dip Strict Boundary (0.8)
NW Orientation 90 deg dip Strict Boundary (0.2)

RLME Magnitudes:
- M 6.7 (0.1)
- M 6.9 (0.25)
- M 7.1 (0.3)
- M 7.3 (0.25)
- M 7.5 (0.1)

Earthquake Recurrence Intervals (1.0)

Past 2000 yrs (0.8):
- 1886, A, B, C (1.0) — Poisson (1.0) — NA

Past 5500 yrs (0.2):
- 1886, A, B, C (0.2) — Poisson (1.0) — NA
- 1886, A, B, C, D (0.3) — Poisson (1.0) — NA
- 1886, A, B, C, E (0.2) — Poisson (1.0) — NA
- 1886, A, B, C, D, E (0.3) — Poisson (1.0) — NA

In (0.9) — Random in Zone (1.0) — Narrow (0.3):

- 15 km (0.2)
- 20 km (0.4)
- 25 km (0.4)

NE Orientation 90 deg dip Leaky Boundary (1.0)

RLME Magnitudes:
- M 6.7 (0.1)
- M 6.9 (0.25)
- M 7.1 (0.3)
- M 7.3 (0.25)
- M 7.5 (0.1)

Earthquake Recurrence Intervals (1.0)

Past 2000 yrs (0.8):
- 1886, A, B, C (1.0)
  - Poisson (0.9) — NA
  - Renewal (0.1) — 0.3 (0.2), 0.5 (0.5), 0.7 (0.3)

Past 5500 yrs (0.2):
- 1886, A, B, C (0.2)
  - Poisson (0.9) — NA
  - Renewal (0.1) — 0.3 (0.2), 0.5 (0.5), 0.7 (0.3)
- 1886, A, B, C, D (0.3)
  - Poisson (0.9) — NA
  - Renewal (0.1) — 0.3 (0.2), 0.5 (0.5), 0.7 (0.3)
- 1886, A, B, C, E (0.2)
  - Poisson (0.9) — NA
  - Renewal (0.1) — 0.3 (0.2), 0.5 (0.5), 0.7 (0.3)
- 1886, A, B, C, D, E (0.3)
  - Poisson (0.9) — NA
  - Renewal — 0.3 (0.2), 0.5 ...

* see Tables 6.1.2-4 and 6.1.2-5

Figure 6.1.2-1a
Logic tree for the Charleston RLME source. Corrected on June 27, 2012.

Figure 6.1.2-1b
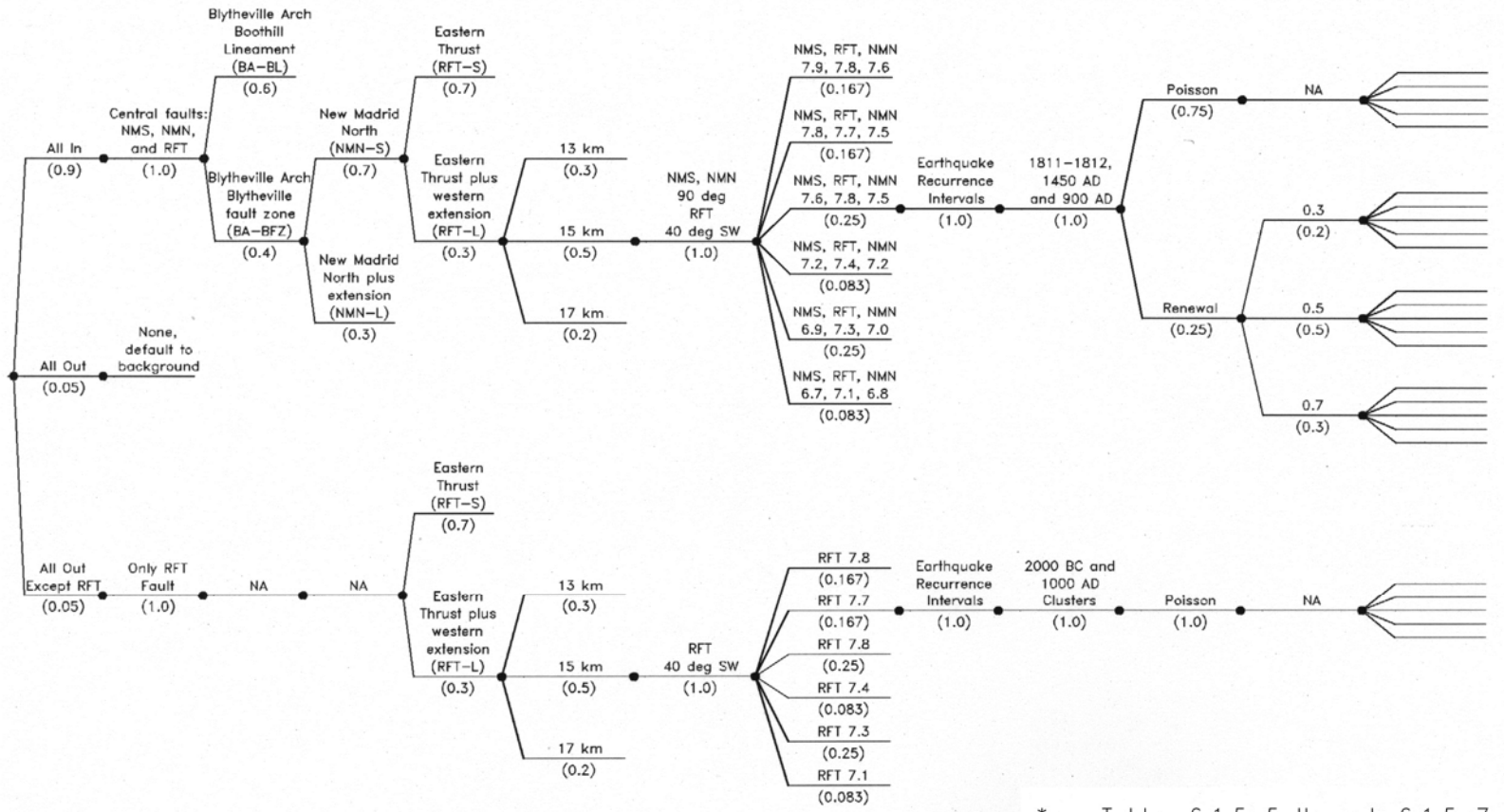**Logic tree for the Charleston RLME source. Corrected on June 27, 2012.**

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency or Slip Rate *

Figure 6.1.3-1
Logic tree for the Cheraw fault RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry Southern Fault	Source Geometry Northern Fault	Source Geometry Central Fault	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitudes	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	Repeat Time Coefficient of Variation (Alpha)	RMLE Annual Frequency *

All In (0.9)

Central faults: NMS, NMN, and RFT (1.0)

Blytheville Arch Boothill Lineament (BA−BL) (0.6)

Blytheville Arch Blytheville fault zone (BA−BFZ) (0.4)

New Madrid North (NMN−S) (0.7)

New Madrid North plus extension (NMN−L) (0.3)

Eastern Thrust (RFT−S) (0.7)

Eastern Thrust plus western extension (RFT−L) (0.3)

13 km (0.3)

15 km (0.5)

17 km (0.2)

NMS, NMN 90 deg RFT 40 deg SW (1.0)

NMS, RFT, NMN 7.9, 7.8, 7.6 (0.167)

NMS, RFT, NMN 7.8, 7.7, 7.5 (0.167)

NMS, RFT, NMN 7.6, 7.8, 7.5 (0.25)

NMS, RFT, NMN 7.2, 7.4, 7.2 (0.083)

NMS, RFT, NMN 6.9, 7.3, 7.0 (0.25)

NMS, RFT, NMN 6.7, 7.1, 6.8 (0.083)

Earthquake Recurrence Intervals (1.0)

1811−1812, 1450 AD and 900 AD (1.0)

Poisson (0.75) — NA

Renewal (0.25) — 0.3 (0.2)

0.5 (0.5)

0.7 (0.3)

All Out (0.05)

None, default to background

All Out Except RFT (0.05)

Only RFT Fault (1.0)

NA — NA

Eastern Thrust (RFT−S) (0.7)

Eastern Thrust plus western extension (RFT−L) (0.3)

13 km (0.3)

15 km (0.5)

17 km (0.2)

RFT 40 deg SW (1.0)

RFT 7.8 (0.167)

RFT 7.7 (0.167)

RFT 7.8 (0.25)

RFT 7.4 (0.083)

RFT 7.3 (0.25)

RFT 7.1 (0.083)

Earthquake Recurrence Intervals (1.0)

2000 BC and 1000 AD Clusters (1.0)

Poisson (1.0) — NA

*see Tables 6.1.5−5 through 6.1.5−7

Figure 6.1.5-1
Logic tree for the NMFS RLME source. Corrected on June 27, 2012.

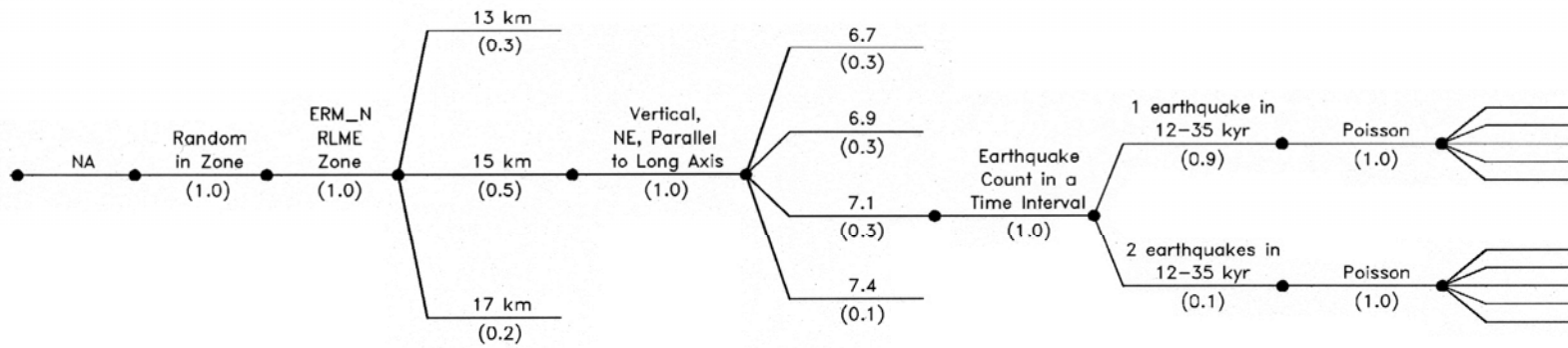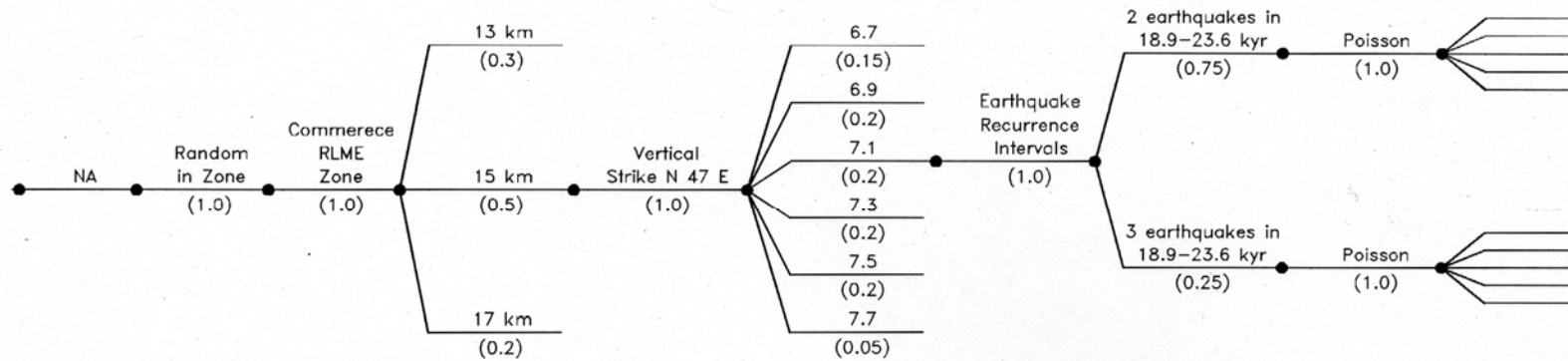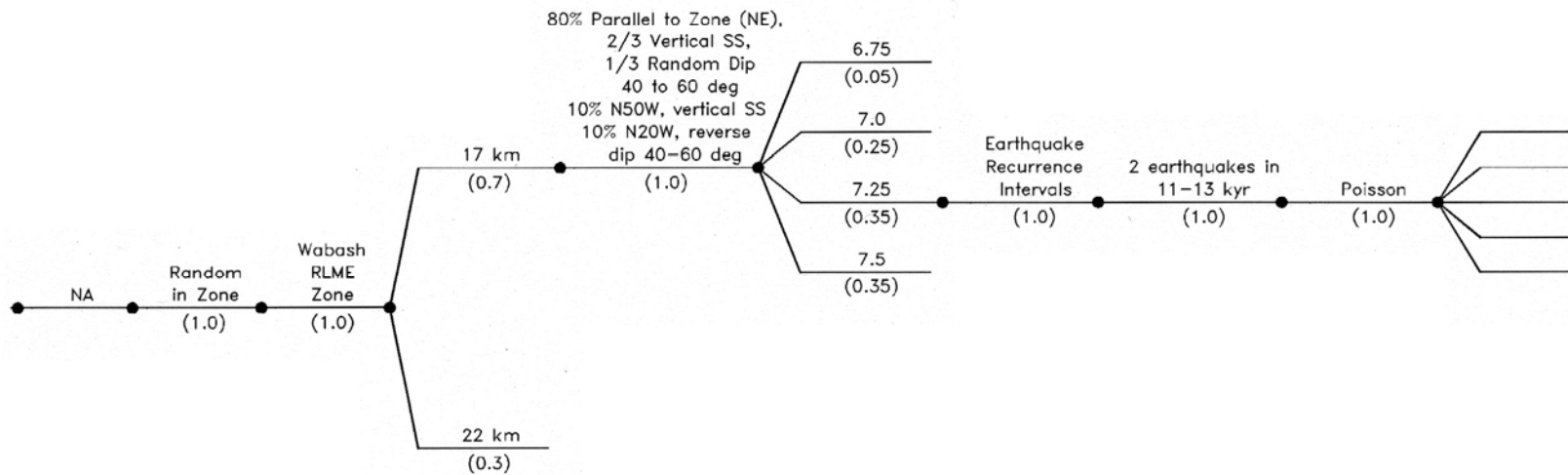| In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency *

Figure 6.1.6-1a
Logic tree for the Reelfoot Rift-Eastern Rift Margin South RLME source. Two options for the southern extent of the ERM-S are considered: ERM-SCC includes the Crittenden County fault zone, and ERM-SRP includes the postulated zone of deformation based on fault picks identified in a high-resolution seismic profile along the Mississippi River. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	Equivalent Annual Frequency

Figure 6.1.6-1b
Logic tree for the Reelfoot Rift-Eastern Rift Margin North RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency *

Figure 6.1.7-1
Logic tree for the Reelfoot rift-Marianna RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency *

Figure 6.1.8-1
Logic tree for the Commerce Fault Zone RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency *

Figure 6.1.9-1
Logic tree for the Wabash Valley RLME source. Corrected on June 27, 2012.

This replaces section H.5.9.3 Geometry and Style of Faulting located in Page H-18 Corrected on June 27, 2012.

H.5.9.3   Geometry and Style of Faulting

A single zone geometry is used to model the Wabash Valley RLME. This geometry is shown on Figure H-5.9-2.

Two alternative estimates of the seismogenic thickness of the crust in the Wabash Valley RLME are used: 17 km (weight of 0.7) or 22 km (weight of 0.3).

The boundaries of the Wabash Valley RLME source zone are modeled as leaky. Earthquakes are to be modeled with the following aleatory distribution:

strike—parallel to the long axis of the zone [0.8]
2/3 strike-slip, 90 degrees
1/3 reverse, uniform 40–60 degrees to the west
N50°W [0.1] strike-slip, 90 degrees
N20°W [0.1] reverse, uniform 40–60 degrees to the west

This replaces the H-5.8-1 Table located in Page H-41
Corrected on June 27, 2012.

Table H-5.8-1
Commerce RLME Magnitude Distribution

Moment Magnitude	Weight
6.7	0.15
6.9	0.2
7.1	0.2
7.3	0.2
7.5	0.2
7.7	0.05

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Reccurrence Model	RLME Annual Frequency

N/A (1.0)

Random in Zone (1.0)

Charlevoix Zone (1.0)

25 km (0.5)

Random Strike, Random Dip 40 to 60 deg (1.0)

6.75 (0.2)

7.0 (0.5)

7.25 (0.2)

7.5 (0.1)

Earthquake Recurrence Intervals (0.2)

Data Set 1 (1.0)

Poisson (1.0)

Table H.5.1−2

Earthquake Count in a Time Interval (0.8)

Data Set 2 (0.75)

Poisson (1.0)

Table H.5.1−3

30 km (0.5)

Data Set 3 (0.25)

Poisson (1.0)

Table H.5.1−4

Figure H-5.1-1
Logic tree for the Charlevoix RLME source. Corrected on June 27, 2012.
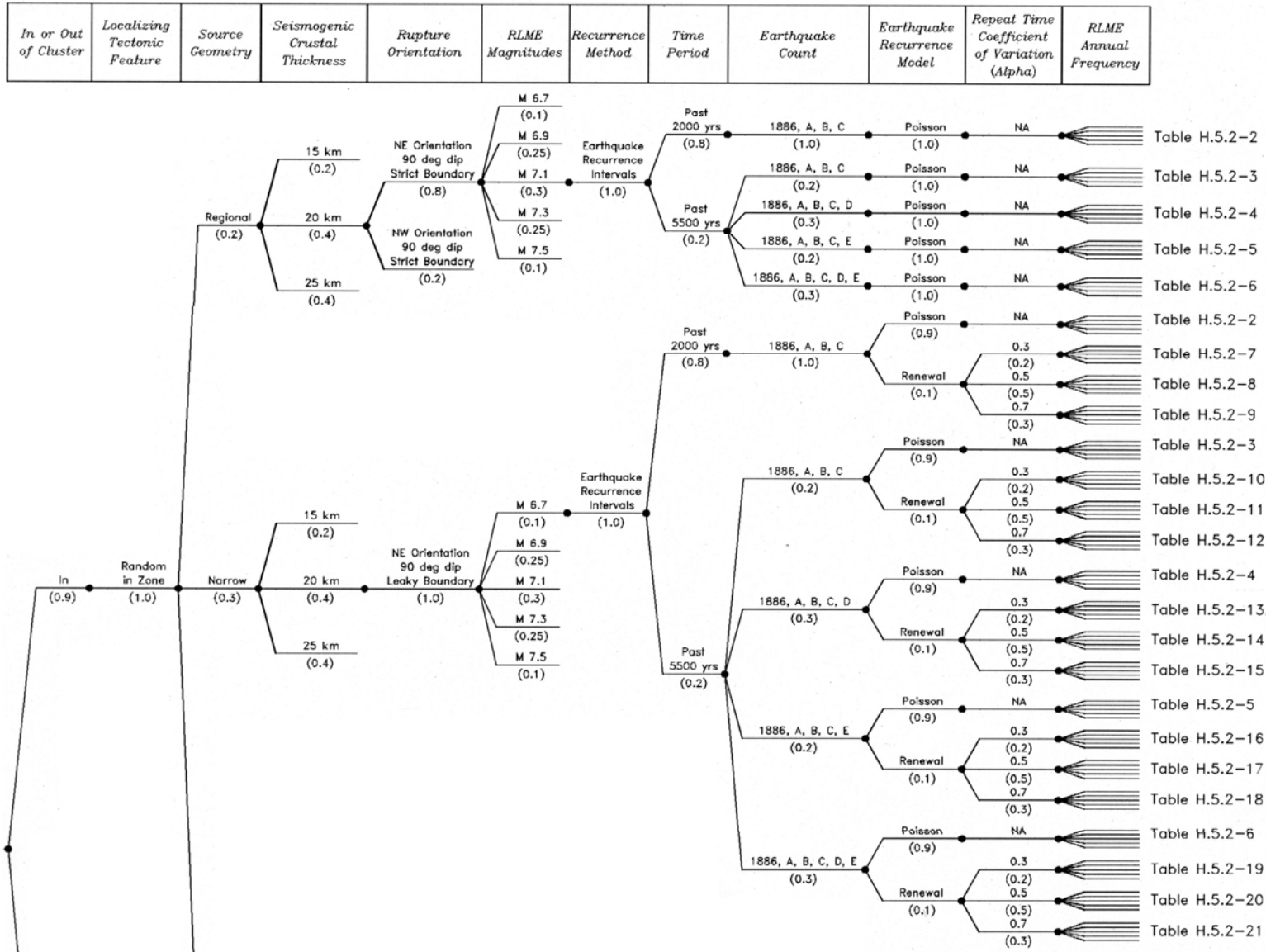
Figure H-5.2-1(a)
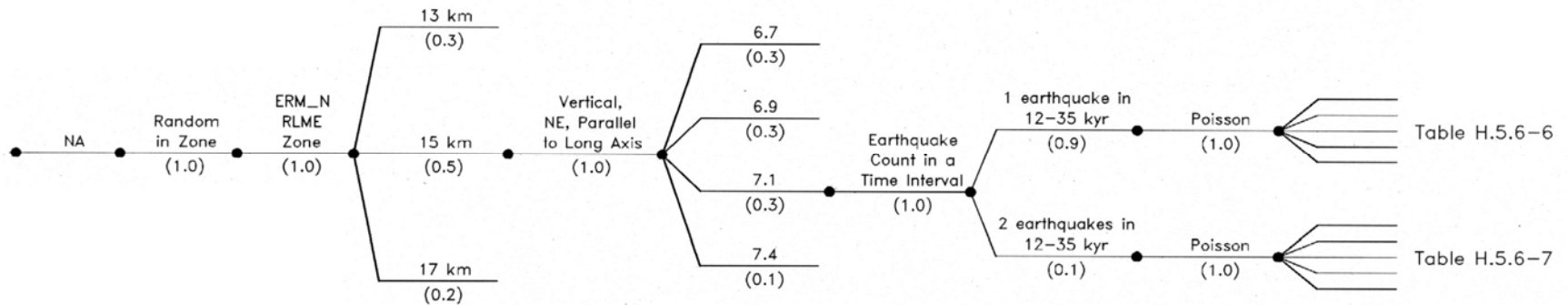**Logic tree for Charleston RLME source. Corrected on June 27, 2012.**

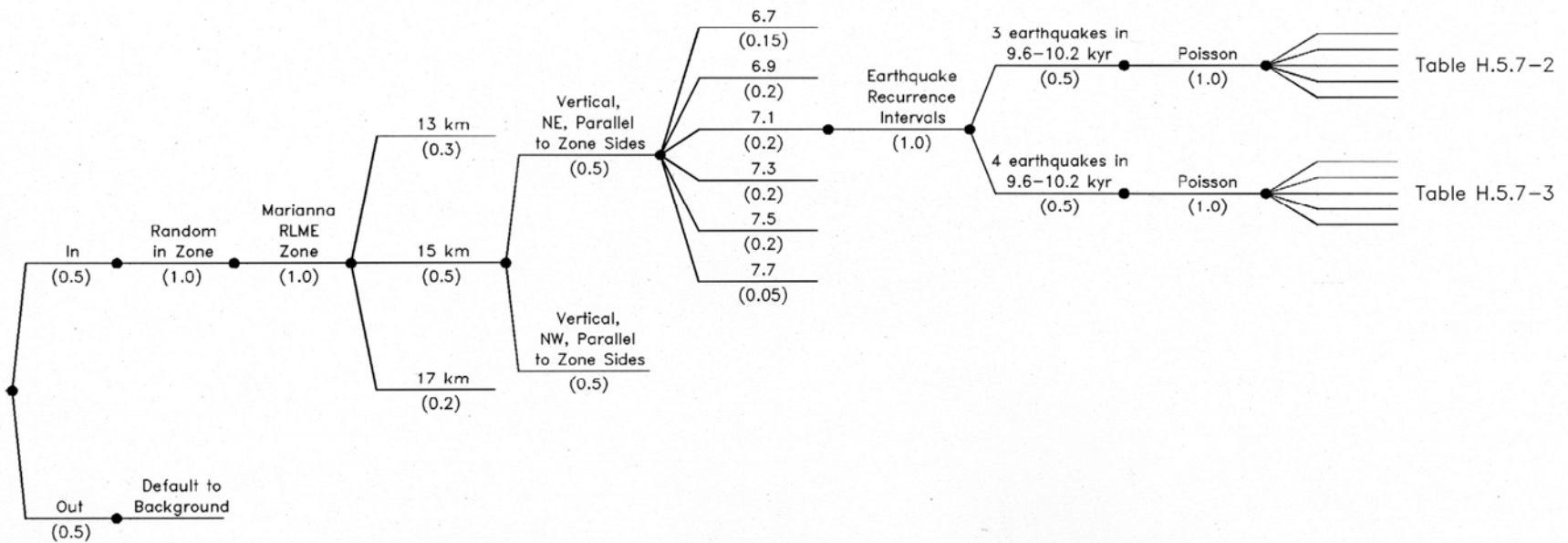| In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitudes	Recurrence Method	Time Period	Earthquake Count	Earthquake Recurrence Model	Repeat Time Coefficient of Variation (Alpha)	RLME Annual Frequency
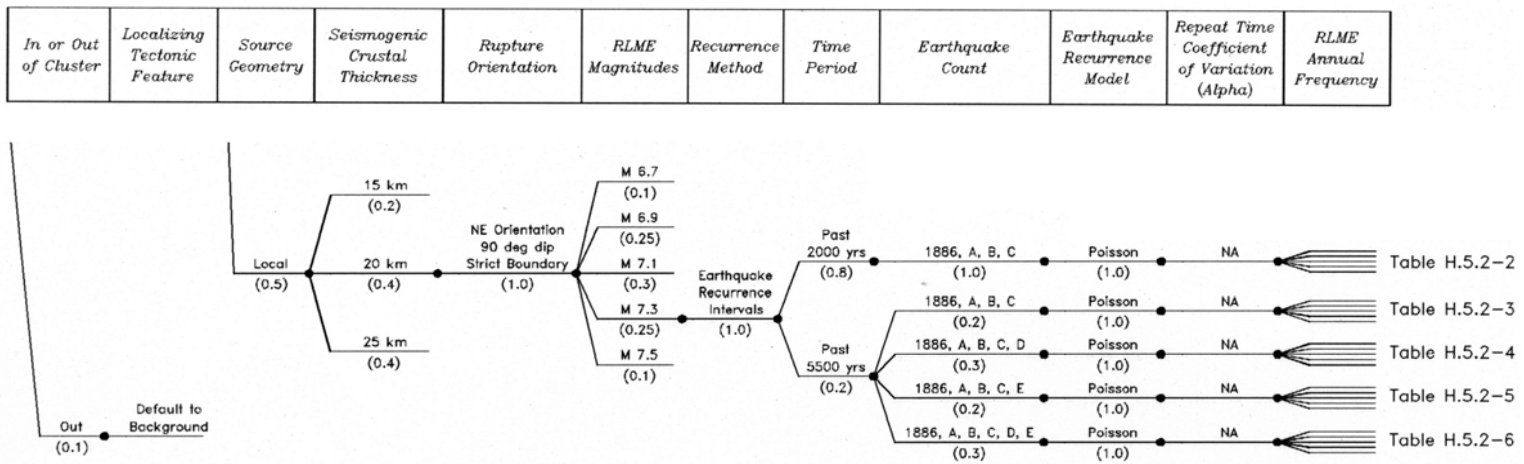
Figure H-5.2-1(b)
Logic tree for Charleston RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Orientation	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency or Slip Rate

Figure H-5.3-1
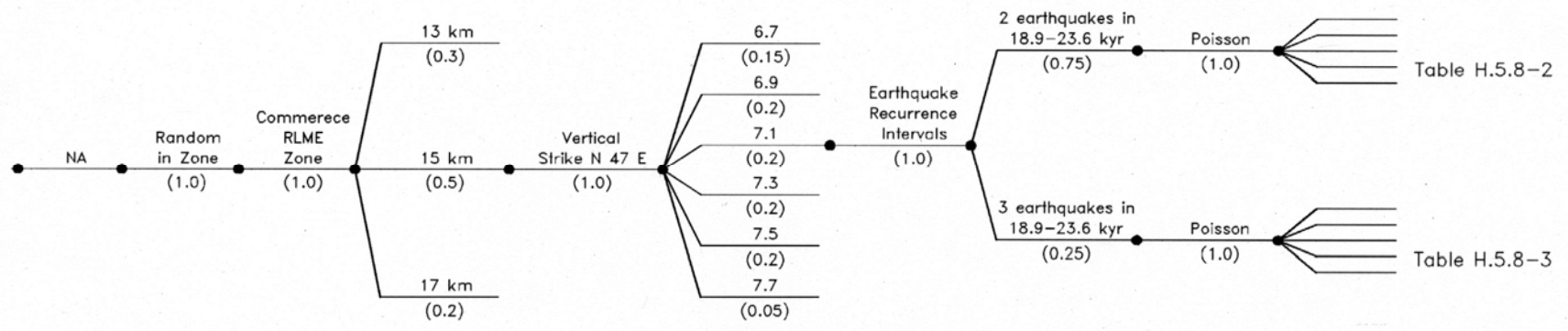**Logic tree for Cheraw RLME source. Corrected on June 27, 2012.**
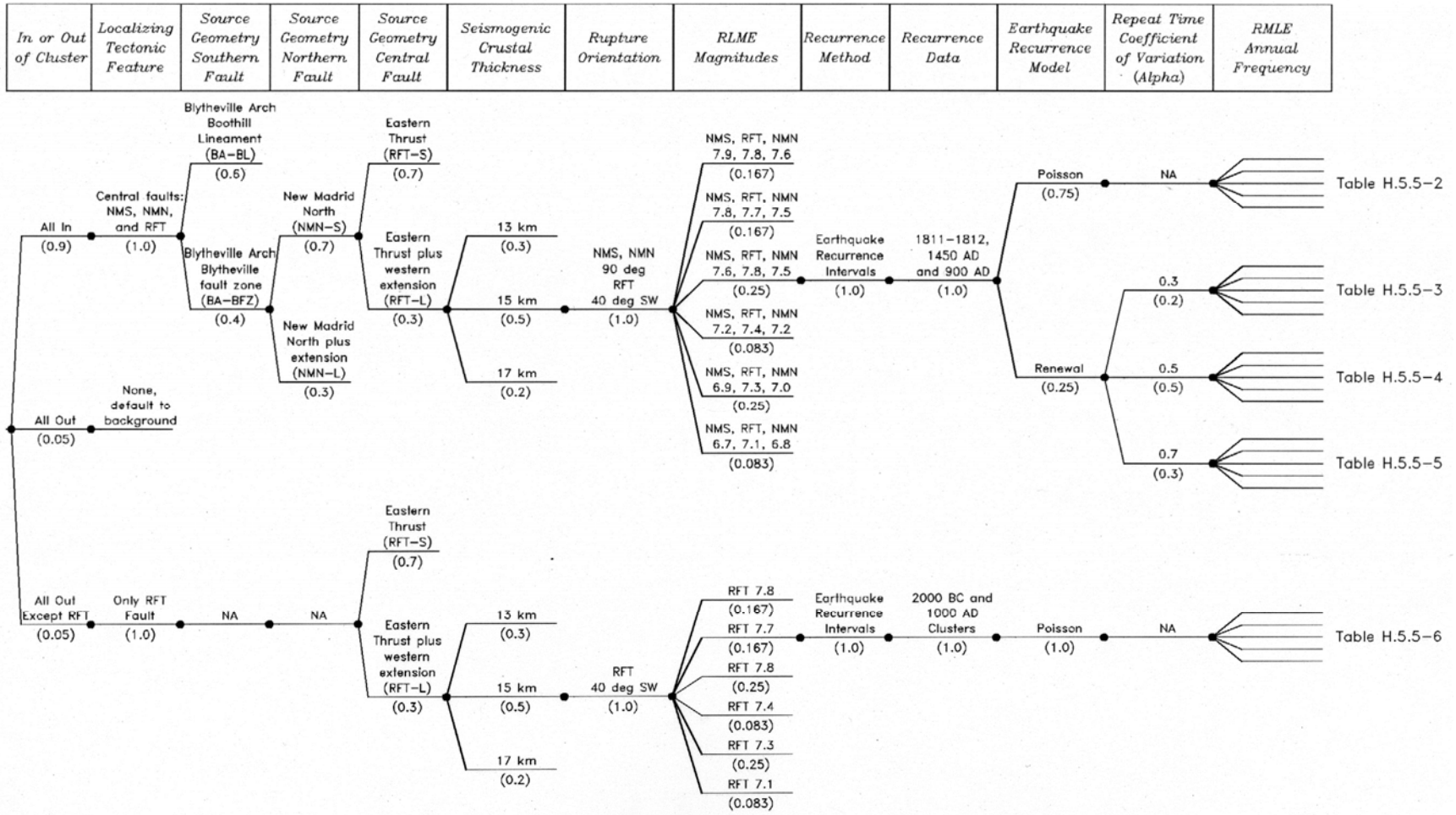
Figure H-5.5-1
Logic tree for NMFS RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency

Figure H-5.6-1
Logic tree for ERM-S RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	Equivalent Annual Frequency

Figure H-5.6-2
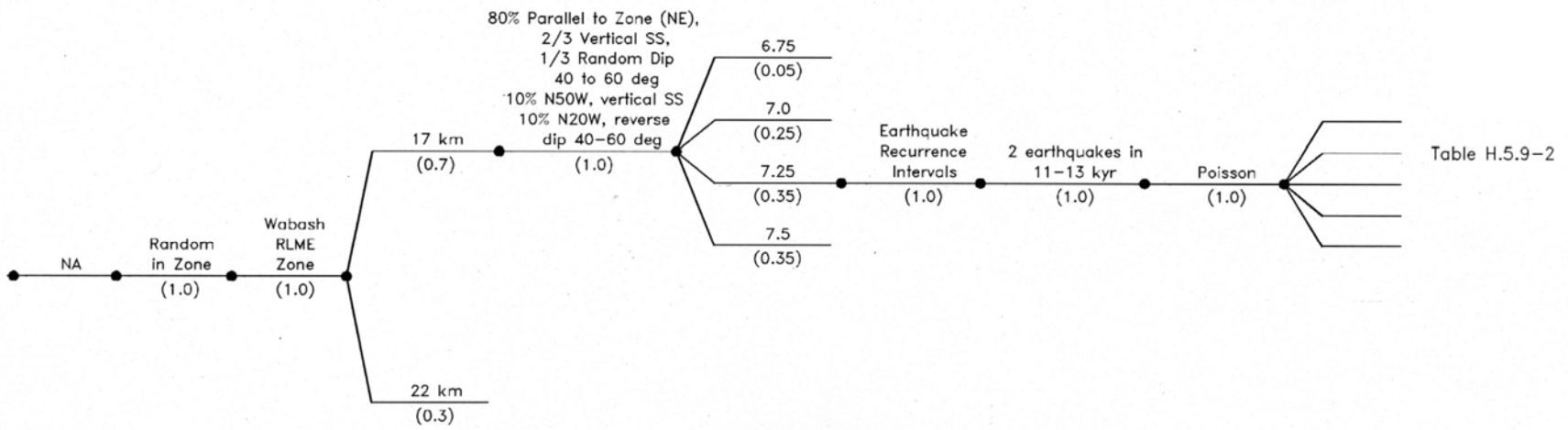**Logic tree for ERM-N RLME source. Corrected on June 27, 2012.**

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency

Figure H-5.7-1
Logic tree for Marianna RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency

Figure H-5.8-1
Logic tree for Commerce Fault Zone RLME source. Corrected on June 27, 2012.

In or Out of Cluster	Localizing Tectonic Feature	Source Geometry	Seismogenic Crustal Thickness	Rupture Geometry	RLME Magnitude	Recurrence Method	Recurrence Data	Earthquake Recurrence Model	RLME Annual Frequency

Figure H-5.9-1
Logic tree for Wabash Valley RLME source. Corrected on June 27, 2012.