Release notes for ENDF/B Development dec-031_Ga_085 evaluation

October 13, 2016

- `fizcon` Errors:

  1. Parity set to illegal value
     MAT= 712, MF= 8, MT=457 (1): Bad parity

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        PARITY= 0.00000E+00 NOT +1.0 OR -1.0
     ```

  2. Generic error message
     MAT= 712, MF= 8, MT=457 (2): Error

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        E(MAXIMUM) > Q  E= 1.26400E+07  Q= 9.84600E+06
     ```

  3. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 9.80559E+06  SUM= 5.52907E+06
     ```

  4. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 6.92562E+05  SUM= 7.03856E+05
     ```

  5. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        BETA MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.01541E+00  SUM= 1.00007E+00
     ```

  6. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (6): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 3.76412E+06  SUM= 3.76912E+06
     ```

  7. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (7): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        NEUTRON MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.01541E+00  SUM= 1.00774E+00
     ```

  8. Energies released in decay not adding up!
     MAT= 712, MF= 8, MT=457 (8): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT= 712, MF= 8, MT=457
        NEUTRON AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 1.03852E+06  SUM= 1.05609E+06
     ```