Release notes for ENDF/B Development dec-049_In_131m2 evaluation

October 14, 2016

- `fizcon` Warnings:

  1. We don't know the energy of the isomer in question, FIZCON should just lighten up and let science progress
     MAT=1513, MF= 1, MT=451 (1): Unknown ELIS

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 1, MT=451
        ELIS NOT IN RANGE  0.00000E+00 TO  3.00000E+06
     ```

- `fizcon` Errors:

  1. Parity set to illegal value
     MAT=1513, MF= 8, MT=457 (1): Bad parity

     ```
     ERROR(S) FOUND IN MAT=1513, 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=1513, MF= 8, MT=457 (2): Bad norm (b)

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
        NORMALIZATION CHECK INTEGRAL= 1.00821E+00 BEFORE
     ```

  3. Energies released in decay not adding up!
     MAT=1513, MF= 8, MT=457 (3): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 1.29791E+07  SUM= 5.78852E+06
     ```

  4. Energies released in decay not adding up!
     MAT=1513, MF= 8, MT=457 (4): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 2.93453E+06  SUM= 2.95933E+06
     ```

  5. Energies released in decay not adding up!
     MAT=1513, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
        BETA MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.00000E+00  SUM= 1.00016E+00
     ```

  6. Energies released in decay not adding up!
     MAT=1513, MF= 8, MT=457 (6): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 2.82376E+06  SUM= 2.82876E+06
     ```

  7. Energies released in decay not adding up!
     MAT=1513, MF= 8, MT=457 (7): Bad energy sum

```
ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
   NEUTRON MULTIPLICITY SUMUP FAILURE
       WHOLE= 1.33480E-03  SUM= 1.34576E-03
```

8. Energies released in decay not adding up!
   MAT=1513, MF= 8, MT=457 (8): Bad energy sum

```
ERROR(S) FOUND IN MAT=1513, MF= 8, MT=457
   NEUTRON AVERAGE ENERGY SUMUP FAILURE
       WHOLE= 4.14722E+02  SUM= 4.24694E+02
```