



Comments on WPEC-38  
Requirements for basic data structures etc.  
(Personal comments)  
By Robert Mills, NNL.

- Decay Data
  - Scalars/identifiers  
ZAI, masses, half-lives, decay modes,  
Q values, decay branches
  - Continuous or binned variables with energy  
Emitted particles or photons/spectra
- Uncertainties – how good is the value quoted.
- Covariances – how variances correlated,  
conservation laws, ratio measurement
- Cross-nuclide covariances –  
measurement standards and methods.

- Fission yields
  - Scalars/identifiers  
ZAI, masses, product zai, cause of fission
  - binned variables with energy  
dependent yields “Thermal”, “Fast”...“14 MeV”
- Uncertainties – how good is the value quoted.
- Covariances – how variances correlated  
conservation laws, ratio measurements
- Cross-nuclide covariances –  
measurement standards and methods.

Evaluators (few, expect to support new format)

- How easy to use, to generate, to extend?
- Professionals set and work within guidelines
  - Who will set guidelines? ISO, NEA, IAEA?
    - Primer, “dictionaries”, user guides...  
(Who “owns” formats, documents and updates)
- Costs to changes – recoding, APIs, ?languages?
- Cost reductions – simplify work, simplify future coding, take data handling out of evaluation

Users of data (many, resistant to change)

- How easy to use?
- Primer, “dictionaries”, user guides, updates?
- Ease of access- proprietary code/systems?
- Costs to changes
  - recoding, APIs, ?languages?
- Cost reductions –
  - Simplify future coding, take data handling out of tasks

Will

I,  
my colleagues,  
my students,  
my collaborators,  
my funding bodies and  
MY CUSTOMERS

see any benefit and be willing to handle the  
initial learning curve and costs?

Those who do not know  
history's mistakes are  
doomed to repeat them.

George Santayana, 1863-1952

Age is foolish and  
forgetful when it  
underestimates  
youth[ful ideas].

Rowling



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J. K. Rowling,  
Harry Potter and the Half-Blood Prince, 2005