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## Beta decays make anti-neutrinos too

The ENDF/B-VII decay sub-library stores the beta decay information for thousands of isotopes. Beta decays produce an electron and an electron anti-neutrino in addition to the daughter nucleus. Currently the ENDF format has no provision for storing the anti-neutrino spectrum. This is unfortunate because neutrino detectors are finding a niche in the area of non-proliferation. Currently we can not provide the developers of these detector systems with anti-neutrino data.

We propose to add an anti-neutrino STYP so that anti-neutrino spectra can be stored alongside the electron spectra from a beta decay. The only change is to the list on page 161 (Chapter 8, Section 8.4.c) of the ENDF manual to add the additional STYP:

STYP		Radiation type
10	$\bar{\nu}_e$	Anti-neutrinos