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Memo 4C-1/215

DATE: March 3, 1993
TO: Distribution
FROM: V.McLane
SUBJECT: Comments on transmission files 4084 - 4090

Enclosed are comments on the EXFOR Transmission files 4084 to 4090. Processing of these was delayed because we did not receive tape 4084 until last October.

A general comment: The data translated from the Rider file must be checked against the original references before it is converted into legal EXFOR. Rider has made changes to the original data in many cases, or has changed the representation. Also, in some cases, data may be missing. Any data in EXFOR should have the approval of the issuing data center.

cc: Ganesan
Kammer
Lemmel
Wienke
Dunford
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Distribution:

V. N. Manokhin
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NNDC (3)

TRANS 4084

AN	SAN	Seq.#	Comment
40680	1	4	comma missing between volume and issue#
*40776	2	3	Code 'PAR' missing from SF5
*40877	2-6	3	Reaction should be coded as ratio to 235U Should have modifier 'FST'
*40894	2	12	Add pointer 2 to column 11
*	3	13	Add pointer 2 to column 11
*	5	3	Add DERIV to SF9
40918	1	8	Page # missing
*40934	2-72	3	SF3 should be EL; delete AV from SF8 (STF is average)
40974	2	4	Duplicate of subentry 1 text
*41047	2-8		Illegal data units PER-CENT, s/b PC/FIS
	2		Illegal secondary energy
41048	1	11-13	These should be entered in one parentheis, without repetition of nuclide and HL

TRANS 4085

*40083	2-3	3	Modilfier should be FIS or FST.
*	6-7	3	Modilfier should be FIS or FST.
*	9	3	Modilfier should be FIS or FST.
*40145	3	BIB	Add RESULT (FRIND)
*40173	8	12	Illegal units vs. quantity (probably PC/FIS)
*41055	2-7		Illegal units for nu, should be NO-DIM
*41056	3	3	Delete PAR from SF5
*41059	3	3	Delete PAR from SF5
*41061	2-3	3	Delete PAR from SF5

TRANS 4086

*41026	2-6	DATA	Illegal units for nu
41038	4-6		Illegal use of COREL in status; correlated with what?
*41072	2	3	Add RESULT (FRIND)
*41073	2	3	Add RESULT (FRCUM)
*	3	3	Add RESULT (FRIND)

TRANS 4087

*40007	all		Value under ASSUMED should be under MONITOR

*41084		(See recoding of this entry, attached)
	1	Recode as per article. Change monitor; add value to common; add error info This data is normalized to sum of yield for 145Nd+146Nd for 235U.
	2-3	Delete, redundant
	4	Add element; change monitor. Secondary monitor sum of yield for 145Nd+146Nd for 239Pu.
	5-6	Delete, redundant
	7	Add element; delete ISOMER, monitor data.
*41085	all	(See TRANS 4090)
*41087		(See TRANS 4090)
*41086	all	(Fixed in TRANS 4090)
*41087		(See TRANS 4090)

TRANS 4088

AN	SAN	Seq#	Comment
*40199	11	3	REACTION should be PAR,SIG,G
*	26-27	3	REACTION should be PAR,SIG,G
*40245	7	3	SF3 should be EL
*40329	3	3	Add FCT to SF8
	4	5	Probably should be DEP rather than RNORM
40326	2-19		Usual way to code these is PAR,DA,G,4PI with angle given in COMMON
*40346	13-14	COMMON	Change E1, E2 to E, E
*	18	COMMON	Change E1, E2 to E, E
*40422	2-3		Code as ratio with units NO-DIM; convert values ((92-U-238(N,F)ELEM/MASS,CUM,FY)/ (92-U-238(N,F)ELEM,CUM,FY))
*40449	2		Take of E-LVL field. May be coded as MISC.
*40539	1	6	comma missing between volume and issue#
*40936	1	11	comma missing between volume and issue#
*41063	2	3	Delete PAR from SF5
*41066	2-6	3	SF3 should probably be SCT
*	9-10	3	SF3 should probably be SCT
*41067	2-4	3	REACTION should be (5-B-10(N,T+A)2-HE-4,,SIG)
*41074	2		RNORM is used only when renormalized by data center of other. Explain who renormalized? Should be entered in data set 40329, not separately. Also, if entered, 40329 values must be coded as OUTDT.

*41077	2		RNORM is used only when renormalized by data center of other. Explain who renormalized? Should be entered in data set 40422, not separately. Also, if entered, 40422 values must be coded as OUTDT.
*41088	9	3	SF8 should be AV not SPA
*	11	3	SF8 should be AV not SPA
*	14	13	Illegal data in field 3: 2. 2+02
*41089	2	3	Add MXW to SF8

TRANS 4089

*40551	1	9-10	comma missing between volume and issue#
*	2	3-4	AV not needed in SF8, STF and D are averages
*	4	3-4	AV not needed in SF8, STF and D are averages
*	6	3-4	AV not needed in SF8, STF and D are averages
*40602	2	12	MONIT2 should be added to code string
*40655	2-3	3	Illegal trailing commas
*40667	7-9	3	Delete AV from SF8; STF is average
*40728	5-10		Illegal Reaction sequence, should be: (N,T)2-HE-4...
	7	6	comma missing between volume and issue#
	14	6	comma missing between volume and issue#
40729	1	10-11	add MONIT1, MONIT2 headings to code
*40891	2	3	Remove PAR from SF5
*41095	2	3	Change modifer in SF8 to AV; averaged over incident energy, not spectrum average.

TRANS 4090

*40329	3	3	These should be numbers as given in article. I can't figure out how these were calculated. For numbers in article, Y(given) = 2 * Y(Z,A)/(Y(Mo)+Y(Ba)) Put original numbers in; 1/2300, 1/291, etc. Add FCT to SF8; 'factor = 2' in comment.
*	4	5	Should be DEP rather than RNORM. The numbers don't make sense according to my calculations. Please explain. According to my math for 77As at 1,5 MeV; Y(given) = 4.35-4; Y(Ba)/Y(Mo) = 0.97; value in data should be 4.28-4.
*40389	9	7-9	Add MONIT1, MONIT2 headings to proper codes
*40420	2	3,5	These would be better coded as PR,NU,FF. Must be added to dictionaries. Save PAR for usual.
*	4	3	Change SF6 to FY/DE; add RAW to SF8
*	8-9	3	Change SF6 to FY/DE
*	12-20	3	Change SF6 to FY/DE
*	47-55	3	Change SF6 to FY/DE; add RAW to SF8
*	80-97	3	Change SF6 to FY/DE; add RAW to SF8

40899	1	10	Wrong info in comment field
*40916	2	17	Illegal units vs. reacton, s/b 1/MEV
40924	1	8-9	Main reference should be coded first Comma missing between volume and issue#
40928	1	7	Volume field comma missing
*41047	2-8		Illegal data units PER-CENT, change to NO-DIM and add E-02 to data and errors
	2		Illegal secondary energy
*41085			(See recoding of this entry, attached)
	1	5	Journal code should be SNP
	2		Delete monitor, data error, corrected data values. Is this theoretical data?
*41087			(See recoding of this entry, attached)
	1		Recode as per article. Change energy to 14.7 MeV.
	2-4		Add data for 131Xe, take out monitor.
41096	2	4	Reference duplicate of SAN 1
*41100	4-7	3	Add DERIV to SF9

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TRANS              4087     930302                                  1000000000000
ENTRY             41084     930302                                  41084  0     1C
SUBENT         41084001     930302                                  41084  1     1C
BIB                  11         17                                  41084  1     2
INSTITUTE  (4CCPNIR)                                                41084  1     3
REFERENCE  (J,AE,43,59,77)                                          41084  1     4
           (J,SJA,43,670,7801) ENGLISH TRANSLATION                  41084  1     5
AUTHOR     (V.YA.GABESKIRIYA,V.V.GRYZINA,YU.B.NOVIKOV,              41084  1     6
           V.S.PROKOPENKO,V.M.PROKOP'EV,V.TIKHOMIROV,               41084  1     7
           V.A.CHETVERIKOV)                                         41084  1     8
TITLE      CT YIELDS DURING IRRADIATION OF URANIUM-235 AND          41084  1     9
           PLUTONIUM-239 IN REACTOR BOR-60                          41084  1    10
FACILITY   REAC) BOR-60                                             41084  1    11I
METHOD     (ASEP)                                                   41084  1    12
MONITOR    ((MONIT1)(92-U-235(N,F)60-ND-145,CUM,FY)+                41084  1    13C
           (92-U-235(N,F)60-ND-146,CUM,FY))                         41084  1    14I
INC-SPECT   FAST REACTOR SPECTRUM, SIGMA-F(U-238)/SIGMA-F(U0235)    41084  1    15
            IS EQUAL TO 0.087+-0.005                                41084  1    16
ERR-ANALYS ABSOLUTE UNCERTAINTY, INCLUDING ERROR IN STANDARD VALUE  41084  1    17C
STATUS     DATA TAKEN FROM ARTICLE                                  41084  1    18I
HISTORY    (930302A) CORRECTED BY NNDC AS PER ARTICLE               41084  1    19I
ENDBIB              17          0                                   41084  1    20
COMMON               3          3                                   41084  1    21
EN-DUMMY   MONIT1      MONIT1-ERR                                   41084  1    22C
MEV        PC/FIS      PC/FIS                                       41084  1    23C
 1.0        6.85        0.20                                        41084  1    24
ENDCOMMON            3          0                                   41084  1    25
ENDSUBENT           24          0                                   41084  199999
NOSUBENT     41084002     930302                                    41084  2     1*
NOSUBENT     41084003     930302                                    41084  3     1*
SUBENT       41084004     930302                                    41084  4     1C
BIB                  3          4                                   41084  4     2
REACTION   (94-PU-239(N,F)ELEM/MASS,CUM,FY,,FST)                    41084  4     3T
MONITOR    ((MONIT2)(94-PU-239(N,F)60-ND-145,CUM,FY)+               41084  4     4C
           (94-PU-239(N,F)60-ND-146,CUM,FY))                        41084  4     5I
HISTORY    (911128C)  COMPILED AT THE CENTRE - CJD                   41084  4     6
ENDBIB               4          0                                   41084  4     7
COMMON               2          3                                   41084  4     8R
MONIT2     MONIT2-ERR                                               41084  4     9
PC/FIS     PC/FIS                                                   41084  4    10
 5.56       0.12                                                    41084  4    11
ENDCOMMON            3          0                                   41084  4    12
DATA                 5         10                                   41084  4    13
MASS       ELEM1       ELEM2       DATA        DATA-ERR             41084  4    14
NO-DIM     NO-DIM      NO-DIM      PC/FIS      PC/FIS               41084  4    15
 135.       55.                     7.73        0.19                41084  4    16
 137.       55.                     6.54        0.18                41084  4    17
 140.       58.                     5.62        0.19                41084  4    18
 142.       58.                     5.04        0.14                41084  4    19
 143.       58.                     4.42        0.10                41084  4    20
 144.       58.         60.         3.69        0.08                41084  4    21
 145.       60.                     3.06        0.07                41084  4    22
 146.       60.                     2.50        0.05                41084  4    23
 148.       60.                     1.69        0.03                41084  4    24
 150.       60.                     1.01        0.03                41084  4    25
ENDDATA             12          0                                   41084  4    26
ENDSUBENT           25          0                                   41084  499999
NOSUBENT     41084005     930302                                    41084  5     1*
NOSUBENT     41084006     930302                                    41084  6     1*
SUBENT       41084007     930302                                    41084  7     1C
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BIB                 2          2                                    41084  7    2
REACTION    (92-U-235(N,F)ELEM/MASS,CUM,FY,,FST)                    41084  7    3T
HISTORY     (911128C)  COMPILED AT THE CENTRE - CJD                 41084  7    4
ENDBIB              2          0                                    41084  7    5
NOCOMMON            0          0                                    41084  7    6
DATA                5          9                                    41084  7    7
MASS        ELEM1       ELEM2       DATA        DATA-ERR            41084  7    8
NO-DIM      NO-DIM      NO-DIM      PC/FIS      PC/FIS              41084  7    9
 135.         55.                     6.84        0.30              41084  7   10
 137.         55.                     6.41        0.31              41084  7   11
 140.         58.                     6.64        0.30              41084  7   12
 142.         58.                     6.05        0.25              41084  7   13
 143.         58.                     5.90        0.18              41084  7   14
 144.         58.          60.        5.26        0.17              41084  7   15
 145.         60.                     3.86        0.11              41084  7   16
 146.         60.                     2.99        0.09              41084  7   17
 150.         60.                     0.725       0.028             41084  7   18
ENDDATA            11          0                                    41084  7   19
ENDSUBENT          18          0                                    41084  799999
ENDENTRY            7          0                                    41084999999999
ENTRY           41085     930302                                    41085  0    1C
SUBENT       41085001     930302                                    41085  1    1C
BIB                 8         12                                    41085  1    2
INSTITUTE   (4CCPFEI)                                               41085  1    3
REFERENCE   (J,YF,25,(5),945,7705)                                  41085  1    4
            (J,SNP,25,503,7705) ENGLISH TRANSLATION                 41085  1    5C
AUTHOR      (B.P.MAKSYUTENKO,A.A.SHIMANSKIY,YU.F.BALAKSHEV)         41085  1    6
TITLE        SYMMETRIC AND ASYMMETRIC MODES OF SPONTANEOUS FISSION  41085  1    7
             OF 252CF                                               41085  1    8
ANALYSIS     YIELDS OF FOUR IODINE ISOTOPES, 135-SB, AND 143-CS BY  41085  1    9
             COUNTING DELAYED NEUTRONS.                             41085  1   10
ERR-ANALYS   ERROR IS  NOT SPECIFIED                                41085  1   11
STATUS      DATA TAKEN FROM ARTICLE                                 41085  1   12C
HISTORY     (911128T)  CONVERTED FROM RIDER 77MAK1                  41085  1   13C
            (930302A) UPDATED BY NNDC AS PER ARTICLE                41085  1   14I
ENDBIB             12          0                                    41085  1   15
NOCOMMON            0          0                                    41085  1   16
ENDSUBENT          15          0                                    41085  199999
SUBENT       41085002     930302                                    41085  2    1C
BIB                 2          3                                    41085  2    2
REACTION    (98-CF-252(0,F)ELEM/MASS,CUM,FY,,REL)                   41085  2    3T
HISTORY     (930302A) REACTION CORRECTED, MONITOR, DATA ERROR       41085  2    4I
                       REMOVED                                      41085  2    5I
ENDBIB              3          0                                    41085  2    6
NOCOMMON            0          0                                    41085  2    7
DATA                3          6                                    41085  2    8
ELEMENT     MASS        DATA                                        41085  2    9R
NO-DIM      NO-DIM      ARB-UNITS                                   41085  2   10
 51.        135.          14.00                                     41085  2   11
 53.        137.          13.5                                      41085  2   12
 53.        138.           8.2                                      41085  2   13
 53.        139.           3.23                                     41085  2   14
 53.        140.           0.915                                    41085  2   15
 55.        143.           5.59                                     41085  2   16
ENDDATA             8          0                                    41085  2   17
ENDSUBENT          16          0                                    41085  299999
ENDENTRY            2          0                                    41085999999999
ENTRY           41087     930302                                    41087  0    1C
SUBENT       41087001     930302                                    41087  1    1C
BIB                 9         12                                    41087  1    2
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INSTITUTE   (4CCPTIL)                                                        41087  1    3
REFERENCE   (J,AE,42,337,7704)                                               41087  1    4
            (J,SJA,42,337,77) ENGLISH TRANSLATION                            41087  1    5I
AUTHOR      (K.A.PETRZHAK,E.V.PLATYGINA,V.F.TEPLYKH)                         41087  1    6
TITLE       THE FINE STRUCTURE OF HEAVY NUCLEI FISSION FRAGMENT              41087  1    7
            YIELDS                                                           41087  1    8
FACILITY    (LINAC)                                                          41087  1    9
METHOD      (ASEP)                                                           41087  1   10D
ERR-ANALYS  ERRORS ARE NOT SPECIFIED                                         41087  1   11
STATUS      DATA TAKEN FROM ARTICLE                                          41087  1   12I
HISTORY     (911209T)  CONVERTED FROM RIDER ENTRY 77PET1                     41087  1   13C
            (930302A) CORRECTED BY NNDC AS PER ARTICLE                       41087  1   14I
ENDBIB              12           0                                           41087  1   15
COMMON               1           3                                           41087  1   16
EN                                                                           41087  1   17
MEV                                                                          41087  1   18
 14.7                                                                        41087  1   19C
ENDCOMMON            3           0                                           41087  1   20
ENDSUBENT           19           0                                           41087  199999
SUBENT        41087002      911209                                           41087  2    1C
BIB                  1           1                                           41087  2    2
REACTION    (94-PU-239(N,F)ELEM/MASS,CUM,FY,,REL)                            41087  2    3D
ENDBIB               1           0                                           41087  2    4
NOCOMMON             0           0                                           41087  2    5
DATA                 4           4                                           41087  2    6
ELEMENT     MASS        DATA        DATA-ERR                                 41087  2    7C
NO-DIM      NO-DIM      ARB-UNITS   ARB-UNITS                                41087  2    8C
 54.        131.          20.5          0.3                                   41087  2    9I
 54.        132.          24.9          0.3                                   41087  2   10C
 54.        134.          28.5          0.3                                   41087  2   11C
 54.        136.          25.75         0.3                                   41087  2   12C
ENDDATA              6           0                                           41087  2   13
ENDSUBENT           12           0                                           41087  299999
SUBENT        41087003      930302                                           41087  3    1C
BIB                  2           2                                           41087  3    2
REACTION    (90-TH-232(N,F)ELEM/MASS,CUM,FY,,REL)                            41087  3    3C
HISTORY     (930302A) DATA FOR 136XE CORRECTED                               41087  3    4I
ENDBIB               2           0                                           41087  3    5
NOCOMMON             0           0                                           41087  3    6
DATA                 4           4                                           41087  3    7
ELEMENT     MASS        DATA        DATA-ERR                                 41087  3    8C
NO-DIM      NO-DIM      ARB-UNITS   ARB-UNITS                                41087  3    9C
 54.        131.          14.15         0.3                                   41087  3   10
 54.        132.          18.8          0.3                                   41087  3   11C
 54.        134.          28.7          0.75                                  41087  3   12C
 54.        136.          28.25         0.4                                   41087  3   13C
ENDDATA              6           0                                           41087  3   14
ENDSUBENT           13           0                                           41087  399999
SUBENT        41087004      930302                                           41087  4    1C
BIB                  1           1                                           41087  4    2
REACTION    (92-U-235(N,F)ELEM/MASS,CUM,FY,,REL)                             41087  4    3D
ENDBIB               1           0                                           41087  4    4
NOCOMMON             0           0                                           41087  4    5
DATA                 4           4                                           41087  4    6
ELEMENT     MASS        DATA        DATA-ERR                                 41087  4    7C
NO-DIM      NO-DIM      ARB-UNITS   ARB-UNITS                                41087  4    8C
 54.        131.          20.75         0.3                                   41087  4    9I
 54.        132.          25.05         0.4                                   41087  4   10C
 54.        134.          28.35         0.4                                   41087  4   11C
 54.        136.          25.85         0.4                                   41087  4   12C
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