

Memo CP-D/297

April 17, 1998

To: Distribution

From: *Influence* 
O. Schwerer and H. Wienke

Subject: Pending retransmissions of EXFOR entries with important mistakes

In fulfilment of Action 53 of the 1997 NRDC meeting, we distribute a list of all those EXFOR (sub)entries where NDS requested retransmission because of important mistakes but the corrected (sub)entries were not yet transmitted (as of 15 April 1998).

All centres are asked to review the list of entries from their area and to retransmit the corrected entries as soon as possible. To facilitate the correction, we include this time not only the (sub)accession numbers but also copies of the relevant pages of the original 4C or CP memos giving details on the requested corrections.

This memo is based on the last comprehensive "list of pending retransmissions" included in the 1995 NRDC meeting (which is herewith superseded) and all following relevant 4C and CP memos. These were checked against all TRANS files received by 15 April 1998. For completeness and future reference we included also mistakes from the most recent TRANS files although it is obvious that their corrections are not yet transmitted. On the other hand, some requests are rather old; cases where the original reason for the "request for correction" could no longer be traced were omitted.

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OS/sa x21716

Area 1	Page 1 and 2
Area 2	Page 3 to 9
Area 4	Page 10 to 14
Area A	Page 15 to 21
Area C	Page 22 to 24
Area M	Page 25 to 27
Area O	Page 28 to 33

AREA 1

Memo 4C-3/340
1989-09-13

Page 2

Comments on TRANS 1233

Entry	Subent	Line(s)	Comment
12788	2-5		ANG-CM = 16.4 always repeated, check input
12846	2-5		ANG-CM = 16.3 " " " "
12911	2*)		E-EXC repeated; I don't understand the meaning of the second E-EXC column (0.95 MeV repeated throughout the DATA section)
13066*)	3,4		Headings ELEM 1,2,3 and MASS1,2,3 are illegal. We doubt that they should be introduced for this case because it is not easy to see where each one belongs. If these very old average R-values are to be compiled at all (which we are not sure), a legal way could be <u>replacing</u> both numerators of the double-ratio by sum REACTIONS (with explicit SF4) for the 2 (or 3) fission products, using 4 levels of parentheses.
13073	2*)		DECAY-DATA: half-life of SN-133 is 1.4 sec as opposed to 55 sec given here. Also the values for SN-131 and 132 deviate strongly from recent data. Is there a compilation mistake, or are the original data in error?
13079	3	15,21	ISOMER should be blank (no metastable state exists).
13085	2	23	Exponent in wrong position
13090	2	3	Delete ELEM from SF4 (chain yield needs MASS only)
	3	11	ISOMER should be blank
	7	10-14	ISOMER should be blank, delete this column
13091	16	17,18,20,21, 23,27-33	ISOMER should be blank
13092*)	2,3		See comment on entry 13066, (also for heading ISOMER2)
13094	2	9	3rd heading should read DATA 2
13095	5	14-17,19,22,) 26-28)	ISOMER should be blank
13097	2	19)	
	7	21)	

*) Retransmission requested

From: IAEAND::SCHWERER "Otto Schwerer, IAEA Nuclear Data Section" 6-APR-1998 16
:35:09.01
To: @4CMEMO
CC: SCHWERER
Subj: Memo 4C-3/390

Memo 4C-3/390
=====

To: Distribution

6 April 1998

From: O.Schwerer

Subject: Comments on TRANS 1270; Units for delayed nubar (LEXFOR change?)

Please find below our comments on this TRANS.

13668.002-005: Delayed nubar for half-life groups must be coded
(N,F),DL/PAR,NU
(LEXFOR, "Delayed Fission Neutrons", second page)
Retransmission requested

13668.006-009: According to the same LEXFOR page, total delayed nubar must have units NO-DIM rather than PC/FIS. Propose to change LEXFOR page to allow both units as is the case already for DL/PAR,NU (absolute delayed neutron group yield, see middle section of same LEXFOR page).

13678.003: Delete illegal SF4 of MONITOR code

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AREA 2

Memo 4C-3/300

Page 2

Comments on TRANS 2110-2112

2110	20540	5	3	isomeric sum requires 'SUM' in SF6
	21362	22	3	reaction product missing
	21983	3	3	delete ELEM in REACTION SF4 (chain yield, only MASS given in data section)
			104	exponent of last field in wrong position
	21984	95	3	SF4 should read 8-0-16
	21989	2	3	SF4 should read 1-H-2
	21993	2*)	13	ANGLE should have units ADEG (DEG-C = degrees Celsius)
				data section: EN not monotonic. Either sort data records by energy, or put ANG in first data field (col. 1-11).
	21994	2-8	6	abundance field wrong, divide by 100 (100% = 1.0)
	22000*)	2,4,6		data section: spectrum temperature KT needs units (M)EV, not DEG-K. Sample temperature must be given as "additional information" following the DATA, under heading TEMP. If the sample temperature is meant, than EN (or equivalent) is missing.
				whole entry: 5 subentries for 63-EU-152(N,G),,SIG are given, 3 of them with the MXW modifier at the same "temperature", and 2 more with DERIV in SF9. I do not understand the difference between these values from the information given in the EXFOR entry.
	22001	14,15 21,22*)	3	isomeric sum requires 'SUM' in SF6 EN-MIN > EN-MAX. Or should EN-MIN be changed to EN-MEAN and EN-MAX to EN-ERR?
	22003	2*)		data not monotonic; data for Z=30,31 (=lines 249-269) should be moved to top of data section.

Comments on TRANS 2111

<u>Entry</u>	<u>Subent</u>	<u>Line</u>	<u>Comments</u>
20396	1	3	comma missing (it is probably not <u>volume</u> 129 but page 129)
20864	1	3	date should be,80)
20914	1	8	comma missing (not <u>volume</u> 439)
21314	1	5	comma missing (not <u>volume</u> 547)

*) Retransmission requested

<u>Entry</u>	<u>Subentry</u>	<u>Line</u>	<u>Comment</u>
22030*)	2-16		REACTION coding IND,FY is incompatible with giving secondary energy E in COMMON section and with units 1/MEV. Correct code should probably be ,DE,FF. Please check and retransmit with different REACTION.
22031*)	151-159		add PAR to SF5 and Q-VAL to COMMON section
22033*)	1	31	N1=3
	2-37	3	SF4 missing (must be given for scattering cross section, but not for STF). Strictly speaking, average cross section and strength function should be compiled in separate subentries (see LEXFOR 'Multiple Reaction Formalism' for the classes of data where this may be used).
22037*)	2,3,6-19, 3		SF4 missing
	22-25		
21	3		SF4: isomer extension (G) missing

*) Retransmission requested

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
<u>22238 *)</u>	1	21	Describe details of spectrum under INC-SPECT. Free text already under METHOD.
		26	Should be coded under keyword MONITOR.
	2-7	46	Missing free text.
		3	Modifier SPA should be given in SF8.
			Inc. neutron energy missing. Exponents should be right adjusted.
2	3	Delete -G from SF4.	
<u>22239 *)</u>	1		Keywords METHOD, MONITOR, DETECTOR, DECAY-MONIT (info given in main ref.) and ERR-ANALYS missing. Data in section 2 of main ref. should also be compiled (in separate subentry).
		2,3	Inc. neutron energy missing. Keywords DECAY-DATA, INC-SPECT missing.
		3	Modifier SPA should be given in SF8.
22240	1	23	Should be coded under keyword MONITOR.
		34	Code NAICR should be given.
		55	Free text should be given.
	2-4	3	SF4 should be blank if SF5-8 is resonance parameter.
		10	Put EN-RES into COMMON section.
22241 *)	2-9		Incident neutron energy missing.
	2-5	3	Code CMP should be explained or, if the data were derived for natural Ti, SF1 should be 22-TI-0 (and the compounds be mentioned under SAMPLE).
			3
22243	1	39	Reaction product missing in SF4.
		49	Replace DATA-ERR with ERR-S.
	2	10	Idem.
22244	1	38	Reaction product missing in SF4.
		55	Replace DATA-ERR with ERR-S.
	2	10	Idem.

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
<u>22250 *)</u>	1	57	Free text missing.
	2-7		<u>Independent variable missing</u> (incident neutron energy: EN, or resonance energy: EN-RES).
	2,3	3	AH only for resonance parameters (see DICT. 36). Therefore it is an illegal REACTION in these cases.
<u>22251 *)</u>	2-10	3	<u>Incident neutron energy missing</u> .
		3	SF4 wrong, should be SF1.
		3	Code SIG should be replaced with DA in SF6. PAR in SF5 should be deleted.
	2,6,8,9 8	3	(N,N) illegal, must be (N,EL) or (N,INL) or (N,SCT).
<u>22252 *)</u>	1	15	<u>Incident-neutron energy missing</u> .
		44	Delete keyword INC-SPECT and move text to more appropriate keyword (e.g. METHOD). Replace DATA-ERR with ERR-S.
	2,3		Delete keyword INC-SOURCE (already present in subent 1 with the same free text) and keyword INC-SPECT.
		4	Replace DATA-ERR with ERR-T. (N,N) must be (N,INL).

To: Distribution

23 October 1997

From: O.Schwerer

Subject: Comments on TRANS 2139-2141, 4105, 4106

Please find below our comments on these TRANS files.

Comments on TRANS 2139

22297 1 Line12: Lab code should read 4UKRIJI

22299 1 Line 12: (REAC,...
4 REACTION: comma missing before SF8 (REL)

Comments on TRANS 2140

22307*) All subentries: There is a confusion about the type of average cross sections given. SF8 says 'SPA' (spectrum average) with an entry under INC-SPECT defining a very broad incident neutron spectrum. If SPA is used, then the data are understood to be averaged over the broad spectrum as defined under INC-SPECT, and a mean EN value must be given under the heading EN-MEAN, EN-DUMMY or equivalent. This is however not the case; instead, narrow energy intervals are given in the DATA sections using EN-MIN and EN-MAX. For this type of data, SF8 should be =AV (averaged) instead of SPA, and the broad spectrum as explained under INC-SPECT should not be important since the cross sections are given for rather narrow EN intervals. Spectrum averaged data are normally given for only one (mean) energy value, not for a table of values.
Please clarify whether these data are 'Averaged' or 'Spectrum Averaged' and retransmit.

22308*) Subent 2: Secondary energy (E-EXC) only legal for partial quantity. In this case, heading MISC should be used instead.

Subent 3: 1) REACTION code TER/BIN,FY not in dictionary. Is this a new quantity? Note that TER/BIN so far is used for ratios only (TER/BIN,SIG/RAT) so that the denominator of the ratio given here would be a ratio in itself. (?)

2) Dimension: since a ratio of 2 fission yields is given, should the dimension not be NO-DIM?

3) The definition of the "complete" quantity, given by this reaction ratio, is not clear, need either new proposal for dict.36 (item 1 above) with explanation and/or explanation in free text of this subentry and/or correction of units. Since a ratio is given, perhaps SIG could be used instead of FY? Please retransmit.

Comments on TRANS 2141

To: Distribution

6 March 1998

From: O.Schwerer

Subject: Comments on TRANS 2142 - 2145

Please find below our comments on these TRANS files.

TRANS 2142 No comments

TRANS 2143

20220.007 New quantity PAR,COR,G/N not yet in Dict.36.
To be approved at the forthcoming NRDC meeting.

22343.002-6,8 and 22353.002,4: Delete 'PAR' from REACTION PAR,DA/DE
(ordinary double-diff. cs)

22346.008,9 Replace isomer extension -M/G+M by -M/T

TRANS 2144 No comments

TRANS 2145

22352.002,4,6,8,10, 22359.002,5,8, and 22362.002: Delete PAR from REACTION

22357.001*) REFERENCE: Report code NEANDC(E)-GE/R/ND/01/96 illegal.
(First character following hyphen must be numeric.)
Please check with original report whether the number field can
be rewritten as -01/96/GE/R/ND or similar (characters not needed
to identify the report issue, such as distribution codes, should
be omitted).

22358.001 INC-SOURCE: (D-N14) new code, to be added to Dict.19
To be approved at the forthcoming NRDC meeting.

22359.001 Conf. code 97TRIESTE:
New code 97TRIEST (not 97TRIESTE which is too long) to be added
to Dict.7.
Note: Ref.year must be 97. (Date must be date of conference
rather than date of publication of proceedings.)

*) Retransmission requested

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Comments on TRANS 1227

Entry	Subent	Line	Comment
12517	7	3	delete comma before RAW (wrong subfield)
12921	1		HISTORY entry documenting present corrections is missing

Comments on TRANS 4066

Entry	Subent	Line	Comment
40868	2	3)	
40893	2,3,4	3)	delete 'PAR' from SF5
40911	1	11	83MØSKWA should read 83MØSKVA
40914	4	3	delete 'PAR' from SF5
40915	3 *)		COMMON section: illegal repetition of column heading THICKNESS. If the 2 thickness values belong to DATA 1 and DATA 2, add pointers to COMMON section. If not, delete COMMON section (thickness values are anyway given in free text under SAMPLE).
40916	2 *)		COMMON section: angle given, which is not consistent with units B/MEV and with quantity PR,DE,N. (Data are considered as angle-dependant <u>only</u> when DA or CØR is given in SF6). Delete angle from COMMON section. Geometry of measurement may be explained in free text, e.g. under METHOD or DETECTOR.

*) Retransmission requested

AREA 4

Memo 4C-3/323
1988-05-05

Page 3

Entry	Subent	Line(s)	Comment
40926	2,3	3-5	Whole REACTION combination should be given as implicit isomeric ratio -63-EU-152-M/T,,SIG/RAT), without PAR modifier.
		3	REACTION: add SPA to SF8
40927	2-5		heading ERR-T repeated (it is not legal to give an error for the same data point both in B and in PER-CENT).
40929	1	9	REFERENCE code should be (S,IAEA-410,257,8703).
40930*)	2,4,6,8		Incorrect REACTION coding. Fission neutron spectrum relative to a Maxwellian spectrum of a certain temperature must <u>not</u> be coded as ... (O,F),PR,DE,N,REL) because REL requires ARB-UNITS in the data section. But these data can never be given in ARB-UNITS, because the numbers do not represent the shape of the spectrum but only the deviation from the Maxwellian (all numbers are close to 1). For a very similar work recently compiled at NDS we used the coding of an explicit ratio ((... (O,F),PR,DE,N,,EXP)/ (..... (O,F),PR,DE,N,,CALC)).
		4-9	add MXW to SF8.
40931	3		EN-NRM not needed if it is equal to EN.
	4	3 14	SF8: SPA incorrect, use AV. COMMENT should be given as free text under MONITOR.

*) Retransmission requested

Comments on TRANS 4094

Entry	Subent	Line(s)	Comment
40508	1	8	Code obsolete (4RUSKUR).
	2-3	3	PAR in Sf5 should be deleted.
	8-9	3	Idem.
	9	1	Subent alter code missing.
41067	1	7	Code obsolete (4RUSFEI).
41102	1	4	Code obsolete (4UKRKGU).
		5-6	Delete references, they seem to be already in appropriate subentries. Remove Q-VAL from DATA-sections.
41103 *)	1	6	Code obsolete (4RUSNIR).
	7	3	Should probably be BA-133-G. Code AV missing in Sf8.
41105	1	5	Code obsolete (4RUSKUR).
41106	1	6	Code obsolete (4KASKAZ).
41109 *)	1	8	Code obsolete (4RUSFEI)
	2-6,8-10	3	Modifiers in SF8 not explained in free text.
	5, 8-10	18	Wrong data-unit, use ARB-UNITS.
41120 *)	2-4		If SPA in SF8, then 1) INC-SPECT must be given. 2) EN must be replaced by EN-MEAN or EN-DUMMY.
		6	Otherwise delete SPA from SF8. Code AV missing in SF8.
41124	3,6,7,10, 11		Pointer 3 missing in col. 66, in DATA-section.
41128	10	8	Should probably be EN-MIN, EN-MAX respectively.
	2,3		Pointer 3 missing in col. 66, in DATA-section.

40655.002,3 Illegal trailing commas in REACTION code
40728.005-010 3-LI-6(N,A)1-H-3 must be written 3-LI-6(N,T)2-HE-4
40792.002-009 REACTION SF4 missing
40891.002 Delete PAR from SF5 (PAR,SPC is obsolete)
41088.014 Line 14: illegal data field

From: IAEAND::SCHWERER "Otto Schwerer, IAEA Nuclear Data Section" 24-APR-19
To: @4CMEMO
CC: SCHWERER
Subj: Memo 4C-3/386

Memo 4C-3/386
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To: Distribution

24 April 1997

From: O.Schwerer

Subject: Comments on TRANS 4104

Please find below our comments on this TRANS.

Entry 41234, all subentries: REACTION codes need modifier in SF8 (FST or FIS or SPA) because according to INC-SPECT, the data are fast reactor neutron spectrum average.

Subentries 3 and 5: PAR needed in SF5 because secondary energy given. (In subentry 5, PAR,POL will be new quantity for dictionary 36 - please check again whether this coding correctly describes the data measured.)

Entry 41238, subentries 2 - 6: The data given under E-MIN and E-MAX should be moved to free text or MISC1, MISC2 because the quantity PR,AKE,N should not be dependent on a secondary energy. Also, in subentry 2, it is not immediately clear how an experiment covering neutrons between 2.6 and 8.0 MeV can lead to an average energy of 1.87 MeV (explanation needed).

Retransmission of both entries is requested.

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22313004: Change units of DATA (STF) to NO-DIM
22314004,5: same as above

22320002 Line 13: exponent not right-adjusted

22321001 Line 13: lab code should be 2SWDUPP
Line 43: SF4 missing

Subents 2 and 3: Cs ratio must have units NO-DIM

22325005, line 4: -G missing

22326002,3, line 4 (DECAY-DATA): multiple gamma energies must be separated by slash (/)

22326003*) EN missing (or EN-MIN, EN-MAX for RI)

22328002*) 1) Delete PAR from REACTION SF5
2) DECAY-DATA missing

22329 and 22330, subent 1, MONITOR: SF 4 missing

22329 Subents 2,3: SF4 in REACTION missing

22331003: Change units of DATA (STF) to NO-DIM

22334*) 1) EN missing
2) Subentries 2-37: ratio of 2 reactions with same dimension must always be given in units NO-DIM (not PER-CENT).

Comments on TRANS 4105

41244.002*) KT (incident particle spectrum temperature) must have units MeV or equivalent, not DEG-K.

41248*) and 41249*) Since REACTION SF8=SPA, EN must be replaced by EN-MEAN or EN-DUMMY (or KT), and more information under INC-SPECT should be given.

Comments on TRANS 4106

41201*) I don't understand the difference between subentries 2-4 on one hand and 8-10 on the other. PAR in SF5 in subentries 2-4 should be deleted (the quantity PAR,DE is obsolete), and judging from the references (the 94GATLINBURG paper and the English abstract of the YK article) it seems to be the same quantity. Subent 8 says "correlated to subentry 2" (and the same for subents 9/3 and 10/4) but it is not explained how they are correlated. Could it be that subentries 8-10 etc. SUPERSEDE subentries 2-4? Please check and retransmit (explain correlations between subentries and/or correct reactions and/or delete any superseded subentries)

*) Retransmission requested

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AREA A

Memo CP-D/202
1990-01-12

Page 2

Comments on TRANS A022

Entry	Subent	Line(s)	Comment
A0100	1	5	Omit author's initial for thesis
	2	6)	
	3	7)	
	5	10)	delete isomer extension -M+G (for total
	8,9	4)	isomeric sum, no extension should be given)
	10	7)	
	11	5,6)	
	12	9)	
	8	15	7th heading should be DATA 3
	11	2	N1 = 3
		112	delete this empty data line
	A0394	1	7,8
4,5		4	38-Sr-83 requires isomeric state code
8,9		4	37-RB-84 " " " "
2-11			DECAY DATA should contain at least the half life. Nuclide alone is not useful.
A0399 *)	1	8	report code HH87 - unknown, see top of this memo
		12	HISTORY dates out of order
	5,10	17	5th heading should be ERR-S 2
	15	133,134	data line repeated
A0402	3,4		REACTION SF3 contains exotic nuclides (not shown on 1981 chart of nuclides) 44-RU-117 and 44-RU-114. The Exfor entry does not mention that these nuclei were actually detected, perhaps other channels are involved? Should these subentries be coded with SF3 = X? (For time being, we do not include these nuclei in dictionary 27)
	7	37	MASS should probably be = 92.
A0403	2	3	delete IND from SF5

Comments on TRANS L003

Entry	Subent	Line(s)	Comment
L006 *)	10	3	REACTION subfields 3 and 4 inconsistent (SF4 = 29-CU-63?)
L0011 *)	2	31-52	invalid numerical data in DATA-ERR field. Probably '1' in col. 30 to be deleted.

*) Retransmission requested

Comments on TRANS A017

Entry	Subent	Line	Comment
A0136	4	16	delete '(' (redundant closing parenthesis)
A0208	1	2	N2=34
A0229	4*)	13	delete '-G' General comment on this subentry: a range of cross sections (0.2 to 93 μ b) for the same quantity at same energy (61 MeV) is given, depending on what half-life is assumed. These data should not be compiled in the DATA section; only a most likely "final" value of the experiment should be given, with the whole table perhaps in free text in the BIB section. Since the data are based on an experiment, the modifier 'CALC' in the REACTION string should not be used. Please check and, if possible, retransmit corrected version.
A0230	3	14	93-NP-236-M
A0292	1	7	86KHARKO (not KHARKOV)
A0304	1	6	86KHARKO (not KHARKOV)
A0304	1 8,12,17	4 4	-G/G+M should be -G/T -M/G+M should be -M/T
A0317	2 4*)	4 15 <u>22-end</u>	DATA-ERR and EN-ERR given under ERR-ANALYS, but not in data section <u>DATA should be DATA-ERR</u> DATA in first column should be EN Data Section: variable NUMBER not monotonic within same energy, should all be increasing or decreasing for same EN (e.g. always 0,2,4, or 4,2,0, but not 2,4,0). Please sort records accordingly and retransmit.
A0329	2*)	4,5	70-YB-169 requires isomer extension -G or -M. Which state has this half-life of 3.24 min? According to our information, the ground state has 32.0 <u>days</u> and the metastable state 46 <u>seconds</u> . Please correct and retransmit.

*) Retransmission requested

Therefore UND is redundant, and should not be used, if SF3 = X (e.g. several subentries of A0536).

DECAY-DATA:

An entry under DECAY-DATA giving only the nuclide but no other information is not meaningful although it is not illegal (entries A0535, A0536). At least the half-life should be coded (if the values used by authors are known); or give only free text "no information given by authors" without nuclide code.

Detailed comments

Entry	Subent	Comment
=====	=====	=====
A0514	1	Line 30: -G missing (CORR.NDS)
A0529	12	Why is UND missing in SF5 ? Not consistent with other subents.
A0530	7	Lines 27,28 identical
A0531	2	REACTION43-TC-96,IND/M+,SIG should be either43-TC-96-G,M+,SIG (g.s. with partial m.s.contribution) or43-TC-96,,SIG (if measured quantity (almost) equal total c.s.)
A0532*)	2-4	Isomeric cross section ratios must be coded as IMPLICIT ratios, e.g. (subentry 2): (78-PT-198 (D,2N) 79-AU-198-M/G,,SIG/RAT,,,EXP) Also the REL modifier in SF8 should be unnecessary since it is a ratio anyway.
A0535	2	RAD-DET: 9-F-19 should be 9-F-18 (CORR.NDS)
A0536*)	5,20,21	Metastable state given as -M in REACTION SF4 should not be defined by heading LVL-NUMB but by it's half-life (under DECAY-DATA).
	6	REACTION SF4 has -G but DATA section and LEVEL-PROP give LVL-NUMB = 2: this is a contradiction. Anyway LVL-NUMB should be used with PAR in SF5 but not for -G and -M states.
		Units PER-CENT illegal for LVL-NUMBER, use NO-DIM. (CORR.NDS)
	7	See comment on A0529.012
	15,17	Check whether REACTION SF4 should contain -G or -M extension (metastable states exist which partly decay by beta decay, partly by isomeric transition, therefore it is unlikely that the total cs - which is coded without -G or -M - was measured)
A0538	4	IND/M+ in SF5 should be deleted - probably total cs measured (-M has 100% isomeric transition, and no cumul.production by beta decay possible)
A0540	2	The angles explained in lines 5-8 should be given in COMMON section too, using headings ANG1, ANG2 etc.

To: Distribution

15 April 1996

From: O.Schwerer

Subject: Comments on TRANS A032, A033

Please find below our comments on TRANS A032 and A033. Entries for which we consider correction and retransmission by CAJaD very important are labelled with *). Several corrections were done by NDS before transmitting these TRANS tapes to the other centres; these are mentioned here for information to CAJaD and are marked in the list below with "CORR.NDS". CAJaD is asked to check the remaining errors for necessary correction and potential retransmission.

Comments on TRANS A032

General comments:

- Alter flags in col.80: often missing
 - IND in REACTION SF5 often redundant
- (Compare our remarks on both topics in memo CP-D/259 on TRANS A031)

Detailed comments

Entry	Subent	Comment
=====	=====	=====
A0538	4	Line 3: add -G to SF4 (M+ in SF5 is only meaningful with -G in SF4. Compare A0555.003,8 where it was done correctly) (CORR.NDS)
A0540	2	Line 4: delete 'A' from SF7 (redundant) (CORR.NDS)
A0546	3	see A0538 (CORR.NDS)
A0542*)	2,3	} Isomeric ratios must be coded as implicit ratios } using ...-M/G,,SIG/RAT
A0546*)	2	
A0547*)	2,3	
A0556*)	2,7	
A0544*)	1	ERR-ANALYS: If EN-RSL is an uncertainty (as explained in free text) rather than a resolution. The heading should be changed to EN-ERR1, and consequently, EN-ERR should be changed to EN-ERR2.
A0551	2*)	Free text explanation of these 3 reactions is not sufficient, coding should be improved the following way: - add PAR to SF5 of first 2 reactions, also to 3rd reaction unless this is total; - give level energy (or level-number) in COMMON section and define under EN-SEC (compare subentry 26 where this is correct)

A0551

16-23*) Since it refers to neutrons, E-EXC should be changed to E (in COMMON and under EN-SEC)

28-31*) PAR,DA/DE: these are double-diff. neutron prod. cross sections for particular levels of Be-8, in mb/sr/MeV. Either outgoing neutron energy missing, or some other inconsistency.

29 add PAR to SF5 (same quantity as subents 28,30,31) (CORR.NDS)

A0552*) 6-9 Add PAR to SF5 and E-LVL to COMMON section and EN-SEC, as done correctly in subentries 10-12

A0555*) 2-11 Q-VAL is equivalent to a secondary energy (e.g. E-LVL) and may only be given if SF5 = PAR. General information on the Q-value of e.g. the (a,n) reaction may be given in free text only.

A0559*) 5 Since UND is given in SF5, both reactions should be coded (A,2N+P) and therefore implicit isomeric ratio should be given-M/G, (CUM)/UND, SIG/RAT,,,EXP

Comments on TRANS A033

A1089 2,3 (T,N+N) should be (T,2N) (CORR.NDS)

3 delete 'N' from REACTION SF5

A1192 3 REACTIONDA,,RS0 not in dictionary 36, will be proposed (see memo CP-D/267)

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To: Distribution

20 January 1997

From: O.Schwerer

Subject: Comments on TRANS A036, A037 and new dictionary codes

Please find below our comments on these TRANS files and a list of new dictionary codes encountered in them. Note that processing of entries with new codes for dictionary 36 may present problems.

Comments on TRANS A036

General comment on REACTION SF3: (T,N+N) should be (T,2N), (HE3,P+P) should be (HE3,2P) etc. for the sake of consistency for retrievals. (Corrected by NDS)

Entry A1156: ,DA,,LEG/RSD new combination for dict.36, will be added

Entry A1133, subent 3: ang.distr. relative to value at 0 deg. should be coded
.,DA,,RS0 rather than as explicit ratio.

Comments on TRANS A037

Entry A1049: New dict.36 combinations

,DA/DA,P/P

,DA/DA,P/D

,DA/DA,N/D

will be added to dictionary 36.

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NDS:

To: Distribution

19 February 1997

From: O.Schwerer

Subject: 1. Mistake in dictionary 34; 2. Comments on TRANS A038

1. Dictionary 34: COS missing due to mistake

In our last dictionary transmission 9072, the code COS (Cosine coefficients) in dictionary 34 was omitted due to an unexplained mistake. It will be reinstated in the next dictionary update. COS happens to occur also in the new TRANS A038 mentioned below. We apologize for any inconveniences this error may cause. The dictionary 36 quantities containing COS are not affected.

2. Comments on TRANS A038

Subentry A0349.005: Added -G to nuclide in DECAY-DATA

Subentry A0514.002 FLAG (3.) used in DATA section but not defined in BIB section. Retransmission requested.

Entries A0502, A0512, A0513, A0514, A0515, A0557: Distinction between independent, cumulative and "unclear" cross sections by FLAG is probably not the best solution. What about using different REACTION codes

IND,SIG
CUM,SIG
(CUM),SIG (with free text explanation of "unclearness")
IND/M+,SIG

with either multiple reaction formalism or splitting into several subentries? We understand however that the compactness of the tables, which may be more user-friendly but has less accurate data definitions, would be lost. We request either retransmission or discussion at the forthcoming data centres meeting.

Subentries A1153.002-007: REACTION SF9 should be = EVAL or CALC rather than EXP because under REL-REF many references with code 'E' (=reference used in the evaluation) are given, and METHOD is CALCULATION. (I assume that the data are not the original experimental data given in the references under REL-REF, because these should not be combined into the same subentry. Probably the data were obtained by some fitting and/or renormalization. If they are just an intermediate step for obtaining the evaluations given in subentries 8 - 13, they might be omitted altogether.) Retransmission requested.

AREA C

Memo CP-D/187
1989-02-24

Page 3

Comments on TRANS C012

→ | STATUS keyword missing:

Entries C0010, C019.005, C0033.007, C0237, C0242, C0250, C0252,
C0262, C0299, C0341, C0342, C0346

→ | Entry C0244, all subentries: many EN-values repeated with strongly
deviating cross section values, e.g. subentry 2: is the value at 3.0 GeV
3.1 mb or 5.0 mb?

C0315, all subentries: N1 in all COMMON records and in some DATA records
invalid.

C0341.001, MONIT-REF: delete heading (MONIT) which is never used in DATA
or COMMON sections.

Comments on TRANS C013

Entry	Subent	Line(s)	Comment
C0305	3	9	N1=3
C0373*)	2,3		Although some ISOMER values in the data table were changed now after an earlier CP-Memo, some of those data points are still as inconsistent as before. Take e.g. line 36-40 of subentry 2: now we have 3 different values for ELEMENT/MASS/ISOMER = 48./115./0. and 2 different values for 48./115./1. At most there should be 3 lines for ELEM/MASS=48./115., with 3 different ISOMER values (blank/0./1.).
			In many cases there are 2 or 3 lines with the same EN/ELEMENT/MASS all with ISOMER=blank; there different ISOMER values are still missing or something else is wrong.
		4	In this subentry an ISOMER column has been added, but for the same ELEMENT/MASS combination always the <u>same</u> ISOMER value (namely 0.) is given, instead of distinguishing these cases by different ISOMER values which is the purpose of this column. Also, the ISOMER column should be placed between MASS and DATA.

*) Retransmission requested

Entry	Subent	Line(s)	Comment
C0305	2	9)	
	3	8)	
	4	7)	N1=4
	5	8)	
	6	9)	
<u>C0306</u>	4*)		3rd independent variable MASS not monotonic within the same EN and ELEMENT
C0310	17-20	11	N1=3
C0312	4-8		FACILITY: lab code 1USALBL obsolete, use BRK
C0313	2	7	N1=1
	3,4	8	N1=4
	5	7	N1=1
<u>C0316</u>	2*)	3	REACTION: modifier MSC so far was agreed for photonuclear data only; anyway explanation in free text is required which is missing.
		7	N1=1
C0320	1-8		INSTITUTE, FACILITY: LBL obsolete
<u>C0333</u>	2*)		STATUS keyword missing; DATA section: MONIT missing (or delete heading MONIT from BIB section in subentry 1)
<u>C0345*)</u>	1	3	1USACMU obsolete, use CAR
	2-9		MONIT missing, or delete heading from BIB section
C0411	1		1USALBL obsolete
	3	41	decimal point missing
<u>C0412</u>	12*)	110	all 3 independent variables repeated, probably MASS wrong?
C0414	1	3	2JAP should be 2JPN
C0418	2,3,5,6		1 or 2 EN-CM values repeated: mistake?

*) Retransmission requested

=====

To: Distribution

20 January 1997

From: O.Schwerer

Subject: Comments on TRANS C017, C018, C019 and new dictionary codes

Please find below our comments on these TRANS files and a list of new dictionary codes encountered in them. Note that processing of entries with new codes for dictionary 36 may present problems.

Comments on TRANS C017

Entry C0295, subentries 3,4: ,,WID/RED,,RMT should have units B*RT-EV rather than RT-EV

Comments on TRANS C018

Entry C0289, subent 5: DECAY-DATA 1 for K-43 decay: wrong values for intensities (should be as in subentry 7)

C0328, subent 7: Delete COMMON section (EN given already in COMMON of subentry 1)

Comments on TRANS C019

Entry C0108: Illegal units CM3/MOLSEC used for quantity SGV, which should have units CM3/SEC.

New dictionary codes found

=====

The following new dictionary codes were encountered in TRANS C018 and C019. We will add them to the next dictionary update unless we receive any objections.

Dict.24

E-EXC-NM	(TRANS C019, entry C0432)
E-EXC-DN	"
MONIT-NM	(TRANS C018, entry C0289)
MONIT-DN	"
POLAR-NM	(TRANS C019, entry C0104)
POLAR-DN	"

Dict.25

AREA M

Memo CP-D/224
1992-01-10

Page 2

Comments on TRANS M011

Entry	Subent	Line(s)	Comment
M0003	24	13	Level energy given 3 times: headings E-LVL and E-LVL-MEAN (<u>twice</u>) are given. I am neither sure what this means nor if this is legal.
	25	14	as above, with 4 times E-LVL-MEAN
M0009	3	29	identical with line 28
<u>M0028</u>	<u>6*),7*)</u>		EN-MAX in COMMON section is in conflict with EN in DATA section. COMMON section should be deleted. If this information is important, it should be given in the BIB section under an appropriate BIB keyword.
<u>M0035</u>	<u>20 *)</u>		Units NO-DIM are not compatible with heading E1. If such a quantity is needed, a new heading must be introduced.
M0037			Error headings inconsistent. Subentry 1 says "statistical errors only", therefore all subentries should give ERR-S. However, subentries 3-6 give "DATA-ERR".
M0045	2	56 63	identical with line 55 " " " 62
<u>M0046</u>	<u>2*),3*)</u>		see comment on M0028

Comments on TRANS M012

Entry	Subent	Line(s)	Comment
M0065.012		4	change E1 to E1-CM
M0072	5-12		EN-SEC should be E1-MIN, E2-MIN
M0074	4	3	REACTION SF4 missing
<u>M0080 *)</u>			ERR-ANALYS inconsistent: - in BIB section and subentry 2 heading 'DATA-ERR' is given, but explanation is 'statistical error only' - if this is correct, use ERR-S throughout

*) Retransmission requested

- not all subentries give an error: move ERR-ANALYS to subentries

M0098 *)	2	20	E-value repeated, probably mistake
M0127	5	51	independent variable repeated
	6	92	" " "
M0135	7	32	independent variable repeated

M0140 *)	11		REACTION: ,PAR,SIG,D,,EVAL: D in SF7 is redundant (same as 1-H-2 in SF4) and should be deleted. However, E-MIN (given in COMMON section) which probably refers to the deuteron (or neutrons or protons?) should be defined under EN-SEC.
----------	----	--	---

12			REACTION: Delete SF7; explanations concerning the meaning of 'PAR' should be given under EN-SEC plus free text (if needed). EN-SEC: should be E1-MIN, E2-MIN.
----	--	--	---

Comments on TRANS M013

Entry	Subent	Line(s)	Comment
M0152 *)	6	22,23	Line 23 gives data for ELEMENT=21, MASS=44, ISOMER=1. Line 22 has some element and mass but ISOMER=blank which means <u>total</u> cross section, but the data are <u>smaller</u> than for the ISOMER=1 in line 23. Probably the partial cross section for the ground state is meant which requires ISOMER=0. (<u>not</u> blank). Similarly, line 14 may also (or may not) require ISOMER=0, please check. Please check also the other subentries of this entry for the correct ISOMER flags.
M0169	6,7	10	Headings MASS1-MAX, MASS2-MIN not yet in dict. 24
M0175	9		Quantity ,DA,,SN2 to be added to dict. 36 (so far, only POL/DA,,SN2 and FM/DA,,SN2 exist)

*) Retransmission requested

M0235	2	59	EN-value repeated, probably mistake
M0240	2	74	identical with line 73
	3	83	EN value repeated
<u>M0244 *)</u>	<u>2</u>		units ARB-UNITS invalid with heading E
M0255	2		several EN values repeated
M0288	3		DI,DA/DE will be added to dict. 36
M0291 *)	} 2,3		REACTION: PAR,INT/DA,G is dependent on <u>angle</u> (DA given in SF6 and units MB*MEV/SR) but <u>no angle given</u> in COMMON or DATA section.
M0293 *)			

Comments on TRANS M014

Entry	Subent	Line(s)	Comment
M0301	4,7,10		In my opinion, PAR in SF5 should be deleted. Difference spectrum is characterized by giving EN-MIN and EN-MAX.
M0305	1	33-64	Invalid characters used for grid in free text table
<u>M0327 *)</u>	<u>16</u>		Both EN-MAX and EN given. Compare our comment on M0028 in TRANS M011.
M0331	1	19	Coded information obligatory for PART-DET. Give (A).
<u>M0333 *)</u>	<u>1</u>	<u>7,23</u>	Journal code AAN invalid, probably either AANL or AAST.
M0340 *)	1	11	PART-DET: should be N rather than P (even if neutrons are counted by proton recoils, unless the protons are a product of the reaction coded under REACTION)
	2		REACTION ... (G,XN) without SF4 in invalid; this must be coded (G,X)O-NN-1.

*) Retransmission requested

AREA 0

Memo CP-D/261
1996-01-17

Page 3

Entry	Subent	Line(s)	Comment	Correction
O0086	3,6,9,11-13 3,18 6	3 4,5	Independent variables repeated. Remove 'IND' from SF5. Isomeric state code -G missing.	NDS
O0087	2,4,6,...,74		Remove 'D' in SF7, redundant.	NDS
O0088	7,21,26 11,19,30	4,5 3-5	Isomeric state code -G missing. - " -	NDS NDS
O0089	4	114	Independent variable repeated.	
O0090	2-11	3	'PAR' missing in SF5.	NDS
O0091	2,4,6,...,60		Remove 'P' in SF7, redundant.	NDS
O0092	1 2-7 2-8	32,99999	N1, N2 wrong. Independent variable repeated. 'PAR' missing in SF5.	NDS NDS
O0093	2-14 2-8		Independent variables repeated. Replace reaction (P,P) by (P,INL) (or perhaps in some cases (P,SCT)). (P,P) is not strictly illegal but should be used only "when scattering types need not be distinguished" (see LEXFOR 'Scattering').	Retr
O0096	17 18	18 3 8-10	Illegal column 80. Remove 'IND' from SF5. Remove angle information in COMMON. (Only legal if SF6=DA or =COR). A new quantity type may be needed, see memo CP-D/263.	NDS NDS Retr
O0099	6,10,14,18		Data-unit code MB/SR/MEV in wrong columns.	NDS
O0106	1	28,99999	N1, N2 wrong.	NDS
O0109	1 10,12-16	44,99999 5	N1, N2 wrong. Isomeric state code -G missing.	NDS NDS
			PART-DET should be deleted in most subentries. Entries like PART- DET (13-AL-26) are wrong if Al-26 radioactivity was measured.	Retr
O0112	2,4-7,9-12		Independent variables repeated.	

To: Distribution

23 October 1997

From: O.Schwerer

Subject: Comments on TRANS O004, O005

TRANS O004 and O005 are available from the NDS open area. Please find our comments below. Errors corrected by NDS are flagged with [NDS], entries where retransmission is requested with *).

Comments on TRANS O004

00177.003, line 3: REACTION must be ... (D,X) ..., CUM, ...
(D,N) ..., CUM can never be the sum of (D,N) ..., IND + (D,P) ..., IND because (D,P) cannot be part of a (D,N) reaction. Therefore the cumulative cs must be coded (D,X). [NDS]

00186, 00187, 00191: According to Conclusion #26 of the 1997 NRDC meeting, the heading WVE-NM was changed to the new heading MOM-TR. [NDS]
The BIB entries for MOM-SEC are probably not needed and should be deleted (According to NNDC, MOM-TR is not a momentum by dimension and should therefore not appear under MOM-SEC.)

00187*) ANG in COMMON of subent 1 should be deleted (redundant when MOM-TR is given)

00189.002-6: Isomeric cs ratios changed to implicit ratios [NDS]

00190.003, line 19: DATA units should be MB [NDS]

00193*), all subentries: FY given with units MB which is incorrect. Since TITLE says fission cross sections, probably SF6 should be = SIG. (Fission cs for individual fission product is possible.)

00194.002-4: Deleted SEQ from REACTION SF5 (makes only sense with 2 or more particles in SF3) [NDS]

00195.002 line 7: -M added to nuclide [NDS]

00204.005,6,46,55: DECAY-DATA: -G added to nuclide [NDS]

00208*), 002,6,7,9: For elastic scattering, no level energy can be given. Delete E-LVL from COMMON and EN-SEC.

00216.006, line 17: changed units from NO-DIM to MB/SR [NDS]

00218.002-4: ANG-RSL should not be explained under ERR-ANALYS
.003: DATA and ERR-T units should be NO-DIM [NDS, but check exponent!]
.004*): FLAG 2. undefined

00220.007,10: same as comment on 00218.003 [NDS]

00221.002,3: The code BIN in REACTION SF5 is normally used only for ternary/

binary ratios, because - as in this case - the difference between the binary fission cs and the total fission cs is usually smaller than the experimental error (the ternary fission cs is smaller than the error of the binary[total] cs). Therefore it is recommended to delete BIN from SF5 for the sake of consistency in retrievals.

00226.001: last 3 errors should be ERR-3,4,5 [NDS]

00227*): Angle specified twice: ANG in subentry 1 and ANG-CM in other subentries, which is not permitted.

00234: E-RSL should not be explained under ERR-ANALYS

00243.002,3, line 14: parentheses missing (()/()) [NDS]

00257.005,6,8: Since E-EXC is given, PAR must be added to REACTION SF5. [NDS]
All subentries: should the proton beam polarization not be given under POL-BM rather than under MISC? Please check and retransmit if necessary.

00258*) .002,8,9,11: Q-VAL given which is equivalent to secondary energy, which is legal only for partial reaction (with PAR in REACTION SF5). Since the values given are the Q-values for the (p,n) reactions to the ground states of the product, these are not partial reactions, therefore the Q-values, if needed at all, should be given in free text only.

Comments on TRANS 0005

00088.011,019, line 5: added -G to nuclide [NDS]

00132.002: reintroduced PAR in REACTION SF5 (E given) [NDS]
.122: Illegal code 'G' in SF8 deleted [NDS]

00147: see comment on 00186 in TRANS 0004 [NDS]

00158*): Many subentries (all with REACTION ...PAR,POL/DA): Units PER-CENT only allowed for errors. For dimensionless data, use NO-DIM and divide by 100. (Sorry for overlooking this error in the last transmission of this entry.)

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To: Distribution

11 March 1998

From: O.Schwerer

Subject: Comments on TRANS O006 - O008

Please find below our comments on these TRANS files. Errors corrected by NDS are flagged with [NDS], entries where retransmission is requested with *). Versions containing the corrections by NDS are available from the NDS open area.

TRANS O006

General remarks:

1) Nuclide codes under RAD-DET and DECAY-DATA should have an isomer code (usually -G or -M) if the nuclide has an isomer registered in dictionary 27. (If there is no isomer, -G must not be used.)

2) REL-REF: References by the same group as given under REFERENCE, describing aspects relevant to the present work (e.g. experimental details) must be given under REFERENCE rather than REL-REF. REL-REF is meant for works by other authors (e.g. in case of criticism, comparing results etc.) (O0276, O0277)

O0276.001 line 50: delete redundant pointer (pointer of previous line remains valid until any other pointer appears under same keyword. [NDS])

TRANS O007

O0288.002 REACTION should be EM/PAR,DA because

1. If projectile = product particle but elastic scatt. excluded:
"emission" cs with EM in SF5
2. PAR needed because secondary energy given [NDS]

.003-6 add PAR to SF5 [NDS]

O0289.010,015 add EM/PAR to REACTION SF5 [NDS]

.011-14,016-019 add PAR to SF5 [NDS]

O0290.010,015 add EM/PAR to REACTION SF5 [NDS]

.011-14,016-019 add PAR to SF5 [NDS]

O0290.024*) Line 438 E value not monotonic, probably typographic error

O0291.010,015 add EM/PAR to REACTION SF5 [NDS]

.011-14,016-019 add PAR to SF5 [NDS]

O0292.010 add EM/PAR to REACTION SF5 [NDS]

.011-14 add PAR to SF5 [NDS]

O0292.015*) Lines 25, 213: E value not monotonic, probably typographic error

O0293.008,013 add EM/PAR to REACTION SF5 [NDS]

.008-12 units must be MB/SR rather than MB [NDS]

.009-12,014-017 add PAR to SF5 [NDS]

00293.018*) Line 89 E value not monotonic, probably typographic error

00294.011,016 add EM/PAR to REACTION SF5 [NDS]

.012-15,017-020 add PAR to SF5 [NDS]

00294.022*) Line 142 E value not monotonic, probably typographic error

.024*) Line 52 E value not monotonic, probably typographic error

00295.008,013 add EM/PAR to REACTION SF5 [NDS]

.009-12,014-017 add PAR to SF5 [NDS]

00308.004 Lines 10,11 Delete illegal col.80 [NDS]

00312.004 add PAR to SF5 [NDS]

00320.064 Lines 3-5: one pair of parentheses missing: (() = ((()+())) [NDS]

00321.002-016*): Inconsistency between REACTION DA/DA/DE and independent variables given. DA/DA/DE requires 2 angles and 1 secondary energy but here 2 secondary energies but no angle are given. Since the data are labelled relative with ARB-UNITS, the dimension of the units does not help to clarify the correct coding. Please either add the needed variables (also constant angles given in COMMON section would be possible) or correct REACTION appropriately. Since 2 secondary energies are given, possible solutions would be DA/DE/DE (which still requires one angle) or just DE/DE (which would have to be added to dict.36). In those subentries with more than one type of outgoing particle, i.e. the subentries with (P,N+P), in addition appropriate codes in REACTION SF7 are needed to define the particles to which the given angles and/or secondary energies belong, e.g. DA/DE/DE,N/N/P (see dictionary 36).

00323.043*) Units MU-B/SR inconsistent with REACTION code SIG. Probably units should be MU-B, but this should be checked by originating compiler and be retransmitted.

00323.046-049*): ANGLE given which is inconsistent with SF6 = SIG. If this is ordinary integral cross section (which does not depend on angle), ANG in COMMON section should be removed. If this is the differential cross section at the angle given, multiplied by 4PI (therefore having units MB or equivalent), change REACTION to ,DA,,4PI.

00323.046,047: Lines 17,18 Delete illegal col.80 [NDS]

00334.002,005,006,008,009,011-014: Isomeric fission cross section ratio: since this is numerically identical to a fission yield ratio, we propose to change SIG to FY here. This is also the quantity mentioned in the TITLE and the way these data are usually called and retrieved. [NDS]

00334.004: This REACTION combination, consisting of 6 individual reactions, must be rewritten to be better retrievable and better readable to the user, even if these 6 reactions were measured individually.
1) Isomeric sums corresponding to the total reaction must be written as simple reaction without any isomer extension, e.g. the sum

(92-U-0(P,F)49-IN-117-M,IND,SIG)+(92-U-0(P,F)49-IN-117-G,IND,SIG)
is not legal and must be replaced by the simple reaction

(92-U-0(P,F)49-IN-117,IND,SIG).

2) CD-117(CUM)+IN-117(IND) = IN-117(CUM)

3) Although numerically there is no difference between fission cross section ratios and fission yield ratios, it is recommended to code such data as fission yield ratios because this is the way users will most likely try to retrieve them.

Therefore, the REACTION for this subentry should be simply:

((92-U-0(P,F)49-IN-117,IND,FY)/(92-U-0(P,F)49-IN-117,CUM,FY))

How this was determined (measuring some or all of the 6 individual components originally coded) could be explained in free text.

[NDS], retransmission with new free text recommended

00334.007,010: see comment on subentry 4 above (same case with different fissioning nuclides)

00336*) and 00337*), all subentries: TITLE says "fission" but all data are coded as (P,X).

Unless there is a reason for this, we propose to change the reactions to (P,F). For the ratios, you might consider to change the coding to FY/RAT (see comment on entry 00334).

00344.003 Line 9: delete illegal col.80 [NDS]

00348.001 METHOD: new code JET was proposed earlier, to be approved

00350, most subentries, and 00361.001: METHOD: new code MASSP was proposed earlier, to be approved

00350.012,013,017,019,020,022,027 REACTION combination in lines 3-6: outside pair of parentheses missing [NDS]

00357.002-004: Fission cross section ratios better to be coded as FY ratios?

00363.003, line 11 and .004-006, line 12: delete illegal col.80 [NDS]

00365.003, line 8: delete illegal col.80 [NDS]

00365.003-019*): SIG and units MB incompatible with independent variable ANGLE. Should SF6 be = DA and units be = MB/SR ?

00374.002-005*): REACTION code KE,FF,REL,EXP not compatible with DATA section. KE,FF is defined as energy of fission fragments (units MEV for DATA). But here the energy of the fission fragments is the independent variable instead of the data measured. Propose to discuss at the forthcoming NRDC meeting how such data should be compiled.

00374.006-009*): (P,F)MASS,,SIG,REL (with ARB-UNITS): it seems that this could be coded as (relative) mass (chain) yields rather than cross sections.

00375.006-009*): Probably codes for SF7 should be added to define the kind of angular correlation, e.g. COR,FF/FF (see dictionary 36)

00379.002,003: REACTION SF5: replace IND by PAR [NDS]

00379.002, lines 16,17 and .003, lines 17,18: delete illegal col.80 [NDS]

00383.002-004*): REACTION (P,F)MASS,,PY,,EXP not correct. For fission product yields SF6 must be = FY. Correct code is probably CHN,FY (total chain yield) or perhaps PRE,FY or SEC,FY (primary or secondary fission-fragment yield). See LEXFOR under "Fission Yields".

00383.008-012*): same case as 00374.002-005, see comment on this.

