Release notes for ENDF/B Development dec-002_He_008 evaluation

October 13, 2016

- `fizcon` Warnings:

  1. The decay library is so big that we ran out of MAT numbers, when following the ENDF convention. So, MAT numbers are messed up as well as ZAs one computes from them.
     MAT= 14, MF= 1, MT=451 (1): Ran out of MATs

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 1, MT=451
          ZA SHOULD BE SET TO  1.14000E+02
     ```

- `fizcon` Errors:

  1. Beta spectrum integral too small
     MAT= 14, MF= 8, MT=457 (1): Beta spect int (b)

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 8, MT=457
        FT VALUE TOO SMALL
     ```

  2. This message would be more descriptive if I knew what FT meant
     MAT= 14, MF= 8, MT=457 (2): Illegal FT

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 8, MT=457
          FT= 5.68909E+01  E= 9.81000E+05  I=    2
     ```

  3. Energies released in decay not adding up!
     MAT= 14, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 1.03258E+07  SUM= 8.95567E+06
     ```

  4. Energies released in decay not adding up!
     MAT= 14, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 8, MT=457
        BETA MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.00000E+00  SUM= 8.49000E-01
     ```

  5. Energies released in decay not adding up!
     MAT= 14, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=  14, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 4.36214E+06  SUM= 3.85220E+06
     ```