Memo 4C-3/355

9 January 1991

To: Distribution

From: H.D. Lemmel and P.K. McLaughlin

Subject: ENDF formatted data libraries.
           Use of NLIB, NMOD, etc.
           _____

1. NLIB and NVER for BROND

    We introduced two NLIB codes for BROND for the following reasons.

    The original BROND has text in Russian. This is available at CJD
    only.

    What we receive at NDS has text in English or, sometimes, no text.
    There is no one-to-one correspondence between CDJ BROND and NDS
    BROND. Often even the material-numbers do not agree, for unknown
    reason. We therefore treat it as two different librarires which
    shall have two different NLIB numbers.

           CJD BROND; NLIB = 41
           NDS BROND; NLIB = 35

    Some of the NDS BROND data are in ENDF-5 format, others in ENDF-6
    format. Both receive the same NLIB number 35, but those that are in
    ENDF-6 format receive the library version number NVER=2.

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The NLIB filed was not defined ENDF-5 but it can easily be entered in the same space as foreseen in ENDF-6.

The NVER field does not exist in ENDF-5, and the message NVER=1 cannot be entered in the ENDF-5 formatted part of NDS-BROND.

All evaluations that show up in BROND for the first time, are marked by NMOD=1 with the idea that a corrected version of the same evalution under the same MAT number will be marked with NMOD=2 (or 3 and so on).

THe BROND evaluations arrive by and by and not as a complete library. We had distributed BROND-NDS1 in ENDF-5 format and BROND-NDS2 in ENDF-6 format.

Supplement tapes are in preparation, i.e. BROND-NDS3 in ENDF-5 format, and BROND-NDS4 in ENDF-6 format. These will have the same NLIB and NVER numbers as BROND-NDS1 resp. BROND-NDS2.

The supplement tapes may include modifications to materials distributed earlier. When the modification still has the same MAT number and the same format, then it is marked with NMOD=2 (or 3 and so on).

When the retransmitted evaluation is, at the same time, upgraded from ENDF-5 format to ENDF-6 (with or without modifications in the evaluation) then the new ENDF-6 version gets NVER=2 and NMOD=1.

When a retransmitted evaluation was modified and at the same time the MAT number was changed, then the new version gets NMOD=1.

2. Derived data files such as point data produced as RECENT output or energy averaged files, shall have the same NLIB, NVER and NMOD numbers as the original on which they are based. If a corrected version of such a derived data file is issued, neither the NMOD nor the NVER number are used to mark this correction.

If the original file is in ENDF-5 format (e.g. BROND-NDS3 with implicit NVER=1) and if the derived file is in ENDF-6 format, then NVER=1 is given.

A derived data file must always agree with its original in NLIB, NVER, MAT and NMOD.

3. IRDF

IRDF-90 is the third IRDF issued. Therefore, IRDF-90 must get NVER=3. (Do not eneter NVER=90!) All materials should have NMOD=1. SImilar with other NDS originated specialized libraries.

IRDF data that have been taken over from the ENDF/B-6 library (with
or without some modification in the data) will also get the IRDF
identification with NMOD=1. The fact that the data came from
ENDF/B-6 and any modification made to the data, are explained in the
free text.

Those IRDF that have been taken over from ENDF/B-6, are not
considered as derived data as considered under item 2. above.