Release notes for ENDF/B Development dec-053_I_140 evaluation

October 13, 2016

- `fizcon` Errors:

  1. Parity set to illegal value
     MAT=1708, MF= 8, MT=457 (1): Bad parity

     ```
     ERROR(S) FOUND IN MAT=1708, 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=1708, MF= 8, MT=457 (2): Bad norm (b)

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        NORMALIZATION CHECK INTEGRAL= 1.00622E+00 BEFORE
     ```

  3. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 8.86206E+06  SUM= 5.97458E+06
     ```

  4. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 3.62098E+06  SUM= 3.63746E+06
     ```

  5. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        BETA MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.00000E+00  SUM= 1.00028E+00
     ```

  6. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (6): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 2.29058E+06  SUM= 2.29558E+06
     ```

  7. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (7): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        NEUTRON MULTIPLICITY SUMUP FAILURE
            WHOLE= 9.76330E-02  SUM= 9.82401E-02
     ```

  8. Energies released in decay not adding up!
     MAT=1708, MF= 8, MT=457 (8): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1708, MF= 8, MT=457
        NEUTRON AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 4.07575E+04  SUM= 4.15451E+04
     ```