ERRATA
PEER Report No 2013-04

Update of the AS08 Ground-Motion Prediction
Equations Based on the NGA-West2 Data Set

June 4, 2013

Errors in Section 3:

There is an error Table 3.1 in the range of rakes for normal faults. A normal fault is defined between rakes of -30 and -150.

There is also an error in Table 3.3, in the definition of R_{y0}. R_{y0} can only be zero or positive. For sites located along the rupture, $R_{y0} = 0$, which can be computed from $R_{y0}=R_x*|\tan(\text{Src2SiteA})|$.

Errors in Section 4:

There is an error in the last line on page 23, which states that M1 is equal 6.5. Instead, M1 is period dependent, as detailed in Table 5.3(a).

There are a couple of errors in the second line of Equation (4.9). It should read:

$$V_1 = \begin{cases} 1500 & \text{for } T \leq 0.5 \text{ sec} \\ \exp(-0.35 \ln\left(\frac{T}{0.5}\right) + \ln(1500)) & \text{for } 0.5 \text{ sec} < T < 3 \text{ sec} \\ 800 & \text{for } T \geq 3 \text{ sec} \end{cases} \qquad (4.9)$$

Equation (4.22), which defines the regional V_{s30} scaling for Taiwan, China, and Japan, is accidentally re-defining f_{11}. Instead, Equation (4.22) should read:

$$\text{Regional} \left(V_{s30}, R_{rup}\right) = \\ F_{TW}\left(f_{12}(V_{s30}) + a_{25}R_{rup}\right) + F_{CN}\left(a_{28}R_{rup}\right) + F_{JP}\left(f_{13}(V_{s30}) + a_{29}R_{rup}\right) \qquad (4.22)$$

Such that Equation (4.23) is defining f_{12} and Equation (4.24) is defining f_{13}.

There is also an error in Equation (4.23). Instead of V_{s30} in the numerator, it should be $V_{s30}*$. Following the above items, Equations (4.23) and (4.24) should read:

$$f_{12}(V_{s30}) = a_{31} \ln\left(\frac{V_{s30}^*}{V_{Lin}}\right) \qquad (4.23)$$

Errors in Section 5:

There is an error in Table 5.3(c) – the coefficient a_{46} at $T = 0.2$ sec should be -0.03 instead of 0.03.