

Memo 4C-3/190

To: Distribution

21 December 1976

From: H.D. Lemmel *HDL*

Subject: Replies to Memos 4C-1/100 and 1/101.

Contents: Reference 4C-1/100

1. Implementation of CPND Exfor proposed for next 4C-Meeting.

Reference 4C-1/101

2. Column heading keyword THICKNESS (involves Manual update)
3. Cross-referencing accession-numbers under STATUS (proposed Manual wording requested)
4. Assumed values (proposed Manual wording requested)
5. Protocol and Manual Update (Manual wording under discussion)
6. RESID-NUC, etc.
7. Resonance-Integral (involves Manual update according to one of two possible alternatives)
8. NEM-NPR
9. Codes and free text (involves Manual update)

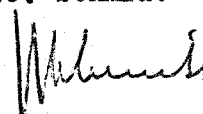
Happy New Year!

Distribution:

S. Pearlstein, NNCSC
H. Derrien, NDCC
V. Manokhin, CJD

NDS: P.M. Attree
H.D. Lemmel
R. Lessler
A. Lorenz
K. Okamoto
J.J. Schmidt
O. Schwerer
P.M. Smith
R. Yaghubian
file

Clearance: J.J. Schmidt



Reference: 4C-1/100

1. re II. Implementation of CPND Exfor

Sorry for the unclear wording. Our understanding is:

When the keyword REACTION is used, the keyword STANDARD must not be used but MONITOR must be used instead.

Similarly, the CPND rules prescribe that the keyword DECAY-DATA must be present when RAD-DET is present.

However, the keyword DECAY-DATA (and all others) could be used together with ISO-QUANT, or together with REACTION.

It seems to me that NNCSC feels the same way.

We would very much welcome if the 4 Centers could agree at the next meeting upon the implementation of the new keywords. This means that each Center should aim at being prepared at least to receive entries containing the REACTION formalism and the other new keywords, even if they prefer to produce entries in the conventional ISO-QUANT formalism until their relevant programs can be converted.

Agenda
4C-Meeting

Reference: 4C-1/101

2. Column heading keyword THICKNESS.

The keyword THICKNESS, as proposed, will function as an independent variable. I therefore gave it, in Dict. 24, the new flag "K". This needs updating of the Manual page VIII.21 b., where below F.Prod. another line for THICKNESS must be inserted.- The proposed codes are being added to Dict. 24 resp. 25.

Manual

3. Cross-referencing accession-numbers under STATUS

We welcome this proposal and request re-submission in form of proposed Manual wording (e.g. pages VIII.3/4, Lexfor "Dependent Data", "STATUS", etc.).- An appropriate entry is being made in Dict. 2 and 16.

4. Assumed values

We welcome this proposal, and in particular Koichi stresses how happy he would have been if this formalism would have been available a few months ago before coding all the Australian resonance parameters.

We request re-submission of this proposal in the form of proposed Manual wording. This will require detailed instructions for the case of more than one "ASSUM" column which will not only involve column headings ASSUM, ASSUM1, ASSUM2, etc. but also pointers.- I shall wait for the proposed Manual wording before updating the Dictionaries accordingly.

5. re III. Protocol and Manual Update

We welcome any proposal for updating the Protocol, which indeed seems superseded in some technical details, justified by its blanco statement H.7 which refers to the Manual for further details on changes and revisions. Perhaps, the Protocol should contain less technical details, and that's why we proposed paragraphs 7 and 8 of 4C-3/184 to be included in Chapter IX rather than in the Protocol. Note also the forthcoming Exfor cooperation of other centers which requires that the Protocol concentrate on the 4C neutron data exchange agreement, whereas technical details relevant to all Exfor participants should be included in other parts of the Manual rather than in the Protocol.

6. The discussion on RESID-NUC may be superseded by the corresponding CPND Lexfor pages in Memo CP-D/13.

7. III.9) Resonance Integrals. It seems not so relevant when and where the exceptional use of the modifier PAR for a resonance integral over a restricted energy range has been agreed (we cannot verify such an agreement in INDC(NDS)-68 p. 23), since it remains a mistake which was not immediately noticed but must be corrected.

Manual | A quantity code ...,RI,PAR clearly denotes a resonance-integral for a partial reaction, e.g. for production of a certain gamma-line. Our proposal C.5 in 4C-3/184 remains therefore valid and we continue to request the corresponding corrections in the Manual. (Alternatively a new modifier, e.g. ...,RI,LIM indicating the limited energy range of the resonance integral may be proposed in the case that such a quantity, which is well defined by the EN-range given, is believed to require a modifier at all.)

8. re IV. NEM-NPR

We regard it as adopted that the REACTION formalism

for NEM is: ((N,N+X),EM,SIG), excluding el.scatt.,
and for NPR: ((N,N+X),PRD,SIG), including el.scatt.

We appreciate NNCSC's thorough verification finding that both quantities are needed in Exfor.

9. re V. Codes and Free Text (Manual page IV.2)

Manual | The proposed change seems not quite correct, since the keywords mentioned are not the only exceptions. The proposed change also does not cover all changes needed on this page. For example, the mode of a "blank field between closing parenthesis and col. 66 instead of a point" needs to be mentioned. We therefore propose to change page IV.2 as proposed in CP-D/13, but omitting the CPND keywords. Admittedly, this wording seems to be a bit bulky but I believe it is exact.