Release notes for ENDF/B Development dec-053_I_139 evaluation

October 13, 2016

- `fizcon` Errors:

  1. Parity set to illegal value
     MAT=1707, MF= 8, MT=457 (1): Bad parity

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        PARITY= 0.00000E+00 NOT +1.0 OR -1.0
     ```

  2. All probability distributions should be normalized to 1, this one isn't.
     MAT=1707, MF= 8, MT=457 (2): Bad norm (b)

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        NORMALIZATION CHECK INTEGRAL= 1.00763E+00 BEFORE
     ```

  3. Energies released in decay not adding up!
     MAT=1707, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 6.74327E+06  SUM= 4.58620E+06
     ```

  4. Energies released in decay not adding up!
     MAT=1707, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 2.91138E+06  SUM= 2.92380E+06
     ```

  5. Energies released in decay not adding up!
     MAT=1707, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 1.61565E+06  SUM= 1.62066E+06
     ```

  6. Energies released in decay not adding up!
     MAT=1707, MF= 8, MT=457 (6): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1707, MF= 8, MT=457
        NEUTRON AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 4.09379E+04  SUM= 4.17409E+04
     ```