Release notes for ENDF/B Development dec-053_I_145 evaluation

October 14, 2016

- `fizcon` Errors:

  1. Generic error message
     MAT=1713, MF= 8, MT=457 (1): Error

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        E(MAXIMUM) > Q  E= 9.88000E+06  Q= 1.05480E+04
     ```

  2. Generic error message
     MAT=1713, MF= 8, MT=457 (2): Error

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        E(MAXIMUM) > Q  E= 9.93000E+06  Q= 1.05480E+04
     ```

  3. All probability distributions should be normalized to 1, this one isn't.
     MAT=1713, MF= 8, MT=457 (3): Bad norm (b)

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        NORMALIZATION CHECK INTEGRAL= 1.00115E+00 BEFORE
     ```

  4. Generic error message
     MAT=1713, MF= 8, MT=457 (4): Error

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        E(MAXIMUM) > Q  E= 7.19000E+06  Q= 7.65700E+03
     ```

  5. Energies released in decay not adding up!
     MAT=1713, MF= 8, MT=457 (5): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        TOTAL ENERGY RELEASE SUMUP FAILURE
            WHOLE= 8.89688E+03  SUM= 4.34821E+06
     ```

  6. Energies released in decay not adding up!
     MAT=1713, MF= 8, MT=457 (6): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        GAMMA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 6.06159E+05  SUM= 6.17632E+05
     ```

  7. Energies released in decay not adding up!
     MAT=1713, MF= 8, MT=457 (7): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        BETA MULTIPLICITY SUMUP FAILURE
            WHOLE= 1.00184E+00  SUM= 1.00014E+00
     ```

  8. Energies released in decay not adding up!
     MAT=1713, MF= 8, MT=457 (8): Bad energy sum

     ```
     ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
        BETA AVERAGE ENERGY SUMUP FAILURE
            WHOLE= 3.37861E+06  SUM= 3.38361E+06
     ```

9. Energies released in decay not adding up!
   MAT=1713, MF= 8, MT=457 (9): Bad energy sum

```
ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
   NEUTRON MULTIPLICITY SUMUP FAILURE
       WHOLE= 5.71403E-01  SUM= 5.71144E-01
```

10. Energies released in decay not adding up!
    MAT=1713, MF= 8, MT=457 (10): Bad energy sum

```
ERROR(S) FOUND IN MAT=1713, MF= 8, MT=457
   NEUTRON AVERAGE ENERGY SUMUP FAILURE
       WHOLE= 3.41723E+05  SUM= 3.46970E+05
```