ERRATUM

ANSI/ANS-5.1-2014

Decay Heat Power in Light Water Reactors

A typographical error was identified on page 30, formula (28). Time should be $10^4$ s not $10^{-4}$ s.” The corrected formula is provided below:

6 Total decay heat power

The total decay heat power from the fission products and actinides is calculated as

$$ P_T(t, T) = P'_d(t, T) + P_{dc}(t, T) + P_{dE}(t, T) + P_{dA}(t, T), \quad (27) $$

where

$$ P_{dc}(t, T) = \begin{cases} 
  P'_d(t, T) \cdot G(t), & t \leq 10^4 \text{ s} \\
  P_{dcs}(t, T) + P_{dE}(t, T), & t > 10^4 \text{ s} 
\end{cases}, \quad (28) $$

The total uncertainty is determined from the uncertainty in the fission product decay heat power without neutron capture in fission products, $\Delta P'_d(t, T)$, as described in Eq. (6), and the uncertainty in the operating power, $\Delta P$, as described in Eq. (7). The other terms in Eq. (27) are defined to provide conservative overestimates of their contributions to the decay heat power, and the uncertainties in these terms are therefore not included in the total uncertainty.