

International Atomic Energy Agency

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INTERNATIONAL NUCLEAR DATA COMMITTEE

WRENDA 83/84

World Request List for Nuclear Data

V. Piksaikin, IAEA, Editor

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Published on behalf of

National Nuclear Data Center, Brookhaven, USA (M.R. Bhat, coordinator) NEA Data Bank, Saclay, France (N. Tubbs and G. Coddens, coordinators) Nuclear Data Section, Vienna, Austria (V. Piksaikin, coordinator) Nuclear Data Center, Obninsk, USSR (O.D. Kazachkovskij, coordinator)

November 1983

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ABSTRACT

WRENDA 83/84 is the eighth edition of the World Request List for Nuclear Data. This list is produced from a computer file of nuclear data requests, maintained by the Nuclear Data Section of the International Atomic Energy Agency (IAEA). The requests are provided by official bodies, such as national nuclear data committees, through four regional data centers serving all Member States of the IAEA. Each request included indicates

- that the estimated accuracy of the nuclear data available does not satisfy the requirements encountered,
- and that, consequently, new data measurements and/or data evaluations with improved accuracy are highly desirable.

WRENDA is intended to serve as a guide to experimentalists, evaluators and administrators when planning nuclear data measurement and evaluation programs.

The requests in this edition come from 15 different countries and one international organization.

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I. GENERAL INTRODUCTION TO WRENDA

I.A. Summary

WRENDA 83/84 is the eighth edition of the World Request List for Nuclear Data. The request list is intended to serve as guide to experimentalists, evaluators and administrators, when planning nuclear data programs. WRENDA is produced from a computer file of nuclear data requests, maintained by the Nuclear Data Section of the International Atomic Energy Agency (IAEA). Input to this request file is provided by official bodies, such as national nuclear data committees, through four regional data centers serving all Member States of the IAEA. The requests in this edition come from 15 different countries and one international organization.

In this edition, there are some changes to the request file since the production of the previous edition. To summarize the changes, 424 requests listed in the previous edition were modified, 318 withdrawn, 135 satisfied and 136 new requests were added. The total number of requests is 1378 of which 435 are Priority 1, 762 are Priority 2 and 181 are Priority 3 requests. There are no Priority 4 requests.

The number of current requests related to fission reactor technology is 902, while the number of requests related to nuclear fusion is 392 and that related to nuclear materials safeguards and other applications is 84.

<u>Part II</u> of this report provides a detailed description of the WRENDA request list structure. <u>Part III</u> provides explanations of the various priority criteria in use and other supplementary information, to assist the user in interpreting the requests. <u>Part IV</u> contains the actual list. <u>Part V</u> contains an index of requests which appeared in the previous edition, but are now withdrawn or satisfied.

I.B. Background information

The practice of using a "request list" to communicate the data requirements of a developing technology to the producers of data has a long history in both the United States and the United Kingdom. In 1968, the Neutron Data Compilation Centre at Saclay initiated publication of a request list for neutron data measurements from a computerized file, known as RENDA, on behalf of the European-American Nuclear Data Committee (EANDC). That list contained requests from the countries represented on the EANDC. In 1971, the International Nuclear Data Committee (INDC) recommended that the IAEA assume responsibility for publication of an expanded international data request list, which would include neutron data requests from a larger number of countries and international organisations. In response to this INDC recommendation, the Nuclear Data Section (NDS) of the IAEA developed a new, computerized, data-request file, WRENDA. The input to this data request file is provided by official bodies, such as national nuclear data committees, through the following regional nuclear data centers:

- NNDC National Nuclear Data Center, Brookhaven National Laboratory, Upton, L.I., N.Y., USA
- NEA-DB NEA Data Bank, Nuclear Energy Agency, Saclay, France
- NDS Nuclear Data Section, International Atomic Energy Agency, Vienna, Austria
- CJD Centr po Jadernym Dannym, Obninsk, USSR

Concurrently with the transfer of responsibility for the neutron data request file from the NEA to the IAEA, the Nuclear Data Section had developed international nuclear data request lists for technologies related to nuclear materials safeguards and to controlled fusion. It was expedient to develop the new WRENDA system to accommodate data requests for all applications.

An immediate consequence of the expanded scope was that the new WRENDA system was designed to accommodate requests for data related to other nuclear processes as well as to neutron-induced reactions. Also concurrently with the development of the WRENDA system it was agreed that data requests related to fusion, safeguards and other applications should also be handled through the regional data centers.

The WRENDA system was designed as a cooperative effort by representatives of the regional centers, coordinated at the NDS by P.M. Attree. The associated computer programmes for file maintenance, error detection and book production were written in the PL/I language by P.M. Smith. The system and computer programmes are described in detail in the internal documents maintained by the NDS. These documents are available upon request.

This report, listing the current contents of the WRENDA request file, is published on behalf of the four regional centers by the IAEA. The excellent co-operation of the other three centers as well as the INDC Liaison Officers in the production of the updated WRENDA file is gratefully acknowledged.

I.C. User Participation and WRENDA Services

The request list is intended to serve as a guide to experimentalists, evaluators and administrators when planning nuclear data measurement and evaluation programmes. When measurers and evaluators begin work which will provide data requested in this document, they are asked to inform the requestor(s). Information about such work should also be provided to the Nuclear Data Section or to one of the regional data centers listed in Section I.B. The names of the requestors are printed with each request, and their addresses are given in Appendix D.

Future editions of WRENDA will be issued every four years in the summer. Before each publication the national data committees will be asked to review their requests so that the lists can be kept current.

Although major updating of the file will usually occur in the spring prior to book publication, the master-files can be updated at other times as well. Between book-publications computer listings of the current files can be requested from the IAEA Nuclear Data Section. <u>Special sorts and selective retrievals from the files can</u> <u>also be obtained upon request</u>. For example, one can obtain, in essentially the same format as the complete request list, a listing of all requests originating in a given country or a given year, or relating to a given application, or having a given priority assignment - as well as arbitrary combinations.

Comments from the users of WRENDA are welcomed and encouraged so that the document and the special services available from the system can better meet their needs.

II. DESCRIPTION OF REQUEST LIST STRUCTURE

We now present a detailed description of the organisation of the WRENDA request list, together with instructions on how to find requests within the list.

II.A. Request Block Format

The request list appearing in Part IV of this report is made up of a series of "request blocks". A request block contains all current data requests of a given type, that is, all requests specifying the same target, projectile (incident particle) and quantity (type of reaction or process).

A WRENDA "data request" consists of a concise statement of what data are needed, the desired accuracy, the priority assignment, the intended application, and the name and affiliation of the requestor - all coded into a particular format for computerized storage, retrieval and report production. In addition, most requests also include free-text comments in which the requestor further defines his requirements. -

A request block may also contain "status comments", which are short statements describing the quality of existing data or referencing work in progress. A typical example of a request block, containing 3 data requests and 1 status comment, is listed on the following page.

Block-heading

" Referring to this example, the first line of a request block gives, from left to right, the target nuclide, the projectile and the quantity. This line of text is enclosed by a double line to make the beginning of each block stand out visually. The meaning of a quantity generally conforms to CINDA *) usage with the addition of some quantities to describe nuclear structure data and complex reactions. A list of the allowed quantities appears in Section II.B. The target nuclide description consists of the atomic number (Z), the element name, and the mass number (A) of the isotope. In case the target is the natural elemental mixture of several isotopes, the mass number is left blank. In the same way, if the target is a mixture of different elements, the atomic number is omitted.

Reference number

Following the block-heading, the individual data requests are listed. A serial number, the REFERENCE number, appears in the left-most field of the first line of each request. The reference number identifies a request in relation to this specific edition of the (Compare this with the IDENTIFICATION number, WRENDA only. discussed below).

*) CINDA - The Index to the Literature and Computer Files on Microscopic Neutron Data published annually by the International Atomic Energy Agency.



Energy

The next two entries on the first line of each request give the range of energy of the incident particle over which data are desired. The energy unit is given after each number. Because no lower case is used, we have adopted the notation MV for milli-electron volts, reserving MEV for million electron volts.

If an energy appears in the first field with the second field blank, then the requested information is required at only a single energy. In the case of a resonance integral, the single entry gives the lower energy limit for the integral. Requests for data at "thermal" energies have been entered at 25.3 MV. An entry in the second field preceded by the words "UP TO" in the first field indicates that data are needed up to the specified energy. This format appears most frequently for threshold reactions. All spectrum averages and non-standard energy specifications must be explained in the requestor's comments (see below).

Accuracy

The fourth field on the first line gives the accuracy required of the requested data stated in percent. Any accuracy requirements which cannot be stated as a single number are given in the requestor's comments. Unless specified otherwise, requested accuracies are one standard deviation. Any other meaning is explained in the comments.

Priority

The fifth field on the first line gives the priority of the requested information. Each of the three major application areas covered in this edition (fission, fusion and safeguards) employs a different set of priority criteria, which are presented in separate sections of Part III.

Requestor

The next three fields of the first line are used to identify the requestor. The first piece of information is a three letter code for the country originating the request. The codes and their explanations are given in <u>Appendix B</u>. The country code is followed by the name of the requestor. Mailing addresses for the requestors are given in <u>Appendix D</u>. The last piece of information is a three character code for the requestor's organisation. These codes conform to the CINDA codes and are listed along with the organisation name in <u>Appendix C</u>. In cases where there is more than one requestor for a request, then their names and organisation codes are given on successive lines.

Identification number

The number in the ninth field of the first line of each request is the IDENTIFICATION number. The number assigned is unique and remains associated with a request from one edition to the next. When a request is withdrawn, this number is <u>not</u> assigned to another request. The first two digits of the identification number are the last two digits of the year in which the request was originated. The third digit represents the responsible nuclear data center (1 = NNDC, 2 = NEA-DB, 3 = NDS, 4 = CJD) and the final three digits are a sequence number. The nuclear data centers are responsible for assigning the identification number.

Application Tag

Each request stored in the WRENDA master file contains a two-character application code which identifies the application associated with the request. These application codes are listed along with explanations in <u>Table 1</u>. In this report, the <u>first</u> character of the application code is listed just to the right of the identification number as a short APPLICATION TAG, allowing the user to quickly identify the general area of application. The most frequently occurring tags are R (fission reactors), F (<u>f</u>usion) and N (nuclear materials safeguards).

Requestors comments

Comments by requestors follow below the requestor's names on the right hand side of the page. The comments are grouped into four types denoted by the characters Q, A, O and M. The group of comments designated by Q refers to further experimental specifications such as details of the <u>quantity</u> to be measured and the energy range of incident or secondary particles. If average value of cross section in a typical spectrum is required, it should be clearly mentioned in the comment section. Those denoted by an <u>A</u> refer to further details concerning <u>accuracy</u> or energy resolution required. Energy resolution requirements or covariance assumptions, if any, should also be explicitly stated. The category <u>O</u> includes all <u>other</u> comments, designated by an <u>M</u>, contains statements about modifications which have been made since the previous version of WRENDA, such as "new request" etc.

Table I. Explanation of Application Codes

F	FUSION
FA	FUSION, REACTOR PHYSICS
FB	FUSION, SHIELDING
FC	FUSION, RADIATION DAMAGE
FD	FUSION, DOSIMETRY
G	GENERAL
м	MEDICINE
MI	RADIOISOTOPE PRODUCTION
MT	CANCER RADIOTHERAPY
N	SAFEGUARDS
NA	SAFEGUARDS, ACTIVE ASSAY
NB	SAFEGUARDS, PASSIVE ASSAY
NC	BURN-UP DETERMINATION
R	FISSION REACTORS

RAFISSION REACTORS, CORE PHYSICSRBFISSION REACTORS, SHIELDINGRCFISSION REACTORS, DOSIMETRYRDFISSION REACTORS, RADIATION DAMAGEREFISSION REACTORS, STANDARDSRFFISSION REACTORS, EVALUATIONSSSPACE

Status comments

Some request blocks include a section devoted to status comments. Ideally, status comments could provide concise and up-to-date information on the accuracy of available data, as well as a summary of work planned or in progress to improve data. Unfortunately, no organisation has been in a position to accept continuing responsibility to compile this detailed information on a continuing basis for all requested data.

The only status comments listed in the present edition are short comments, provided by the NDS, indicating which quantities are under continuous review by members of technical sub-committees of INDC and NEANDC. More information on these reviews can be found in Appendix A.

Status comments are stored in a separate file from the data requests and can be updated whenever new information is available. WRENDA requestor should note that the standard accuracy requirements should be stated with 1° - one standard deviation -, and it must be explicitly written in the comments, if otherwise. At the time of WRENDA publication, they are listed together with the corresponding data requests. The standard form of a status comment is an organisation code (see <u>Appendix C</u>), followed by a name and the text of the comment.

II.B. How to Find a Request in WRENDA

As is discussed in the previous section, all data requests for a single target nucleus, projectile, and quantity are blocked together. These blocks are sorted first by target, then by projectile and then by quantity. Within a given block, requests are sorted by increasing identification number, hence, chronologically.

The target nuclei are listed in order of increasing atomic number (Z). (The elements are listed alphabetically, along with the corresponding atomic number, on the back cover of this report.) For fixed Z, request blocks are ordered by increasing mass number (A). An element with two or more naturally-occurring isotopes is listed before the individual isotopes of the element. On the other hand, an element consisting of a single stable isotope is listed in the appropriate position among the individual isotopes of the element. Following the request blocks of highest Z are requests in which the target is lumped fission products and, finally, requests in which the target is an alloy or chemical compound. Below are given two additional tables for assistance in locating requests. The first table gives the projectile sorting order, and the second gives the quantity sorting order. The main features of the quantity sorting order can be roughly categorized as follows: (1) structure and decay data, (2) scattering, (3) gamma-ray production, (4) neutron production, (5) charged-particle production and (6) fission.

Table II. Projectile Sorting Order

1	No	incident	particle	(e.g.	decay o	lata)

.

2 Photon

3 Neutron

4 Proton

5 Deuteron

6 Triton

7 Helium-3

8 Alpha

9 Lithium-6

Table III. Quantity Sorting Order

LEVEL DENSITY PARAMETERS DISCRETE LEVEL STRUCTURE (ENERGY, SPIN, PARITY) HALF LIFE ALPHA HALF LIFE FISSION HALF LIFE DECAY HEAT PER GRAM TOTAL CROSS SECTION ELASTIC CROSS SECTION DIFFERENTIAL ELASTIC CROSS SECTION VECTOR POLARIZATION PRODUCED IN ELASTIC SCATTERING INELASTIC CROSS SECTION ANGULAR DIFFERENTIAL INELASTIC CROSS SECTION ENERGY DIFFERENTIAL INELASTIC CROSS SECTION ENERGY-ANGLE DIFFERENTIAL INELASTIC CROSS SECTION THERMAL SCATTERING LAW TOTAL SCATTERING CROSS SECTION DIFFERENTIAL TOTAL SCATTERING CROSS SECTION NON-ELASTIC CROSS SECTION ABSORPTION CROSS SECTION CAPTURE CROSS SECTION ENERGY DIFFERENTIAL CAPTURE CROSS SECTION CAPTURE GAMMA RAY SPECTRUM DELAYED CAPTURE GAMMA RAY SPECTRUM PHOTON PRODUCTION CROSS SECTION IN INELASTIC SCAT. ANGULAR DISTRIBUTION OF FHOTON FROM INELASTIC SCAT ENERGY DISTRIBUTION OF FHOTON FRUM INELASTIC SCAT TOTAL PHOTON PRODUCTION CROSS SECTION GAMMA RAY YIELD ENERGY DIFF. PHOTON-PRODUCTION CROSS SECTION ENERGY-ANGLE DIFF. PHOTON-PRODUCTION CROSS SECTION X N X,N NEUTRON SPECTRA X.2N X,2N ANGULAR DISTRIBUTION X,2N NEUTRON SPECTRA ENERGY-ANGLE DIFF.2 NEUTRCN-PRODUCTION CROSS SECT. X.3N X , 4 N X.5N NEUTRON EMISSION CROSS SECTION TOTAL NEUTRON YIELD DELAYED NEUTREN YIELD ENERGY DIFFERENTIAL NEUTRON-EMISSION CROSS SECTION ANGULAR DIFF. NEUTRON-EMISSION CROSS SECTION ENERGY-ANGLE DIFF. NEUTRON-EMISSION CROSS SECTION X,P X.P DELAYED NEUTRON YIELD X,NP NEUTRON AND 2-PROTON PRODUCTION CROSS SECTION X,2P TOTAL PROTON PRODUCTION CROSS SECTION ENERGY DIFF. PROTON-PRODUCTION CROSS SECTION ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION X.D ENERGY DISTRIBUTION OF DEUTERONS X.ND X.T ANGULAR DISTRIBUTION OF TRITONS ENERGY DISTRIBUTION OF TRITONS X,NT

Table III. Quantity Sorting Order (Continued)

ANG.DIST.OF NEUT.FROM N AND T PRODUCING CORSS SEC. TOTAL TRITON PRODUCTION X.HELIUN-3 ENERGY DISTRIBUTION OF HE-3 PARTICLES TOTAL HE-3 PRODUCTION CROSS SECTION X, ALPHA ANGULAR DISTRIBUTION OF ALPHA PARTICLES X NALPHA · · X.NJALPHA X.N4ALPHA THREE ALPHA PARTICLES PRODUCTION CROSS SECTION TOTAL ALPHA PRODUCTION CROSS SECTION ENERGY DIFFERENTIAL ALPHA-PRODUCTION CROSS SECTION ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION TOTAL HYDROGEN-PRODUCTION CRUSS SECTION TOTAL HELIUM-PRODUCTION CROSS SECTION SPECIAL QUANTITY (DESCRIPTION BELOW) FISSION CROSS SECTION SECOND CHANCE FISSION CRCSS SECTION CAPTURE TO FISSION RATIO (ALPHA) NEUTRONS EMITTED PER NEUTRON ABSORPTION (ETA) NEUTRONS EMITTED PER NON-ELASTIC PROCESS NEUTRONS EMITTED PER FISSION (NU BAR) DELAYED NEUTRONS EMITTED PER FISSION PROMPT NEUTRONS EMITTED PER FISSION INFORMATION ON NEUTRONS FROM A FISSION FRAGMENT ENERGY SPECTRUM OF FISSICN NEUTRONS ENERGY SPECTRUM OF DELAYED FISSION NEUTRONS SPECTRUM OF PROMPT GAMMA RAYS EMITTED IN FISSION SPECTRUM OF GAMMA RAYS EMITTED IN FISSION DELAYED GAMMA SPECTRUM FROM FISSION PRODUCTS FISSION PRODUCT MASS YIELD SPECTRUM INFORMATION ON KINETICS OF FISSION FRAGMENTS RESONANCE PARAMETERS ABSORPTION RESONANCE INTEGRAL CAPTURE RESONANCE INTEGRAL FISSION RESONANCE INTEGRAL

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11.8

III. PRIORITY CRITERIA AND OTHER INFORMATION

III.A. Priority Criteria for Fission Reactor (R) Requests

The fission reactor data requests (i.e. those tagged by an "R" following the identification number) are assigned a numerical priority ranging from 1 to 3 (1 being the highest). The priorities are defined as follows:

Priority 1

Nuclear data which satisfy the criteria of Priority 2 and which have been selected for maximum practicable attention, taking into account the urgency of nuclear energy programme requirements.

For example, the Nuclear Energy Agency Committee for Reactor Physics assigns its highest priorities for reactor measurements as follows:

"The highest priority should be given to requests for nuclear data for reactors to be built in the near future if:

a. These data are still necessary to predict the different reactor properties after all information from integral experiments and operating reactors has been used; or

b. information on an important reactor parameter is in principle attainable through mathematical calculation from nuclear data only; or

c. these data are needed for materials required in reactor physics measurements."

Priority 2

Nuclear data which will be required during the next few years in the applied nuclear energy programme (e.g. the design of a reactor or fuel processing plant; data needed for optimum use of reactor fuel and construction materials such as neutron moderators, absorbers and radiation shields; space application and biomedical studies; data required for better understanding of some significant aspect of reactor behaviour).

Priority 3

Nuclear data of more general interest and data required to fill out the body of information needed for nuclear technology.

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III.B. Supplementary Information from Contributors of Fission Reactor (R) Requests

L.N. Usachev's requests

The first set of requests concerns differential cross sections. These requests together make a unique system of requirements for the accuracy of evaluated nuclear data which would assure calculation of K_{eff} and breeding ratio (BR) of a fast plutonium breeder with accuracies of 1% and 2% respectively.

A second set of requests concerns spectrum-averaged (n, γ) , (n, f)and (n, 2n) cross sections for the actinides. Here the accuracy requirements have been determined by the following target accuracies of build-up calculations for fast reactors:

 236 Pu (30%), 238 Pu (20%), 240 Pu (5%), 241 Pu (4%), 242 Pu (10%), 241 Am (5%), 242m Am (20%), 243 Am (20%), and 244 Cm (30%).

Priorities

Accuracies requirements designated 2nd priority would assure the necessary calculational accuracy on the basis only of microscopic data without the use of data from integral experiments.

In connection with using the new integral experiment set for adjustment, those 1st priority requests appearing in WRENDA 76/77 had been withdrawn in WRENDA 81/82.

Meaning of uncertainty

As in all other WRENDA requests uncertainty (or accuracy) is characterized by one standard deviation.

Uncertainty of a point is supposed to be represented as a sum of components with different correlative properties. Accuracy specifications are for those components of the uncertainty which determine the accuracy of the integral under the curve in the partial energy interval mentioned in each request.

In requests for measurements the use of standards - \overline{v} of 252Cf, the ^{10}B (n, \checkmark) cross section (below 100 keV) and the ^{235}U (n,f) cross section (above 100 keV) - is assumed. In all requests except those for standards, the accuracy specifications refer to measurements relative to standards, and the accuracies required for the standards are specified separately.

The algorithm used to derive these requirements is described in References 2 through 6.

- L.N. Usachev and Yu.G. Bobkov, "Planning of an optimum set of microscopic experiments and evaluations to obtain a given accuracy in reactor parameter calculations" <u>Evaluation of Nuclear</u> <u>Data</u>, (Proc. Panel, Vienna, 1971), Report IAEA-153, IAEA Vienna, 1973 (in Russian). English translation: INDC(CCP)-19 (1972).
- 3. L.N. Usachev, V.N. Manokhin and Yu.G. Bobkov, "The accuracy of nuclear data and its influence on fast reactor development", <u>Nuclear Data in Science and Technology</u>, (Proc. Symp., Paris, 1973), IAEA, Vienna, 1973, Vol. 1, p. 129 (in Russian).
- 4. Yu.G. Bobkov, L.T. Pyatnitskaya and L.N. Usachev, "Planning of experiments and evaluations on neutron data for reactors" <u>The</u> <u>Metrology of Neutron Radiation in Reactors and Accelerators</u>, (Proc. Conf., Moscow, 1974), Report FEI-527 (1974) (in Russian).
- 5. L.N. Usachev, "Unique Definition of Nuclear Data Accuracy", pp. 102-107 in the Proceedings of the 7th INDC Meeting, Lucas Heights, October 1974, INDC-18/L, International Atomic Energy Agency (1975) (in English). Report FEI-537 (1974) (in Russian).
- 6. L.N. Usachev, Yu.G. Bobkov, V.E. Kolesov, A.S. Krivtsov, "Determination of transactinide nuclear data required accuracy for burn-up calculation in fast reactors", contributed paper to Conf. on Neutron Physics and Nuclear Data for Reactors and Other Applied Purposes, Harwell, U.K., September 1978.

M.N. Nikolaev's requests

Basic demands for accuracy of K_{eff} and BR prediction are 1 and 1.6 percent, respectively.

The requests are formulated for the totality of microscopic data without taking into account the results of integral experiments. Therefore, these requests are, as a rule, of the second priority.

The comparatively less demanding accuracies specified in this set of requests are stipulated by an assumption about the sense of uncertainties which differs from the assumption used in Usachev's requests. In this set of requests complete correlation of uncertainties within each group in the ABBN 26-group set and full statistical independence of uncertainties of neighbouring groups is supposed.

Correlation of uncertainties for different isotopes, cross sections and values is taken into account by assuming as standards the U-235 fission cross section and $\overline{\mathbf{v}}$ of Cf-252.

The author of the requests considers that these conditions would exist for instance, when on each adjacent lethargy interval 0.5 - 1 there would fall, on the average, one experiment carried out by an independent method with the requested, guaranteed accuracy.

The algorithm of request formulation and substantiation of basic requirements for K_{eff} and BR are described in paper by S.M. Zaritsky, M.N. Nikolaev, M.F. Troyanov, "Nuclear Data Requirements for Calculation of Fast Reactors", Report INDC(CCP)-17, IAEA, Vienna, 1972.

Conclusion

The two sets of requirements presented here emphasize the importance of precise understanding of accuracy specifications.

III.C. Priority Criteria for Nuclear Fusion (F) Requests

The following priority criteria for fusion requests were developed by the IAEA with the assistance of the International Fusion Research Council (IFRC), the INDC and many scientists engaged in fusion research:

Priority 1

In general highest (first) priority shall be assigned to those nuclear data upon which some important aspect of fusion research is immediately contingent. Specifically Priority 1 shall be assigned to requests for nuclear data which

- 1. are required for evaluation of the feasibility of a proposed fusion reactor concept, or
- 2. are required for immediate application of plasma phenomena in a fusion reactor context, or
- 3. are essential for application of a material which is of conceptual importance in fusion research, or
- 4. are required for an important decision involving allocation of resouces or redirection of research effort in fusion programmed, or
- 5. are necessary to develop some important aspect of current fusion programmes to a level consistent with progress in other aspects of these programmes.

Priority 2

Priority 2 shall be assigned to nuclear data which

- 1. are required for evaluation of materials of high potential utility in current fusion reactor designs, or
- are expected to contribute to significant progress in fusion research or reactor design stufies in the near future.

Priority 3

Priority 3 shall be assigned to nuclear data which

- 1. are of use in current design studies but are not of crucial importance, or
- 2. are not immediate importance but which have probability of becoming important as fusion programmes develop.

Priority 4*

Priority 4 shall be assigned to nuclear data which

- 1. fill out the body of information needed for fusion reactor technology, or
- 2. are of potential interest for fusion research but which cannot be assigned a more definite priority at present.

III.D. Priority Criteria for Nuclear Materials Safeguards (N) Requests

The following criteria were recommended by the International Nuclear Data Committee (INDC) for use in assigning priorities to nuclear data requests for nuclear materials safeguards purposes:

Priority 1

First priority shall be given to those requests for nuclear data that

- 1. are necessary for the refinement of an existing technique in order to bring its accuracy to within acceptable limits for safeguards purposes, or
- 2. are essential for the development of a new and promising technique for the nondestructive assay and control of nuclear material in amounts that are significant to the safeguards system.

Priority 2

Second priority shall be given to those requests for nuclear data that

1. are essential for the use or interpretation of an existing or proposed technique for nondestructive assay and that are now obtained either by extrapolation or by an empirical method but for which experimental confirmation is desirable, or

^{*} At present, there are no Priority 4 requests in the request file.

 are necessary for the development of a technique for non-destructive assay that may reasonably be expected to be useful for safeguards purposes.

Priority 3

Third priority shall be given to those requests

- 1. may be neede for the nondestructive assay of materials not now included in the safeguards system by that are likely to be in the future, or
- 2. are necessary for the assessment or elimination of minor sources of error in the assay of nuclear material, or
- 3. are needed for the exploration of new techniques for nondestructive assay for future applications, or
- 4. may be needed for the development of new techniques for nondestructive assay for which the required technology does not now exist but which may reasonably be expected to in the future.

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1 HYDROGE	EN 1		====== NEU	TRON	***********	TÚTAL	CROSS	SECTION
1	1.00	KEV	500-	KEV	. 3 *	2	USA	STEWART 1.45 78117-0
-			5000		• • •	L	0:	TG CHECK ON PRINARY STANDARD IN LARGELY UNMEASURED REGIONS.
STATUS							M:	SUBSTANTIAL MODIFICATIONS.
U	NDER CC	NT INUGUS	REVIE	. AR #	INDC AND NE	EANDC.	SEL AP	PENDIX A.
1 HYDRGG	EN 1		NEU			DIFFE	RENTIA	ELASTIC CRUSS SECTION
2	10.0	MEV	50.0	MEV	1. %	2	USA 0:	STEWART LAS 8012891
								ABSOLUTE VALUES AT A FEW INCIDENT ENERGIES REQUIRED.
3	5.00	MEV	15.0	MEV	0.5%	3	JAP	T.MICHIKAWA JAP 8320230
							0:	DIFFERENTIAL ELASTIC SCATTERING CROSS SECTION AT 180. DEGREES.
							۵:	SIANDARD FUR ABSULUIE MEASUREMENTS OF MUNU- ENERGETIC FAST NEUTRON FLUENCE. The Desent accuracy is depocent, decise
							o:	MEASUREMENTS AND EVALUATIONS ARE REQUIRED. A PRECISE EVALUATION OF THE ELASTIC SCATTERING
							м:	CROSS SECTION FROM 10 KEV TO 20 MEV IS ALSU WANTEL New request.
STATUS								STATU
Ur	NDER CU	NTINUOUS	REVIE	W BY I	NDC AND NE	EANDC.	SEE API	DENDIX A.
1 HYDROGE	EN 1		NE U	TRON		CAPTU	RE CRO	SS SECTION
4	25.3	MV .	10.0	ć V	0.3 %	1	USA	HEMMIG DOE 8210C1/
							U: M:	TO HELP RESOLVE DISCREPANCIES IN THERMAL CRITICALITY PARAMETERS. THIS REQUEST WAS REVIEWED BY CSEWG AND RECOMMENCE AS DESERVING SPECIAL EMPHASIS. NEW REQUEST.
I HYDROGE	EN 1	********	 NEU	======		SPEC I		NTITY (DESCRIPTION BELOW)
			******				522232	
5	100.	Ēν	1.00	MEV	30• X	2	USA	BOWMAN NBS 821050
•						•	a:	ELECTRON EXCITATION OR REMOVAL INDUCED BY SUDDEN ACCELERATION OF NUCLEUS IN NEUTRON-NUCLEUS SCATTER (N.N.'E).
							0: M:	INCIDENT ENERGY RESOLUTION: JO. PERCENT. Neutrun Spectrum Calculations. New Request.
1 HYDROGE	EN 2	*******	NEU	====== ITRON		ENERG	Y-ANGL	E DIFF.2 NEUTRON-PRODUCTION CROSS SECT.
6	U	P TG	15.0	MEV	15.0%	2	JAP	A.TAKAHASHI OSA 612018
	÷		· · · ·	•	· .		a: 0:	ENERGY-ANGLE DIFFERENTIAL CROSS SECTIONS FOR THE (N,2N) REACTION REQUESTED FOR FUSION. FOR ESTIMATION OF ENITTLU NEUTRON SPECTRA FROM A D-T MIXTURE OF INERTIALLY CONFINED PLASMA
	====== FN 3							
22222242		*******	******	======				
7	ί υ	р то	20.0	MEV -		2	FR	A+MICHAUDON BRC 752055
							A: M:	ACCURACY REQUIRED TO BETTER THAN 20 PERCENT. SUBSTANTIAL MUDIFICATIONS.
1 HYDROG	EN 3	==========	NEU	TRON		ENERG	Y-ANGL	DIFF.2 NEUTRON-PRODUCTION CRUSS SECT.
					c án	-		
8	U	P. TO	15.0	MEV.	5.0%	. 2	JAP	A TAKAHASHI OSA 812019
				÷ .			0:	FUR ESTIMATION REQUESTED. FUR ESTIMATION OF EMITTED NEUTRON SPECTRA FROM A D-T MIXTURE UF INERTIALLY CUNFINED PLASMA.
	3		IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			 N•P	======	
********		======						
-9	10.0	KEV -	3.00	MEV	1 e X	2.	USA	HEMMIG DOE 6910C1
: .							Q: A: G:	ABSOLUTE VALUES REQUIRED. Intermediate accuracy useful. For use as secondary standard.
. 10	5.00	KEV	200.	ĸev	2. X	- 2	USA	STEWART LAS 691003
		•	· · · ·			ī ,	Q: Q:	ABSULUTE VALUES REQUIRED. INCREASINGLY USEFUL AS A STANDARD AND FOR SPECTROMETERS.
11	200	KEN	3.00	MEV	ч Э •	2	 U ≲∆	
	2.00.	n., ¥	3.00	~ L ¥	J. A	£	0.5- Q:	ABSCLUTE VALUES REQUIRED.
							0:	INCREASINGLY USEFUL AS A STANDARD AND FOR SPECTRUMETERS.

			============				=#======	=====		
692003R	HAR	E.LYNN	UK	2	2.0x	MEV	1.00	KEV	100-	12
RE ACCURATELY Section measurements.	EPENDENCE NEEDED MURE A standard in cross-s	ENERGY DE USED AS A	A: 0:							
801234F	HED DOSIMETRY.	MCELRGY For Emit	USA G:	3	10. %	MEV	30.0	MEV	2.00	13
8013COF	HED	MCELROY	USA	3	20. X	Mēv	40.0	MEV	30.0	14
*========		FUR FMIT								
				N,NP ======				=====		======
801235F	HED DOSIMETRY.	MCELRGY FOR FMIT	USA O:	3	10. %	MÉV	30.0	ір то	U	15
8013C1F	HED	MCELROY	USA	. 3	20. X	MEV	40.0	MEV	30.0	ló
	DUSIMEIRY.	FUR FM11		======= N - 2P		::==== TRON	= <u>*</u> ======= NFU		=========================	====== HEL (UM
		=========		========			==========			=======
801233F	HED DUSIMETRY.	MCELRUY FOR FMIT	USA Ö:	3	10. X	MEV	30.0	IP Tũ	U	17
801302F	HED	MCELRDY	USA	3	20• X	MÉV	40.0	MEV	30.0	18
	DOSIMETRY .	FUR FMIT	0:							
		*********		======= ALPH ========			======================================			======= LITHIU ========
7411676			US4		6 - ¥	MEV	6.50	KEV	300-	19
D. NT NEEDED. Kev.	RGET YIELDS REGUIRED. ERROR UF 3.0 PERCENT ERGY RESOLUTION 100 H	THICK TAR RELATIVE ALPHA ENE	03/4 A:							
	CROSS SECTION	ELASTIC	ERENT I AL	======= iFFئ		JTRON	======================================	*====	====== M 6	LITHLU
*********************									*******	
722060F	JUL Ann Jul	J.DARVAS H.BROCKMA	GER	2	10.0%	MEV	15.0	MEV	1.00	20
SELÚM 6 MEV REQUIRED. Sport.	VEMENT IN ACCURACY BE ION OF NEUTRON TRANSF	AN IMPROV CALCULATI	0: U:		•					
722061F	CUL	R.HANCOX	UK	з	20.0%	MĒV	15.0	ĸEV	1.00	21
AND NEUTRUN TRANSPORT	UN REQUIREMENT. LDING CALCULATIONS AN	FUR SHIEL	. 0:							
724001F	VIN KUR	I •N•GULUV	ССР	2	10.0%	NEV	15.0	MEV	4.00	22
MEV AND ADDITIÜNAL DATA Smissiün.	NT GF DATA BELOW 7 ME 7 Mev Required. 10n of Neutrun Transm	REFINEMEN ABOVE 7 CALCULATI	u: G:							
792094F	BOL	C.COCEVA	1 T Y	1	15.0%	MEV	20.0	MÉV	1.00	2 3
LTION PRODUCTS NEEDED. Ion Reactors.	DISTRIBUTION OF REACT Calculations in Fusic Ial Modifications.	ANGULAR D BLANKET C SUBSTANTI	0: 0: M:	. ••						
+=====================================	INELASTIC CRCSS SECT	ERENTIAL	LAR DIFF	== == == == Angu =======	*********	JTRON	113		:===;==== /M 6 :========	L ITHIU
700055	- 301	C.COCEVA	114	1	. 15,0¥	MEV	15-0	MEV	2.50	24
CTION PRODUCTS NEEDED. Ion Reactors.	DISTRIBUTION OF REACT CALCULATIONS IN FUSIO IAL MODIFICATIONS.	ANGULAR D BLANKET C SUBSTANTI	U: U: M:	•					2.000	<u> </u>
**********************	TUN CROSS SECTION	PRODUCTI		TUTA		JTRON	======== NEU			
	****************									C
724004F		I.N.GOLOV	CCP	2	15.0%	MEV	15.0	MEV	9.00	25
DING CALCULATIENS.	A ARE REQUIRED. Y HEATING AND SHIELD:	SAMMA RAT SPECTRA Gamma Ray	υ: υ:			•.				
				N.2N		JTRÜN	========= NEU ========		M 6	======= L T H U =======
. 792056f	BOL	C.COCEVA	114	1	20.0%	NEV	20.0	JP TO	u	26
ECTRUM OF EMITTED	DISTRIBUTION AND SPEC NEEDED.	ANGULAR D	Q:		-					

3 LITHIU	M 6	NEUTRGN		ENERG	Y-ANGL	E DIFF. NEUTRUN-EMISSION CRUSS SECTION	
27	UP TO	15.0 NEV	20.0%	2	GER	J.DARVAS JUL 72 H.BROCKMANN JUL	2064F
					ú:	NEUTRON SPECTRA UP TU MAXIMUM ENERGIES ARE Required.	
						NEUTRON ANGULAR DISTRIBUTIONS AT A FEW ENERGI WOULD BE USEFUL.	ES
					0:	FOR CALCULATIONS OF NEUTRON TRANSPORT AND SHIELDING.	
28	2.00 MEV	15.0 MEV	10.0%	2	JAP	A.TAKAHASHI OSA 83 Y.SEKI JAE	12035F
					٥:	ENERGY-ANGLE DOUBLE DIFFERENTIAL CRCSS SECTIO REQUIRED WITH AN INCIDENT ENERGY STEP OF 0.5	N MEV.
					с:	NEUTRON TRANSPORT AND TRITIUM PRODUCTION RATE CALCULATIONS, ANGULAR DISTRIBUTIONS OF	
						INELASTICALLY SCATTERED NEUTRUNS FOR ALL AVAI LEVELS ALSO REQUIRED.	LAELE
					M:	NEW REQUEST.	
3 LITHIL	IM 6	NEUTRON		N,P	=========		
20		IE A MEV	16 04		1.1.1		00075
29	3.00 MEV	13.0 AEV	15.04	1		ANGULAR DISTRIBUTION OF REACTION DROUGTS NEE	060.
					ч.	ALSE PARTIAL CROSS SECTIONS FOR RESIDUAL NUCL IN GROUND STATE AND FIRST EXCITED STATE NEEDE	EUS
					0: M:	BLANKET CALCULATIONS IN FUSION REACTORS. SUBSTANTIAL MODIFICATIONS.	
		NEUTRON		======================================			=====

30	UP TO	15.0 MEV	10.0%	2	GER	J.DARVAS JUL 72	2151F
					A:	ENERGY RESOLUTION OF 0.2 TO 0.5 MEV WOULD AF	
					G:	SUFFICIENT. FOR SHIELDING AND CALCULATION OF HEAT GENERAT	ICN.
31	UP 10	15.0 MEV	10.0%	1 [.]	CCP	I.N.GOLUVIN KUR 72	4003F
					0:	NEUTRUNICS CALCULATIONS AND ENERGY DEPUSITION Blanket materials.	I 1N
32	UP TO	20.0 NEV	15.0%	1	ΙΤΥ	C.COCEVA BOL 79	2098F
					a:	ANGULAR DISTRIBUTION OF REACTION PRODUCTS NEE	DEC.
					м:	SUBSTANTIAL MODIFICATIONS.	
3 LITHIU	IN 6	NEUTRCN		====== N,T			
*******					======		
33	1.00 KEV	3.00 MEV	1. *	1	USA	SMITH ANL 69 HEAMIG DOE 69)1005R
					Q: A:	ABSOLUTE VALUES REQUIRED.	
					c:	ENERGY RESOLUTION MUST REPRODUCE TRUE SHAPE.	
34	500. EV	3.00 ÅEV		2	USA	HALE LAS 64	10116
						AUSOLUTE VALUES REQUIRED.	
					Á:	ACCURACY RANGE 1. TO 3. PERCENT. ENERGY_RESOLUTION MUST REPRODUCE TRUE SHAPE.	
					6:	FCR USE AS STANDARD.	
35	5.00 KEV	15.0 MEV	5.0%	1	GER	M.KUECHLE KFK 69	26046
					0:	STANDARD.	
36	16.0 ĒV	100. KEV	1. %	1 '	USA	HALE LAS 72	210096
					a:	FOR USE AS STANDARD BELOW 1 MEV.	
37	100. KEV	3.00 MEV	3.0%	1	ССР	I.N.GOLOVIN KUR 72	24002F
				-	0:	FOR TRITIUM BREEDING AND ENERGY DEPLSITION.	
38	1.00 MEV	20.0 MEV	5.0%	. 1	BL, G	G.DELËEUW-GIERTS MOL 74	2024F
					Q:	SECONDARY ANGULAR DISTRIBUTION REQUIRED	
				·	A: 0:	IN THE SAME ENERGY RANGE. ANGULAR RESOLUTION - 10 DEGREES FROM 0 TO 90. Determination of Neutron Spectra from Triton Energy Distributions.	
20	3.00 MEV	15.0 MEV	5- *	1	.jadʻ	Y. 52K1 10F 74	20575
	aree det		.	•	0:	TRITIUM BREEDING AND ENERGY DEPOSITION CALCUL	ATICN
۵٥	100- 454	2.00 MEV	10.0*	2	ί.κ		
40	IVV NET	LIUU MET		2	n:	EVALUATION REQUIREMENT.	/2243F
						FOR TRITIUM BREEDING CALCULATIONS.	
41	10.0 MV	10.0 EV	1 X	1	USA	CARLSUN NBS EO)1290R
					٥:	TO STUDY ATOMIC BINDING AND RELATED EFFECTS.	
STATUS						S	STATUS
	NDER CGNTINUOU	S REVIEW BY IN	DC. SEE	APPENDI ======	× A.		

3 LITHIU		NEUTRON	======================================	ANGUL	.AR DIST	TRIBUTION OF TRITONS	
42	500. EV	3.00 MEV	5. X	2	USA	HALE LAS	801251R
					0: 0: M:	AUSOLUTE CROSS SECTION AS A FUNCTION OF AND NEEDED FOR USE OF LI-6(N,ALPHA) AS STANDARD SUBSTANTIAL MODIFICATIONS.	iLE.).
				====== N.NT	======		**======
					=======		
43	UP TO	20.0 MEV	15.0%	1	ITY	C.COCEVA BOL	792055F
					Q: D: M:	ANGULAR DISTRIBUTION OF REACTION PRODUCTS N BLANKET CALCULATIONS IN FUSION REACTORS. SUBSTANTIAL MODIFICATIONS.	NEEDEC.
3 LITHIU	• 6 • 6	NE U TR ON	======================================	TOTAL		PRODUCTION CROSS SECTION	
4.0		25.0 MEV	10. *	2			6019056
	0. 00			-	034 0:	TOTAL HE PRODUCTION FOR MASS SPECTREMETRY. FOR FMIT DUSIMETRY AND DAMAGE CALCULATIONS.	
45	25.0 MEV	40.0 MEV	20 • X	2	USA	MCELRUY HED	8013C3F
					0: 0:	TOTAL HE PRODUCTION FOR MASS SPECTROMETRY. For FMIT DOSIMETRY AND DAMAGE CALCULATIONS	•
				ENERG	======= Y-ANGL +	- ALFR. NEUTRIN-EMISSION (BASS SFITIAN	
=======		55555555555555555555555555555555555555					
46	UP TO	10.0 MEV	5.0%	1	FR	C.A.PHILIS BRC	£1∠063F
					Q:	NEUTRONS EMITTED PER NON-ELASTIC PROCESS SECONDARY ENERGY-ANGLE DISTRIBUTIONS REGUL	RED
3 LITHIU		TRITON		NEUTR	ON EMIS	SSION CRUSS SECTION	

47	UP TO	10.0 MEV	15.0%	1	FR M:	C.A.PHILIS BRC	8320C1F
			==========				
	M / ====================================	NEUTRUN 		DIFFE	THEN I I AL	L ELASTIC CRUSS SECTION	
48	2.00 MÉV	15.0 MEV	10.0%	1	CCP	I.N.GOLOVIN KUR	7240C5F
					۵: د:	REFINEMENT OF DATA BELOW 7 MEV AND ADDITION Above 7 Mev Reguired. For Tritium Breeding and Energy Defosition	NAL DATA
49	14.0 MEV		10.0%	1	FR	B.DUCHEMIN SAC	732003F
				4	A: 0:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. Evaluation of Neutron Balance.	
50	1.00 MEV	20.0 MEV	15.0%	1	1 T Y	C.COCEVA BOL	792100F
					Q: 0: M:	ANGULAR DISTRIBUTION OF REACTION PRODUCTS D BLANKET CALCULATIONS IN FUSION REACTORS. SUBSTANTIAL MODIFICATIONS.	NEEDEC.
3 LITHIU		NEUTRON		INELA	STIC CF	RUSS SECTION	
51	01 40	15.0 MEV	15.0%	1 -	сср а:	CROSS SECTION FOR 0.478 MEV LEVEL REQUIRED.	7240C6F
					c:	NEUTRONICS CALCULATIONS AND ENERGY DEPOSIT	IÚN+
52	2.00 MEV	14.0 MEV	5.0 %	1	IND	V.R.NARGUNDKAR TRM	833045F
					A: 0: M:	ENERGY STEPS 0.5 MEV Fusion blanket neutronics New Request.	
	3255555 75 55555					EFERENTIAL INELASTIC CROSS SECTION	
				======			*******
53	1.00 MEV	20.0 MEV	15.0%	1	1 T Y	C.COCEVA BOL	7921C1F
					0: 0: M:	ANGULAR DISTRIBUTION OF REACTION PRODUCTS I BLANKET CALCULATIONS IN FUSION REACTORS. Substantial Modifications.	NELDED.
3 LITHIU		NEUTRON		ENERG	Y DIFF	ERENTIAL INELASTIC CROSS SECTION	
54	UP TO	15.0 MEV	20.0%	3	UK	T.D.BEYNON BIR R.HANCUX CUL	73211 5 F
					٥:	EVALUATION REQUIREMENT.	
********			*******		*******		
3 LITHIU ========	m / ====================================	NEUTRON		10TAL	- PHUTO	N PRUDUCTION CROSS SECTION	
55	9.00 MEV	15.0 MEV	15.0%	1	CCP	I.N.GCLUVIN KUR	724010F
					a:	GAMMA RAY PRODUCTION CROSS SECTIONS AND GA SPECTRA ARE REQUIRED.	MNA RAY
	***********			=======	:	GAMMA KAY MEATING AND SHIELDING CALCULATIC	N3. =======

3 LITHIL	IM 7	NEUTRON		N • 2N		
56	up tõ	15.0 MEV	20.0%	2	GER	J-DARVAS JUL 722071 H-BRUCKMANN JUL
					0: D:	THREE OR FOUR DATA PEINTS USEFUL. For estimates of neutron multiplication.
57	UP TO	15.0 MEV	15.0%	1	ССР	I.N.GLLOVIN KUR 724009
					a:	SECONDARY ENERGY AND ANGULAR DISTRIBUTIONS AT 14 TO 15 MEV REQUIRED. BLANKET NEUTRUNICS CALCULATIONS.
58	8.00 MÉV	15.0 MEV	20.0%	1	111	C.COCEVA dul 792102
					0: 3: M:	ANGULAR DISTRIBUTION OF REACTION PRODUCTS NEEDED. BLANKET CALCULATIONS IN FUSION REACTURS. SUBSTANTIAL MODIFICATIONS.
3 L ITHIU	JM 7 	NEUTRÛN	*********	ENERG	Y-ANGL	E DIFF. NEUTRGN-EMISSIEN CROSS SECTION
59	2.00 NEV	15.0 MEV	10.0%	2	JAP	Y.SEKI JAE 832037
					a :	A.TAKAHASHI OSA ENERGY-ANGLE DIFFERENTIAL CROSS SECTIONS FOR TOTA
					0: M:	NEUTRON EMISSION REQUIRED. NEUTRON TRANSPORT AND TRITIUM PREDUCTION CALCULATIONS. ANGULAR DISTRIBUTIONS OF INELASTICALLY SCATTERED NEUTRONS FOR ALL AVAILABLE DISCRETE LEVELS ALSO REQUIRED. NEW REQUEST.
3 LITHIG	======================================	NEUTRON		======= N,NP		
.60	8.50 MEV	15.0 MEV	20.0%	1	1TY 0:	C.COCEVA BOL 792103 ANGULAR DISTRIBUTION OF REACTION PRODUCTS NEEDED.
					0.	ALSC PARTIAL CRUSS SECTIONS FOR RESIDUAL NUCLEUS IN GROUND STATE AND FIRST EXCITED STATE NEEDED.
					M:	SUBSTANTIAL MUDIFICATIONS .
3 LITHIL	IN 7 IN 7	NEUTRON		N,D		
61	8.00 MEV	15.0 MEV	20 . O X	1	111	C.COCEVA BOL 832048
					61 01 Mi	(N,D) CROSS SECTION. ALSC PARTIAL CROSS SECTIONS FOR RESIDUAL NUCLEUS IN GROUND STATE AND FIRST EXCITED STATE NEEDED. BLANKET CALCULATIONS IN FUSION REACTORS. NEW REQUEST.
3 LITHIC	######################################	NEUTR CN		N,ND		
62	4.00 MEV	15.0 MEV	20.0X	1	1TY Q:	C.COCEVA HOL 792164 ANGULAR DISTRIBUTION OF REACTION PRODUCTS NEEDED.
					U: M:	BLANKET CALCULATIONS IN FUSION REACTORS. Substantial modifications.
3 LITHIU		NEUTRON		N,NT		
6.3	UP TG	15-0 MEV	5.0*	,	CCP	L.NGDEGVIN KUD 224067
				•	с.: с:	FOR TRITIUM BREEDING AND ENERGY DEPOSITION.
64	10.0 MEV	15.0 MEV	15.0%.	1	ССР	I.N.GOLÜVIN KUR 724008
	• •				۵: ئ	SECENDARY ENERGY AND ANGULAR DISTRIEUTILNS Reguired. Neutron transmissiun calculatiens.
65	3.00 NEV	14.0 MEV	5.0%	1	f R	Ö.DUCHEMIN SAC 732004
			•		A: Ú:	QUUTED ACCURACY AT 2 STANDARD DEVIATIONS. Evaluation of Neutron Balance.
66	UP TO	15.0 MEV	10.0%	2	UK .	T.D.6EYNON BIR 762246
					0:	ENERGY SPECTRA OF EMITTED PARTICLES NEEDED. Evaluation Requirement. Trittum Breeding. MCDE of Break-up and Cross-Section in Threshold REGILN.
67	14.0 MEV			1	USA	YOUNG LAS 821040
					Q: A:	TRITIUM PRODUCTION X/S NEEDED. ACCURACY RANGE 3. TO 5. PERCENT.
		•		•	0:	THE RESOLVE DISCREPANCIES IN EXISTING DATA AND
					M:	ID CURRUDURALE ACCURACY (LR IL CORRECT DATA) OF NEW EVALUATION. NEW REQUEST.
68	υρ το	15.0 MEV	5.0%	1	JAP	Y.SEKI JAE 832036 A.TAKAHASHI USA
					G:	(N.NT) CRUSS SECTION. NEUTRON SPECTRA WITH 15 PERCENT ACCURACY ALSU Required.
					C: M:	TRITIUM BREEDING AND ENERGY DEPOSITIUN CALCULATIONS. NEW REQUEST.

3 LITHIU	4 7	PROTON		ENERG	Y-ANGLE	DIFF. NEUTRON-EN	ISSION CROSS SECTION	======================================
69	UP TO	10.0 MEV	5.0%	1	FR	C.A.PHILIS	BRC	812062F
					4:	NEUTRONS EMITTED SECONDARY ENERGY-	PER NUN-ELASTIC PROCESS ANGLE DISTRIBUTIONS REQU	IRED
3 LITHIUM		DEUTERON		====== ENÉRG	SY-ANGLE	DIFF. NEUTRON-EM	ISSIGN CROSS SECTION	
				******		********************		********
70	UP TO	10.0 MEV	5.0%	1	FR	C.A.PHILIS	PER NON-ELASTIC PROCESS	512064F
					u.	SECUNDARY ENERGY-	ANGLE DISTRIBUTIONS REQU	IRED
3 LITHIUN	4 7 	TRI TUN	=======================================	NEUTR	ON EMIS	SIUN CRUSS SECTIO)N ====================================	
71	LP IG	10.0 MEV	15.0X	1	FR	C.A.PHILIS	BRC	832002F
					м:	NEN REQUEST.		• •
4 BERYLLA	UM 9	NEUTRON		01FF8	RENTIAL	ELASTIC CROSS SE		
72	2.0C MEV	15.C MEV	10.03	2	CCP	I - N - GGL DV IN	KUŘ	724C11E
				-	0:	FOR NEUTRON TRANS	SMISSION CALCULATIONS.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4 BERYLL	LUM 9	NEUTRON		INELA	ASTIC CR	RUSS SECTION		
					12252221			*********
73	01 40	15.6 MEV	15.0%	2	ССР 0:	NEUTRONICS CALCUL	KUR ATIONS FOR BLANKET AND S	724012F
74	1.80 MEV	15.0 NEV	10.0×	1	1 T Y	C.CUCEVA	BOL	832050F
					0:	ALSO REQUIRED DIF	FERENTIAL CROSS SECTION	AND
	,				A:	RESCLUTION OF ENI OR 0.50 MEV, WHIC	TTED NEUTRON ENERGY 20. HEVER IS SMALLER.	PERCENT
					M:	NEW REQUEST.	IONS IN FUSION REACTORS.	
4 BERYLL	12222222222222222 [UM 9 12222222222222222	NEUTRON	********	PHUT	IN PRODU	JCTIÚN CHOSS SECTI	ION IN INELASTIC SCAT.	
75	8.00 MEV	15.0 MEV	10-0*	2	GER	JADARVAS	101	722075F
				-		H-BROCKMANN		
					u: ========		ION OF GAMMA RAYS REQUIRE	
4 BERYLL	[UM 9 ====================================	NEUTRON	====== # ==		- PHOTOM	N PRODUCTION CROSS	5 SECTION 	
76	3.00 MEV	15.0 MEV	15.0%	2	ССР	I.N.GOLUVIN	KUR	724015F
					0: 6:	GAMMA RAY SPECTRA GAMMA RAY HEATING	A ALSO REQUIRED. 3 AND SHIELDING CALCULATI	CNS.
4 BERYLL	Lessessessesses LUM 9	NEUTRCN		======= N,2N				
77		15.0 464	20.0*				KEV	7220775
	0, 10	13.0 ALV	20.0%	•	0ER Q:	ANGULAR DISTRIBUT	IUNS AND ENERGY SPELTRA	0F
					· c:	SECONDARY NEUTR Radiatiun damage	RUNS AND GAMMA RAYS ALSU Estimates.	NEEDED.
78	UP TO	15.0 MEV	15.0%	2	CCP	I.N.GOLOVIN	KUR	724013F
					0: 0:	ENERGY AND ANGULA NEUTRONS REQUIA	AR DISTRIBUTION OF SECOND Red. Multiplication and transm	ARY
					0.	CALCULATIENS.		133160
79	υρ το	15.0 MEV	5. X	2	USA	ENGHOLM	GA	8010∠0F
					0:	DATA FOR NEUTRON	MULTIPLIER.	
80	1.80 MEV	15.0 MEV	10.0%	1	1TY G:	C.CUCEVA	BOL	832049F
						ALSO REQUIRED DI	FERENTIAL CROSS SECTION D NEUTRONS DOWN TO 0.2 N	AND
					0:	OR 0.5 MEV. WHICH BLANKET CALCULAT	HEVER IS SMALLER. IONS IN FUSION REACTURS.	PERCENT
					м:	NEW REQUEST.		
81	2.00 MEV	14.0 MEV	5.0 %	1		V.R.NARGUNDKAR		833046R
		•	· :	•	5: 	DATA NEEDED FOR I BLANKET NEUTRONIC	FISSION REACTOR AND FUSIO	אנ
					M; [122222:	nes Réguesi. Sections		
				. :			. ·	
				•				
	•							
				• •				
					6			

4 BERYLL	IUM 9		NEU	TRON		ENER	GY-ANGLI	E DIFF. NEUTRON-EMISSION CROSS SECTION	*************
82	1.80	MEV	5.00	NEV	15. X	2	USA	HÊNMIG DGE	621002
							0: A: 0:	MUST RECORD NEUTRUNS DOWN TO A FEW HUN INCIDENT ENERGY RESOLUTION: 5. PERCEN ACCURACY 50 MB AT 2 - 3 Mév. RESOLUTION UN E(N*) - 500 KEV. FOR BE MODERATED FAST SPECTRUM FEACTOR	DRED KEV. T.
							-	THERMAL BREEDERS OR CONVERTERS AND N ECGNONY CALCULATIONS.	EUTRUN
83	1.70	MEV	15.0	MEV	15.0%	2	JAP	Y.SEKI JAE A.TAKAHASHI OSA	832038
						·	U: M:	ENERGY-ANGLE DIFFERENTIAL CRUSS SELTIC NEUTRON EMISSION REGUIRED. DUUBLE DIFFERENTIAL CROSS SECTIONS FOR REACTIONS ALSO REGUIRED BY A.TAKAHASHI BLANKET NEUTRONICS CALCULATIONS. ALSO FOR NEUTRON MULTIPLICATION CALCUL NEW REGUEST.	NS FUR ICTAL The (N.2N) • Ations.
4 BERYLL	 Ium S		NÉU	===== TR CN		N, P			
				=====					
84	13.0	MÉV	15.0	MEV	15.0%	1	117 9:	C.CUCEVA BOL (N.P.) CROSS SECTION.	83204 0 F
							м:	NEW REQUEST.	5.
HERYLL	=== ==== IUM 9 ========		NEU	TRON		N.P	DELAYE) NEUTRON YIELD	
85	14.0	MEV	16.0	MEV	10.0%	2	сср a:	V.K.MARKUV GAC DELAYED NEUTRON YIELD FRUM BE-9 PROJUC	714037N ED EY BETA
							د ن.	DECAY OF LI-9 REACTION PRODUCT REGUL ALLUWANCE FOR BACKGROUND IN DELAYED NE CCUNTING	RED. UTRÚN
A BERYLLI	LUM 9		**==:**** NćU	===== TRON		N,T			*************
86	1.05	MEV	15.0	MEV	15.0%	1	1 T Y	C.CCCEVA BOL	832645F
							C:	BLANKET CALCULATIONS IN FUSION REACTOR BLANKET CALCULATIONS IN FUSION REACTOR NEW REDUCTS	5. 5.

						N, 4L)			***********
87	ð•00	MEV	15.0	MEV	10.0%	1	GEK	F.FROLHNER KFK	722078F
							0: 0:	TETAL ALPHA PRODUCTION REQUIRED. Calculation of Neutron Transport.	
88	8.00	MEV	15.0	MEV	15.0%	2	CCP	1.N.GOLUVIN KUR	724014f
							0:	FOR HELIUM ACCUMULATION CALCULATIONS.	
89	8.00	MEV	15.0	MEV	15. X	3	JAP	Y.SEKI JAE	762063F
		÷		-			. c:	HELIUM ACCUMULATION CALCULATIONS	
90	700.	KEV	15.0	MEV	20.0%	1	114	C.CGCEVA BUL	832047F
							. G: D: M:	(N:A) CROSS SECTION. ALSC PARTIAL CROSS SECTIONS FOR RESIDU IN GROUND STATE AND FIRST EXCITED STAT BLANKET CALCULATIONS IN FUSION REACTOR NEW REQUEST.	AL NUCLEUS E NEEDED. S.
BERYLL	LÚM 9		NEU	TRON		SPEC	AL QUAN	NTITY (JESCRIPTICN ƏLCM)	
91	9.00	MEV	15.0	MĖV	20. %	2	USA	BERK DCE	801085F
	· .	• ••	•				0: 0:	ALL SIGNIFICANT ACTIVATION REACTION CR SECTIONS. DATA NEEDED FOR SHIELDING, ACTIVATION TEANSDUPT CALOUS ATIONS	GSS And Neutron
	UM 9	*****		====== HA		ÁLPHA			
¥2	100,	KEV	0.50	ME V	ó. X	·2	USA Q: A:	WALTON LAS THICK TARGET YIELDS REQUIRED. RELATIVE EMBOR DE 3.0 PERCENT NERVER.	781168N
		******		==`===				ALPHA ENERGY RESOLUTION 100 KEV.	
• OCRYLL/	LUM 10	=====	NEU 1	=====		N, NAL	. 2014		
93	14.0	MEV			25. X	د	USA	MULR LAS	801116F
							c: 	RADIDACTIVE TARGET 1.6X(10**6) YR PRJDUCTION OF HE-6 WANTED. KADIDACTIVE NEEDED FOR ACTIVATION OF GRAPHITE STRU	TARGET. CTURES.
	=#								

. 7

5 BCRCN		NEUTRON	TO	TAL CRGSS	SECTION	
94	4.50 MEV	15.0 MEV	2	USA	HEMMIG DOE	741001R
				4: Ú:	FUR SHIELDING EFFECT OF B(4)C.	
======= 5 Búron		NEUTRCN	D I	FERENTIA	L ELASTIC CROSS SECTION	==========
=======			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	********	***************************************	
95	4.50 MEV	15.0 MEV	15. × 2	USA	HEMMIG DOE	741003F
5 BCRGN		NEUTRON	ΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞΞ	ERGY-ANGL	E DIFFERENTIAL INELASTIC CROSS SECTION	

96	UP TO	15.0 MEV	10. % 2	USA	HEMMIG DEE	7410C5R
				A:	INCIDENT ENERGY RESOLUTION: 16. PERCENT. 15 PERCENT IN ENERGY SPECTRA. 20 PERCENT IN ANGULAR DISTRIBUTION IF NL ISOTROPIC. DELTA EIN') - 10 PERCENT.	T
= 5 BGRUN		NEUTRGN	######################################	ERGY-ANGL	E DIFF• PHOTON-PRODUCTION CROSS SECTION	
			\$===========	*******	## 12#\$	
\$7	1.00 KEV	15.0 MEV	15. * 2	USA	HENNIG DOE	7410C7R
				A:	INCIDENT ENERGY RESOLUTION: 10. PERCENT. 20 PERCENT IN ANGULAR DISTRIBUTION IF NO ISUTROPIC. DELTA E(GAMMA) - 10 PERCENT.	T
======= 5		FETERESESSESSESSESSESSESSESSESSESSESSESSESS		PTURE CRO	SS SECTION	
*******		*************		********		*********
98	25.3 MV	200. KEV	20.0% 1	UK	E.LYNN HAR	832052R
				L.: M:	REQUIRED FOR SCATTERED NEUTRON CORRECTIO NEW REQUEST.	N•
3======= 5	***********		======================================			**********
3 80800			============	=======		********
99	750. KEV	15.0 MEV	20 . x 2	USA	BERK DOE	781156F
				٥:	DATA NEEDED FOR BLANKET, SHIELD AND MAGN	ET HEAT
*=======						
5 BCRCN	10		N.	2N		=======
100	8.00 MEV	14.0 MEV	15.0% 2	FR	B.DUCHEMIN SAL	732006F
				A:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS	NIE.
*=======		**********				
5 BCRON	10	NEUTRON	N, =======================	3N =======		
101	10.0 MEV	14.0 MEV	15.0% 2	FR	B.DUCHEMIN SAC	7320C7F
				A:	QUOTED ACCURACY AT 2 STANDARD DEVALTIONS	·
				6: :========	FOR IMPROVED CALCULATION OF NEUTREN BALA	NCE.
5 BORON	10	NEUTRGN	N •	ALPHA		
102	100. KEV	1-00 MEV	2.0% 1	UK		6420016
102			2007 1		ALSO (N,ALPHA, GAMMA).	0420018
				- A: G:	ENERGY DEPENDENCE NEEDED MCRE ACCURATELY USED AS A STANDARD IN CROSS SECTION MEAS	SUREMENTS.
103	10.0 KEV	2.00 MEV	1	BLG	A.FABRY MCL	682004R
				A: 0:	ACCURACY I PERCENT TO 100 KEV, 3 PERCENT Standard crúss Sectiún. Calculatiún of standard neutron spectrum	E ABCVE.
104	1.00 KEV	100. KĒV	1.X 1	USA	SMITH ANL	691364R
	·				HEMMIG DOE	,
				Q: A: D:	ABSCLUTE VALUES REQUIRED. ALPHA(0)/ALPHA(1) RATIC NEEDED FCR BLTH GAMMA DETECTION. 3 PERCENT ACCURACY USEFUL TO 100 KEV, 1(FOR USE AS STANDARD.	ALPHA AND D PERCENT
105	100. KEV	30C. KEV	3. x 1	USA	SMITH ANL	691365R
					HEMMIG DGE	
				4: 6:	ABSLUTE VALUES REGUTRED. Alpha(0)/Alpha(1) RATIU NEEDED FGR EGTH GAMMA DETECTION. ACCURACY USEFUL AECVE 100 KEV. FGR USE AS STANDARD.	ALPHA ANC
106	300. KEV	10.0 MEV	5. % 1	USA	SMITH ANL	69136ch
	•			- ù:	ABSOLUTE VALUES REQUIRED.	
					ALPHA(0)/ALPHA(1) RATIG NEEDED FOR ECTH GAMMA DETECTION.	ALPHA AND

C: FOR USE AS STANDARD.
						=====		******	*****************	***********************	*******
107	30.OE	ĸev	100.	KEV	1.	x	1	USA	SMITH HEMMIG	ANL DOE	651373
								Q: A: D:	AUSILUTE VALUES 3 PERCENT ACCURA ABOVE. FOR USE AS STAND	REGUIRED FOR 480 KEV GAMM ACY USEFUL TO 100 KEV, 10 Dard.	A. PERCENT
108	100.	KEV	300.	KEV	3.	×	1	USA	SMITH	ANL	ć91374
								Q: A: C:	AUSCLUTE VALUES 3 PERCENT ACCURA ABOVE. FOR USE AS STAN	DUE REQUIRED FOR 480 KEV GAMM Acy Useful to 100 keV, 10 Dard.	A. PERCENT
109	300.	KEV	10.0	MEV	5.	x	1	USA	SMITH	ANL	691375
								0: A: D:	AUSCLUTE VALUES 3 PERCENT ACCURA ABOVE. FOR USE AS STAND	REQUIRED FUR 480 KEV GAMM ACY USEFUL TG 10C KEV, 10 DARD.	A. PERCENT
110	5.00	ĸëv	10.0	MEV			2	ССР	L .N.USACHEV	Fēl	754025
								A: 0:	FROM 5.0 - 100 H Standard Cross S For More Detail	KEV ACCURACY 2 PERCENT. Section below 100 Kev. See introduction.	
111	100.	KEV	1.00	MEV	2.0	x	1	GER	H.KUESTERS	ĸfĸ	792187
TATUS			S REVIE	 W FY I			ANOC .	SEE 48			STATU
	======		2222222		=======	====					
BLALN I			ALCO NEU	======			======	. ALPHA			========
112	U	P TU	25.0	MEV	10.	x	2	USA	MCELRÜY	HED	801238
								0: U	TOTAL HE PRODUCT For Fmit Dosimet For Use as fluen	TION FOR MASS SPECTROMETRY TRY - NCL MGNITGR.	•
113	25.6	MEV	40.0	MEV	20.	×	2	USA	MCELRUY	HED	801304
							:	0: 0:	FOR FMIT DUSINE FOR USE AS FLUE	TION FOR MASS SPECTREMETRY [RY• NCE MUNITOR•	•
5 BGRON 1	0		NEU	TRON			SPECI	AL QUA	NTITY (DESCRIPTIO	JN BELOW)	
6 BCRON 1 				TR (IN 222222			SPECI	AL QUA	NTITY (DESCRIPTION	JN BELOW)	========
3 BGRON 1 	5.0C		NEU =======	TRGN MEV	20.	* * *	SPEC 1	USA	BERK	N BELOW)	======================================
5 BGRON 1 	5.0C	ME V	NEU 15.0	TRGN ====== MEV	20.	x -	2	USA USA Q:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC	DUE ACTIVATIUN REACTION CROSS Shielding,Activatiun and Culations.	801048 NEUTRON
5 BGRON 1 114 5 BGRON 1	5.0C	ME V	NEU 15.0	TR GN MEV MEV	20.	x -	2 2 ENER(USA USA Q: Q: SY-ANGL	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF	DUE ACTIVATION REACTION CROSS SHIELDING,ACTIVATION AND CULATIONS. RODUCTION CROSS SECTION	801048 NEUTRON
114 5 BGRON 1 5 BGRON 1 115	5.0C	ME V ME V ME V	NEU 15.0	TR GN MEV MEV TR ON MEV	20.	x - x - 	2 2 2 2 2 2	USA USA U: U: U: U: U: U: U: U: U: U: U: U: U:	BERK BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC DIFF. PHOTON-PF	DUE ACTIVATIUN REACTION CROSS SHIELDING,ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE	801046 NEUTRON
114 114 5 BGRON 1 115	5.0C	ME V	NEU 15.0 NEU 15.0	TRON MEV TRON TRON MEV	20.	* * * * * * * * * * * * * * * * * * *	2 2 ENERC	USA USA U: Y-ANGL USA O:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEJEJ FOR TRANSPURT CALC DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL	DUE ACTIVATION REACTION CROSS SHIELDING,ACTIVATION AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE CULATIONS.	801048 NEUTRON
114 114 5 BGRON 1 5 BGRON 1 115	5.0C	ME V	NEU 15.0	MEV MEV TR ON HEV	20.	x · · · · · · · · · · · · · · · · · · ·	2 2 ENERCI 2 ENERCI 2	USA USA USA USA USA O: DHA	BERK ALL SIGNIFICANT SECTIONS. DATA NEEJED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL	DOE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DOE BLANKET, SHIELD AND MAGNE COLATIONS.	801046 NEUTRON
114 114 5 BGRON 1 115 5 BGRON 1	5.0C	ME V	NEU 15.0 NEU 15.0	TRON MEV TRON MEV MEV	20.	x · · · · · · · · · · · · · · · · · · ·	2 2 ENERC 2 N,AL	USA USA USA USA O: DHA	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL	DOE ACTIVATIGN REACTION CRESS SHIELDING,ACTIVATIGN AND CULATIONS. RODUCTION CROSS SECTION DOE BLANKET, SHIELD AND MAGNE CULATIONS.	801048 NEUTRON 761167 T HEAT
114 114 5 BGRON 1 115 115 5 BGRON 1 115	5.0C	ME V 	NEU 15.0 NEU 15.0 15.0 NEU NEU 25.0	MEV MEV TRON MEV TRON TRON	20. 20. 20.	x	2 2 ENERC 2 2 3	USA USA USA USA USA USA O:	BERK BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE CULATIONS. HED	801048 NEUTRON 761167 T HEAT 801221
114 5 BGRON 1 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 116 116	5.0C 1 2.10 2.10 2.25.0	ME V ME V ME V ME V ME V ME V	NEU 15.0 15.0 15.0 15.0 25.0 40.0	MEV MEV TRON HEV MEV MEV	20. 20. 20. 10.	x x x x	2 2 2 2 2 2 3 3	USA USA USA USA USA USA	BERK ALL SIGNIFICANT SECTIONS. DATA NEEJED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY MCELROY	DOE ACTIVATIUN REACTION CROSS SHIELDING,ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION BLANKET, SHIELD AND MAGNE CULATIONS. HED	801046 NEUTRON
114 5 BGRON 1 5 BGRON 1 115 115 5 BGRON 1 116 116	5.0C 1 2.10 2.10 2.25.0	ME V 	NEU 15.0 NEU 15.0 15.0 NEU 25.0 40.0	MEV MEV MEV MEV MEV MEV	20. 20. 1c. 20.	x x x	2 2 ENERC 2 3 3	USA USA USA USA USA USA C: USA C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIMES MCELROY	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET. SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER.	801048 NEUTRON 761167 T HEAT 801221 601305
114 5 BGRON 1 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 116 117 117	5.0C 1 2.10 25.0 25.0		NEU 15.0 15.0 15.0 15.0 25.0 40.0	MEV MEV TRON MEV MEV MEV	20. 20. 20. 1C. 20.	x x x	2 2 2 2 2 2 2 3 3 3	USA USA USA USA USA C: USA C: AR DIF	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DOSIME FOR FMIT DOSIME	DOE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION BLANKET. SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER.	801046 NEUTRON
5 BGRON 1 114 5 BGRON 1 115 5 BGRON 1 115 115 116 117 5 CARBON	5.0C	ME V 	NEU 15.0 NEU 15.0 25.0 40.0	TR GN MEV TR ON MEV MEV MEV MEV	20. 20. 10.	x x x	2 2 ENERC 2 N.AL 3 3 ANGU	USA USA USA USA USA O: USA O: AR UIF	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FERENTIAL INLLAS	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET. SHIELD AND MAGNE CULATIONS. HED IRY AND TRACK RECORDER. HED IRY AND TRACK RECORDER.	801048 NEUTRON
5 BGRON 1 114 5 BGRON 1 5 BGRON 1 115 5 GGRON 1 116 117 5 GGRON 1 116 117 5 GGRON 1 118	5.0C		NE U 1 5 • 0 NE U 1 5 • 0 1 5 • 0 1 5 • 0 2 5 • 0 4 0 • 0 NE U 2 5 • 0	MEV MEV TRON MEV MEV MEV MEV MEV	20. 20. 1C. 20.	x x x	2 2 ENERC 2 3 3 3 ANGU	USA USA USA USA USA C: AR DIF AR DIF	BERK BERK BERK BERK DATA NEEDED FOR TRANSPORT CALC BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET. SHIELD AND MAGNE COULTIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER.	801048 NEUTRON 761167 T HEAT 801221 601305
114 5 BGRON 1 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 116 117 5 CARBON 118	5.0C 2.10 25.0 5.0C	ME V ME V ME V ME V ME V ME V ME V	NEU 15.0 NEU 15.0 25.0 40.0 NEU 25.0 20.0	TRON MEV TRON MEV MEV MEV TRON TRON	20 • 20 • 20 • 10 • 20 •	x x x x	2 2 ENERC 2 3 3 3 4NGU	USA USA USA USA USA C: DHA USA C: USA C: USA C: USA C: C: C: C: C: C: C: C: C: C: C: C: C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME	DOE ACTIVATIUN REACTION CROSS SHIELDING, ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DOE BLANKET, SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER.	801046 NEUTRON 761167 T HEAT 801221 801305
5 BGRON 1 114 5 BGRON 1 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 116 117 5 CARBON 118 5 CARBON	5.0C 1 2.10 25.0 5.0C 5.0C		NE U 1 5 • 0 NE U 1 5 • 0 1 5 • 0 2 5 • 0 4 0 • 0 NE U 2 5 • 0 4 0 • 0	TRON MEV TRON MEV MEV MEV MEV MEV TRON MEV	20. 20. 1C. 20.	x x x x	2 2 ENERC 2 3 3 3 2 ENERC 2 2 2 2 2 2	USA USA USA USA USA C: USA C: USA C: USA C: C: C: C: C: C: C: C: C: C: C: C: C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME FOR 4.43 MEV GAN MEASURE FOR AT I	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECERDER. HED TRY AND TRACK RECERDER.	801048 NEUTRON 761167 T HEAT 801221 601305
114 114 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 115 5 CARBON 118 5 CARBON 119	5.0C 2.10 25.0 5.0C 5.0C 9.00	ME V ME V ME V ME V ME V ME V ME V ME V	NEU 15.0 15.0 15.0 25.0 40.0 NEU 25.0 40.0 NEU 20.0	TRON MEV TRON MEV MEV MEV TRON TRON TRON TRON TRON MEV	20 • 20 • 20 • 1C • 20 • 5 •	x x x x	2 2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 2 2 2 2	USA USA USA USA USA C: DHA C: DHA C: C: C: C: C: C: C: C: C: C: C: C: C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DOSIME FOR FMIT DOSIME FOR FMIT DOSIME FOR FMIT DOSIME FOR FMIT DOSIME FOR A.43 MEV GAN MEASURE FOR AT I	DOE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DOE BLANKET. SHIELD AND MAGNE COLATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER.	801046 NEUTRON 761167 T HEAT 801221 601305
5 BGRON 1 114 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 116 117 5 CARBON 118 6 CARBON 119	5.0C 2.10 25.0 5.0C 9.00	ME V ME V ME V ME V ME V ME V ME V ME V ME V	NEU 15.0 NEU 15.0 25.0 40.0 NEU 25.0 40.0 NEU 25.0 15.0	TRON MEV TRON MEV MEV MEV TRON MEV TRON TRON MEV	20 • 20 • 20 • 1C • 20 • 5 •	x x x x x	2 2 2 2 2 2 2 3 3 3 3 2 2 2 2	USA USA USA USA USA C: AR DIF USA C: SY-ANGL USA C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR FMIT DUSIME FOR 4.43 MEV GAN MEASURE FOR AT I BERK FOR SHIELDING AN GENERATION D	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND ULATIONS. RUDUCTION CROSS SECTION DUE BLANKET. SHIELD AND MAGNE COLATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. MED TRY AND TRACK RECORDER. MED TRY AND TRACK SECTION DRL MA'S ONLY. EAST FOUR ANGLES. EMISSION CROSS SECTION DGE ND TRANSPORT STUDIES OF NE	801048 NEUTRON 761167 T HEAT 801221 601305
5 BGRON 1 114 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 115 5 CARBON 118 6 CARBON 119	5.0C 2.10 25.0 5.0C 9.00	ME V	NEU 15.0 NEU 15.0 25.0 40.0 NEU 20.0 NEU 15.0	TRON MEV TRON MEV MEV MEV MEV TRON TRON MEV	20 • 20 • 20 • 10 • 5 • 10 •	x x x x	2 2 ENERC 2 3 3 3 2 ENERC 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	USA USA USA USA USA C: DHA USA C: GY-ANGL USA C: C: C: C: C: C: C: C: C: C: C: C: C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DOSIME FOR FMIT DOSIME FOR FMIT DOSIME FOR A.43 MEV GAN MEASURE FOR AT I E DIFF. NEUTRON-CAL BERK FOR SHIELDING AN GENERATION D	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND ULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE COLATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. S SECTION S SECTION	801048 NEUTRON 761167 T HEAT 801221 601305
5 BGRON 1 114 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 115 5 CREON 1 118 6 CARBON 119 5 CARBUN 120	5.0C 2.10 25.0 5.0C 9.00 9.00	ME V	NEU 15.0 15.0 15.0 25.0 40.0 20.0 NEU 20.0	TR GN MEV MEV MEV MEV MEV MEV MEV MEV TR GN TR G	20 . 20 . 10 . 5 . 10 .	x x x x x x	2 2 ENERC 2 3 3 3 ANGU ENERC 2 2 ENERC 2 2	USA USA USA USA USA C: USA C: USA C: USA C: C: C: C: C: C: C: C: C: C: C: C: C:	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FGR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR 4.43 MEV GAN MEASURE FOR AT IN E DIFF. NEUTRON-C BERK FOR SHIELDING AN GENERATION DO BERK	DUE ACTIVATIUN REACTION CROSS SHIELDING, ACTIVATIUN AND ULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED DRL MA'S CNLY. LEAST FOUR ANGLES. EMISSION CROSS SECTION DGE ND TRANSPORT STUDIES OF NE TRANSPORT STUDIES OF NE S SECTION	801048 NEUTRON
5 BGRON 1 114 5 BGRON 1 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 115 5 BGRON 1 115 5 CARBON 119 5 CARBON 120	5.0C 2.10 2.10 2.5.0 5.0C 9.00 9.00		NE U 1 5 • C NE U 1 5 • C 1 5 • C NE U 2 5 • O 4 0 • O NE U 2 5 • O 4 0 • O NE U 2 5 • O 1 5 • O NE U 2 5 • O	TRON MEV TKON MEV TRON MEV MEV TRON MEV TRON MEV	20. 20. 1C. 20. 5. 10.	x x x x x x x x	2 2 ENERC 2 3 3 3 2 ENERC 2 2 ENERC 2 2 2 2	USA USA USA USA USA USA C: USA C	BERK ALL SIGNIFICANT SECTIONS. DATA NEEDED FOR TRANSPORT CALC E DIFF. PHOTON-PF BERK DATA NEEDED FOR DEPOSITION CAL MCELROY FOR FMIT DUSIME FOR FMIT DUSIME FOR SMILLDING AT MEASURE FOR AT I SERK FOR SHIELDING AT BERK FOR RADIATION DO D-T REACTOR OD	DUE ACTIVATIUN REACTION CROSS SHIELDING.ACTIVATIUN AND CULATIONS. RODUCTION CROSS SECTION DUE BLANKET, SHIELD AND MAGNE CULATIONS. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. HED TRY AND TRACK RECORDER. MED TRY AND TRACK RECORDER. SECTION DOE ND TRANSPORT STUDIES OF NE S SECTION DOE MAGE STUDIES OF NEXT GENE	801048 NEUTRON 761167 T HEAT 801221 801305 801221 801305 801221 801305 801221 801305 801221 801305 801221 801305

6 CARBEN	******		NEU	TRON		SPECI	AL QUA	NTITY (DESCRIPT	ION BELCW)		
121	9.00	MEV	15.0	MEV	10. %	2	USA	BERK		REACTION CROSS	801051F
							0:	DATA NEEJED FO TRANSPURT CA	R SHIELUING.	ACTIVATION AND N	NEUTREN
6 CARBON		=======	ALP	== = = = HA = = = = = =		ALPHA					
122	100	KEV	6 50	M=1/	4 •	2		WA. TON			72116.14
122	100.	KEV	0.50	MEV	0. 2	2	USA G: A:	THICK TARGET Y RELATIVE ERROR	LAS TIELDS REQUIRE LUF 3.0 PERCE	ED. Ent needed. D key.	781169N
					========					*======================================	*******
5 CARBEN =======				1 R L N =====						********	
123	8.00	MEV	15.0	MEV	10.0%	2	CCP	I.N.GOLCVIN	KUR		724016F
							с:	NEUTREN TRANSH	ISSION CALCU	LATIONS.	
STATUS	DER CO		US REVIE		INDC AND NE	ANDC.	SEE AP	PENDIX A.			
								COLEF. NGUTON			
				=====			=======		===================		*******
124	7.00	MEV	15.0	MEV	10.0%	2	JAP	Y.SEKI A.TAKAHASHI	JAE		832039F
							0: 	ENERGY-ANGLE U NEUTRON EMISSI ANGULAR DISTRI FOR ALL AVAILA WANTED BY A.TA NEUTRON TRANSF NEW REQUEST.	DIFFERENTIAL (ION REQUIRED. BUTION CF IN NDLE DISCRETE MAHASHI. PORT CALCULAT	CRUSS SECTIONS FO Elastically scat Levels especiald IGNS.	CR TCTAL FERED Y
======== 6 Carbûn	 12		 NEU	 TR ON		 N.P	******				*******
		-14001:		=====		=====		*************			
125	5.00	MEV	20.0	MEV	5.0%	2	JAP	S.ITGH	NAG		832041F
							а: С: м:	(N,P) CRUSS SE FOR CALCULATIL DISAGREEMENT E MEV. New REQUEST.	CTION. IN OF DETECTO Between kregei	R RESPENSE FUNCT	ICN. VE 16.0
6 CARBEN	12		NÉU	===== TRON		N.ALF	PHA				
122222913					************						
126	U.	p tu	15.0	MEV	15.0%	2	CCP 0:	I.N.GOLUVIN NEUTRON ABSORF	KUR PTION CALCULA	Flüns.	724017F
127	15.0	MEV	50.0	NEV	10. %	2	USA	CASWELL	NBS		701111G
							6: D;	MEASUREMENT AT Throughout T Gamma-Ray Prod Spectra Are Needed for Ene Radiotherapy	THRESHOLD AN THE RANGE SHOU Duction and C GF Interest. Ergy Jepusitie	ND SEVERAL ENERG JLD DE SUFFICIEN HARGED-PARTICLE UN CALCULATIONS I	IËS T• FOR
6 CARBON	12		NEU	TRON		N . NAL					

128	U	P IU	40.0	MEV	15.01	2	JAP	S.ITOH	NAG		8320406
					·		а: С: м:	SECONDARY NEUT SPECTRA ARE RE For detectur e Reactor neutro New Request.	IRON AND ALPH Quired. Efficiency de Unics experim	A PARTICLE ENERG' TERMINATION IN FU ENTS.	Y USICN
6 CARBON	12		NEU	22222 TR (N	:=====================================	N.N3/	ALPHA				
13.			15 0	<u>и сч</u>	15 05	·	660		2010		7240105
129	U	P 10	15.0	MEV	15.0%	2	۵: م:	SECONDARY NEUT AT 14. MEV.	RON ENERGY D	ISTRIBUTION REQU	724018F IRED
130	11	ΡΙΟ	20 - 0	MEV	15. *	2	USA '	FU	()(2)		7411749
130		a t o	60.0			. .			MOC		7211148
131	L.	P 10	50.0	MEV	10 • X	2	USA 0:	MEASUREMENT AT	NUS I THRESHLLD A	ND SEVERAL ENERG	701112G 1ES
		·					٥:	THROUGHOUT ALPHA SPECTRA NEEDED FOR ENE RADIOTHERAP DISCREPANCY E) Bétween EXPE CALCULATION DEPOSITION	THÈ RANGE SHO ARE OF INTER ERGY DEPCSITI (1575 àt 20 p Èrimèntal dat 5 df secondar Spectra.	ULD BE SUFFICIEN EST UN CALCULATIONS I EV NEUTRON ENERG A AND THEGRETICA Y PARTICLE ENERG	T. FCR Y L
132	U	F TO	15.0	MEV	15. %	. 2	JAP	Y.SEKI	JAE		762065F
							u:	TUTAL ALPHA PA	RODUCTION CRC	SS SECTION AND S	ECCNDARY
		# == ===					:0	NEUTRON TRANSP	PORT AND HELI	UM ACCUMULATION	CALC. =======

6 CARBLN	12		NEU	===== Trcn		SPECI	AL QUA	<pre>====================================</pre>	

133	100.	EV	14.0	MEV	30. X	2	USA	BOWMAN NBS 82	210518
							Q: A:	ELECTRON EXCITATION OR REMOVAL INDUCED BY SUC Acceleration of nucleus in reutron-nucleus Scatter (n.n.e). Incident energy resolution: 30. percent.	DEN
							0: M:	NEUTRÚN SPECTRUM CALCULATIONS. New riquest.	
CARBON	========	======					======		
	*======			======					
134	5.00	MEV	15.0	MEV	25• X	3	USA	MUIR LAS 80) 1 1 1 7 F
							0: A: 0:	PRODUCTION OF BE-10 WANTED. 25 percent accuracy adeguate below 10 MeV. Needed for accivation and parasitic absorptio In graphite structures.	/N
	=========								
======			469	======		41264			
1.i5	υP	το	10.0	MEV	20.0 x	2	JAP	N•YAMAND SAE 75	20701
							a:	EXPERIMENTAL DATA WANTED. ANGULAR DISTRIBUTIC	in .
								ALSU REQUIRED. REQUIRED NEUTRON ENERGIES ARE 100 KEV TO 10 MEV.	
							υ:	FOR NEUTRUN SHIELDING AND EVALUATION OF NEUTR Source.	CN
								FOR EVALUATION OF NEUTRON ENERGY SPECTRUM IN RECYCLE PROCESS.	FUEL
7 NITRUG	=======================================		NEU =======	TR CN ======		CAPTU	======	ISS SECTION 	
136	1.00	KEV	1.00	MEV	10 . X	2	USA	HEMMIG DOE 74	10098
						-	Q:	RESCNANCE PARAMETERS NEEDED.	
							Ă:	INCIDENT ENERGY RESOLUTION: 20. PERCENT.	
7 NITROG	======= EN	*****	NÉU	=± ≓= = = TRGN		TOTAL	ALPHA	PRODUCTION CRESS SECTION	*=====
********				======			======		
137	9.00	MEV	15.0	MEV	20. X	2	USA	BERK ÚLE 76	1097F
							ο:	FOR RADIATION DAMAGE CALCULATIONS.	
	222 22 22 2 F N					======= SPECI		TTACTORIAN ACTION ACTION	
========				======			======		
138	9.00	McV	15.0	MEV	20. X	2	USA	BERK DEE 80	01041f
							a:	ALL SIGNIFICANT ACTIVATION REACTION CRUSS	
							0:	SECTIONS. Data needed for shielding. Activation and neu transport calculations.	JTRCN
7 NITRUG	======= EN		ALP	====== HA		ALPHA		***************************************	
	32322383								
139	UP	TO	7.00	MEV	10.0%	з	UK	A.WHITTAKER HAR 83	320 E 34
							0: M:	FUEL REPROCESSING. New Request.	

7 NITROG	EN 14 111111	******	NEU	TRGN =====	********	DIFFE	RENTIA	L ELASTIC CROSS SECTION	
140	1.00	MEV	15.0	MEV	5.0%	. 2	FR	A.MICHAUDON BRC 69	2015
							4:	AVERAGE (1-CUS) ACCURACY 10 PERCENT. ANGULAR RESOLUTION - 2.5 DEGREES UP TO 20 DEC	REES
							u :	FOR AIR SCATTERING CALCULATION. NEW EVALUATION TO BE CONE IF NEW EXPERIMENTAL	
							м:	DATA. SUBSTANTIAL MODIFICATIONS.	-
				=======			======		
7 NITRUG =======	EN 14 ========		NEU	TRCN ======		TGTÁL	PHOTO	N PRODUCTION CROSS SECTION	
141	1.00	KEV	15.0	MEV	10.01	1	FR	C.PHILIS BRC 75	920626
							C:	EVALUATION SUFFICIENT	
7 NITROG	EN 14		NEU	TREN		NEUTR	CN EMI	SSION CRUSS SECTION	
142	4.00	MEV	15.0	MEV	10.0%	2	FR	A.MICHAUDEN BRC 65	92017f
						-	Q: A:	SECUNDARY ENERGY-ANGLE DISTRIBUTIONS REQUIRED AVERAGE (1-CUS) ACCURACY 10 PERCENT.	•
	-	-	۰.				0:	FOR AIR SCATTERING CALCULATION. New Evaluation to be done if new explrimental	-
	•	:					м:	DATA. SUBSTANTIAL MUDIFICATIONS.	

7 NITROG	LN 14		NEU	TRCN ======		ENERG	Y-ANGL	E DIFF• NEUTRGN-EMISSION CRUSS SECTION	.====
143	9.00	MEV	15.0	MEV	10. ¥	2	USA	568K 006 24	
					7	-	- •··	DATA NEEDED FOR SHIFLDING AND NEUTRAN	, , , , , , , , , , , , , , , , , , ,
				#				TRANSPORT CALCULATIONS.	

8 OXYGEN	*******		NEU	TRON		ELAST	IC CRUS	SS SECTION
144	5.00	KEV	10.0	MEV	5• X	2	USA	DEI BET 76105CR
							0:	TL RESOLVE DISCREPANCIES EETWEEN CALCULATED AND MEASURED MULTIPLICATION FACTORS IN SMALL CRITICAL FACILITIES.
8 CXYGEN			NEU	2222222 TRÉN		DIFFE	RENTIAL	L ELASTIC CROSS SECTION

145	10.0	KEV	20.0	NEV	5 . X	2	USA	HEMMIG DOE 661028R
							Li	NEEDED FUR FAST REACTOR REFLECTOR BURINS.
146	5.00	KEV	10.0	MEV	5. %	2	USA	DEI BET 761051R
							U.	MEASURED MULTIPLICATION FACTORS IN SMALL CRITICAL FACILITIES.
8 CXYGEN			NEU	TRGN	=======================================	TUTAL	PHOTOM	N PRODUCTION CROSS SECTION
						_		
147	1.00	KEV	15.0	MEV	10.02	2	FK D:	A.MICHAUDUN BRC 742028R FOR SHIELDING CALCULATION.
BOXYGEN			NE U	TR CN =======		ENERG	Y-ANGLE	E DIFF. NEUTRON-EMISSION CROSS SECTION ====================================
148	9.00	MEV	15.0	MEV	20 . X	1	USA	BERK DOE 781089F
							0:	DATA NEEDED FOR SHIELDING, ACTIVATION AND NEUTRON TRANSPORT CALCULATIONS.
8 CXYGEN		********	====== NEU			TOTAL	PROTU	N PRUDUCTION CROSS SECTION
149	9.00	MEV	15.0	MEV	20. %	2	USA A*	BERK DOE 781113F
8 OXYGEN			NEU =====	TRCN =======	==================	TOTAL	ALPHA	PRODUCTION CROSS SECTION
150	9.00	MEV	15.0	MEV	20 • X	2	USA	BERK DCE 781101F
					============			
8 CXYGEN			NEU	TR GN == == == ==		SPECI	AL GUA	NTITY (DESCRIPTION BELGW)
151	9.00	MEV	15.0	MEV	20 . X	2	USA	BERK DOE 801042F
					,		٥:	ALL SIGNIFICANT ACTIVATION REACTION CROSS
							:ن	DATA NËEDED FOR SHIELDING, ACTIVATILN AND NËUTRUN TRANSPORT CALCULATIUNS.
8 OXYGEN			≠===== ALP	======= HA		ALPHA		
			s=====				======	
152	U	P TU	15.0	MEV	20.0%	2	FR	F.JOSSO CAD 762138R
							A: C: M:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. FOR FAST REACTUR FUEL CYCLE CALCULATION. Substantial Modifications.
153	100.	KEV	6.50	MEV	Ö. %	2	USA	WALTON LAS 701170
							Q: A:	THICK TARGET YIELDS REQUIRED. Relative erkor of 3.0 percent needed. Alpha energy resolution 100 kev.
154	U	P TO	7.00	MEV	10.0%	з	UK	C.G.CAMPHELL WIN 7921156 V.HARNES UKW
							ป: M:	FOR FAST REACTORS AND FOR FUEL REPRICESSING Substantial modifications.
155	4.40	MEV	6 .10	MEV	30.0%	2	GER	H.KUESTERS KFK 792254F
							a: a:	THICK-TARGET YIELD FCR UC2 GR PUG2. MEASUREMENT WANTED. Neutron Emission Frum Fuel.
8 GXYGEN	16		======= NEU	======= ITR CN		TOTAL	CROSS	SECTION
=======	*******		======		*********			
156	5.00	KEV .	10.0	MEV		, 2	CCP	L.N.USACHEV FEI 7540164
		·					A: 0;	FROM 5.0 - 100 KEV ACCURACY 10 PERCENT. FROM 0.1 - 0.8 MEV ACCURACY 6 PERCENT. FROM 0.8 - 4.5 MEV ACCURACY 10 PERCENT. AHGVE 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. NEED FOR FAST REACTOR CALCULATIONS.
	1 - = 1 4 - = -		=== ===					

8 CXYGEN	16	NEUTRON		N, ALPHA	
157	UP TO	50.0 MEV	10. X	2 USA	CASWELL NBS 761113
				c: U:	MEASUREMENT AT THRESHOLD AND SEVERAL ENERGIES IHRGUGHOUT THE RANGE SHEULD BE SUFFICIENT. GAMMA-RAY PRODUCTION AND CHARGED-PARTICLE SPECTRA ARE OF INTEREST. NEEDED FOR ENERGY DEPOSITION CALCULATIONS FOR RADIOTHERAPY.
15ê	7.50 MEV	15.0 MEV	15. %	2 JAP	Y•SEKI JAE 762066
				Q:	TGTAL ALPHA PRODUCTION CROSS SECTION Helium accumulation calc. In LI-OXIDE Blankets
159	UP IC	15.0 MEV		2 USA	BERK DOE E01065
				A: (:	ACCURACY TO 10 PERCENT NEAR 15 NEV AND 50 PERCENT NEAR 2.5 MEV. Data needed for clagnostics.
======================================	16	NEUTRON		N.NAL PHA	
160	UP TC	50.0 MEV	10. X	2 USA Q:	CASWELL NBS 701114 MEASUREMENT AT THRESHOLD AND SEVERAL ENERGIES
				0:	THRUUGHOUT THE RANGE SHUULD BE SUFFICIENT. Gamma-Ray production and charged-particle Spectra are uf interest. Needed for energy Jeposition Calculations for Radiotherapy.
161	UP TO	15.0 MEV	15. X	2 JAP	Y.SEKI JAE 762067
				C: U:	SECONDARY NEUTRON ENERGY SPECTRA REGUIRED. Calculation of Neutron transport and Helium Accumulation in Li-Oxide Blankets
8 OXYGEN	16	NEUTRON		NIN4 ALPHA	
162	UP TO	50.0 MEV	10. %	2 USA	CASWELL NBS 761115
				0:	NGHMALIZATION. MEASUREMENT AT THRESHULD AND SEVERAL ENERGIES THROUGHOUT THE RANGE SHOULD BE SUFFICIENT. ALPHA SPECTKA ARE OF INTEREST. NEEDED FUR ENERGY DEPOSITION CALCULATIONS FOR RADIOTHERAPY.
8 G XYGEN	16	JRI TON		T,N	
163	UP TO	12.0 MEV	10.0%	2 JAP	K.TANAKA JAE 752071 H.KUDO JAE
				G: A: D:	EXPERIMENTAL DATA WANTED. 5% ENERGY RESOLUTION DESIRABLE. FOR PRECISE ESTIMATION OF LIZC EURNUP IN CTR BLANKET. FOR EVALUATION OF NUMBER OF C 18 ATUMS FROM BETA PLUS DECAY OF F 18 FREDUCED THROUGH D 16 (T,N) F 18.
S CXYGEN	17	NEUTRON		N,P	

164	UP TO	20.0 MEV	20.0%	2 JAP	T.ISHIZUKA JAP 832022 H.KADUTANI JAP 832022
				0: M:	SHIELDING PRIMARY COOLING SYSTEMS FROM DELAYED NEUTRONS FROM N-17. New request.
8 OXYGEN	17	NEUTRON		N.ALPHA	
					• VANAR ITA 800
165	25.3 MV	15.0 MEV	30.0%	2 JAP	T.KAWAKITA PNC 752073 Evaluated data wanted.
				ō:	FUR EVALUATION OF QUANTITY OF C 14 FRGM OXIDE FUE IN FAST REACTOR. BOTH EVALUATIONS AND MEASUREMENT ARE SCARCE.
B CXYGEN	17	ALPHA		ALPHA,N	
166	UP TO	10.0 MEV	20.0%	2 JAP	N.YAMANU SAE 792072 EVERTMENTAL DATA WANTED, ANDLIAR DISTRIBUTION
				0:	ALSU REGUIRED. REQUIRED NEUTRON ENERGIES ARE 100 KeV TO 10 MEV. For Neutrun Shielding and Evaluation of Neutron Scurce. For Evaluation of Neutrun Energy Spectrum In Fuel Cycle Prücess.
a axygen	18	NEU TR ÛN		N,ALPHA	
			******		······································
167	1.50 MEV		30.0%	2 SWD	J.CLKERT AKA 792053 ASEA-ATUM AKA VAESTERAAS AKA
				С: м:	INCIDENT ENERGY: FISSION SPECTRUM For the Calculation of the C-15 fruduction in the Couling media of BWR. Substantial modifications.
		*************		**********	

& CXYGEN	18	ALPHA	**********	ALPHAN	== == =	***************************************	=
				***			=
168	UP TO	9.CO MEV	10. X	3 U	SA	DE1 BET 661010	ħ
					A: 0:	INCIDENT ENERGY RESOLUTION: 200 KEV. Needed fur intrinsic source.	
169	4.00 MEV	7.50 MEV	30.0%	2 F	Ŕ	692029	R
					Q: A: J:	SECONDARY ENERGY DISTRIBUTION REQUIRED. RESOLUTION FOR E AND E'. I.U MEV. QUOTED ACCURACY AT 2 STANCARC DEVIATIONS. FOR SHIELDING OF ALPHA EMITTING SAMPLES. NEW EVALUATION TO BE JONE IF NEW EXPERIMENTAL DATA.	
170	UP TO	10.0 MEV	20.0%	2 J	AP	N.YAMANU SAE 752074	6
					c: 0:	EXPERIMENTAL DATA WANTÉC. ANGULAR DISTRIBUTION ALSU REQUIRED. REQUIRED NEUTRON ENERGIES ARE 100 Kev tû 10 mev. For Neutrûn Shielding and Evaluatiûn of Neutron Sûurce. For Evaluation of Neutrin Energy Spectrum In Fuel Recycle Process.	l
9 FLUCRI	NE 19	NEUTRUN		DIFFERE	NTIAL	L ELASTIC CRUSS SECTIÚN	-
171	2.00 MEV	15.0 MEV	10.0%	2 (ср	i.n.GDLGVIN KUR 724615	= F
				-	с:	USE IN COOLANT.	•
9 FLUORI		NEUTRON		INELAST	IC CR	RUSS SECTION	=
172	1.0C MEV	15.0 MEV	15.0%	2 C	CP	I.N.GOLUVIN KUR 724020	F
					υ:	NEUTRUNICS CALCULATIONS FOR BLANKET AND SHIELD.	
9 FLUCRI	 NE 19 	NEUTRON		ENERGY-	ANGLE	E DIFFERENTIAL INCLASTIC CRUSS SECTION	=
173	100. KEV	20.C MEV	15. X	2 U	SA	FU ORL 741165	.R
					c:	ONLY DATA AT 14 MEV AND BELCW 3.6 MEV.	
9 FLUCRI	======================================	NEUTRON		ABSORPT	10N C	CRÚSS SÉCTIÓN	=
174	25.3 MV	15.0 MEV	15.0%	2 C	CP	I.N.GCLOVIN KUR 724021	F
					c: o;	ALL NEUTRON ABSURPTION PROCESSES SHOULD BE Included. Neutronics calculations and energy depusition in Cullant.	
175	2.00 MEV	20.C MEV	5. X	2 U	SA	FU URL 741170	F
9 FLUCRI	 Në 19 	NEUTRON		TUTAL P	HGTCN	A PREDUCTION CROSS SECTION	:= :=
	5.0.0 45.1		17				
176	SCU. KEV	15.0 MEV	15.0%	2 (ц: сР	GAMMA RAY SPECTRA ALSO REQUIRED.	F
S FLUCRI	======================================	NEUTRON		LNERGY-	ANGLE	E DIFF. NEUTRÛN-EMISSION CRUSS SECTION	:=
							-
177	9.00 MEV	15.0 MEV	20. *	2 U	SA 0:	BERK DÜE 781087 DATA NEEDED FUR SHIELDING, ACTIVATION AND NEUTRON	°F I
					-	TRANSPORT CALCULATIONS.	
9 FLUCR1	NE 19	ALPHA		ALPHA N	=====		:=
176	υΡ Τΰ	15.0 MEV	30.0%	2 F	R	BOUCHEMIN SAC 732039	Ĩ
					0: A:	ENERGY DISTRIBUTION REQUIRED. Quoted accuracy at 2 standard deviations. EGR Shielding of Albaremitting materials.	
179	100. KĒV	6.50 MEV	6 . %	2 U	SA .	•ALTON LAS 781171	in
					Q: A:	THICK TARGET YIELDS REQUIRED. Relative Error of 3.0 percent needed.	
*******	=======================================					ACTING CHERGY RESULVITED IN AN REV.	:=
11 SUDIU =======	M 22 ===================================	NEUIRON ====================================		CAPIURE	CR09		:=
180	25.C MV	15.0 MEV	15.0%	1 G	ER	H-KUESTERS KFK 792154	16
					0:	EVALUATION MANTED. REDUCTION OF NA22.	
11 SGDIU	M 23	NEUTRGN		TOTAL C	ROSS	:=====================================	:=
181	100. KEV	500. KEV	2.0%	2 U	к	J-BUTLER WIN 792120	a
					Q:	ACCURACY FUR AVERAGE VALUE GF THE ERRCR BETWEEN E AND 2E.	

11 SCDIUM	23	NEUTRON		DIFFERENTIA	L ELASTIC CROSS SECTION	==== ====
182	10.0 KEV	15.0 MEV	10 . X	2 USA	HEMMIG DOE 7410	126
				A :	15 PERCENT IN ANGULAR DISTRIBUTION.	
11 SODIUM	23	NEUTR CN	*******	ENERGY DIFF	ERENTIAL INELASTIC CROSS SECTION	2.25
				**********		==\$
183	2.0C MEV	10.0 NEV	10. X	2 USA	SMITH ANL 6210	694
				a:	TOTAL INTEGRAL OVER 4PI REQUIRED. SPECTRA AT SEVERAL ANGLES IF SIGNIFICANTLY ANISDIPPOPIC.	
				Α:	INCIDENT ENERGY RESOLUTION: 10. PERCENT. Delta E(Nº) le 10 percent.	
11 SODIUM	23	NEUTRON		ENERGY-ANGL	E DIFFERENTIAL INCLASTIC CROSS SECTION	===
********					***************************************	===
184	UP TO	2.00 MEV	5 . X	2 USA	HEMMIG DCE 7410	146
				4:	INCIDENT ENERGY RESULUTION: 10. PERCENT. ACCURACY OF 15 PERCENT IN ENERGY SPECTRA. DELTA E(Nº) - 10 PERCENT.	
185	2.00 MEV	15.0 MEV	10. %	2 USA	HENMIG DUE 7410	154
				Α:	INCIDENT ENERGY RESOLUTION: IC. PERCENT. ACCURACY OF 15 PERCENT IN ENERGY SPECTRA. Delta E(N*) - 10 percent.	
196	15.C MEV	35.0 MEV	15 . X	2 USA	CARTER HED 2011	1 JF
				0:	FOR FMIT CALCULATIONAL DUSIMETRY.	
11 SGDIUM	23	NEUTRON		CAPTURE CRO	ISS SECTION	====
187	100- EV	10C. KEV		2 116		0.20
107	1001 20			2 OK A:	ACCURACY.10 PERCENT UP TO 10 KEV, 20 PERCENT	ULK
				0:	ABOVE. For Fast Reactors. Discrepancy in Radiatiún Width Data at 3 kev Resúnance.	
188	25.3 MV	4.00 KEV		2 CCP	N.N.NIKOLAEV FEI 7140	02F
				c:	CAPTURE WIDTH OF 2.9 KEV RESONANCE SHLULD BE MEASURED IN THREE DIFFERENT EXPERIMENTS, RESU SHOULD COINCIDE WITHIN LIMITS OF 5-7 PERCENT. IF HIGH RPI CAPTURE WIDTH CONFIRMED, ENERGY DEPENDENCE OF CAPTURE CROSS SECTICN SHOULD BE MEASURED FROM THERMAL TO RESONANCE REGIN TO INVESTIGATE INTERFERENCE BETWEEN DIRECT AND RESUNANCE CAPTURE. MEASUREMENTS OF GAMMA RAY SPELTRA IN THERMAL AND 2.95 KEV REGIONS DESIRABLE FOR DECISILN ABOUT EXISTENCE UF INTERFERENCE EFFECTS. DIRECT MEASUREMENT OF THE EFFECTS.	LTS C
	n.			A : G :	INTEGRAL IN THE SUDIUM MEDIUM FRUM 24 KEV NEUTRON SOURCE SEEMS TÙ BE USEFUL FÛR DECIDIN THE QUESTION ABOUT THE 2.9 KEV RESONANCE CAPTURE WIDTH. ACCURACY REQUIRED TÙ BETTER THAN 10. PERCENT. FUR CALCULATION OF NA ACTIVATION IN LMFBR. SEE ALSU GENERAL COMMENTS IN THE INTRÉGUCTION.	G
189	5.00 KEV	10.0 MEV		2 CCP	L.N.USACHEV FEI 7540	1 7 R
				A: 0:	FRÚM 5.0 - 100 KEV ACCURACY 44 PERCENT. FRÚM 0.1 - 0.8 MEV ACCURACY 50 PERCENT. FRÚM 0.6 - 4.5 MEV ACCURACY 50 PERCENT. ABOVE 4.5 MEV REGULREMENTS 2 TIMES WEAKER. NEED FOR FAST REACTOR CALCULATIONS. FUR MURE DETAIL SEE INTRODUCTION.	
190	500. KEV	22.0 MEV	10. %	2 USA	CARTER HED 8012	22F
				G:	ACTIVATION IS REQUIRED FOR FMIT.	
191	22.0 MEV	40.0 MEV	20. %	2 USA	CARTER HED 8013	06F
				Q:	ACTIVATION IS REQUIRED FOR FMIT.	
11 SODIUM	23	NEUTRCN		N,2N		====
102		20 0 MEV	16 %	2 1154	LEMM10	24.5
176	QF IU			- 03A 0:	NEEDED FOR COCLANT ACTIVATION.	
103	20.0 MEV	30.0 MEV	20 . •	2 116 4		275
. 123	ZVOU MEV	JU-U MEV	20.0 %	د USA. ۲.:	DUSIMETRY FUR FNIT FACILITY.	218
						== =
11 SCDIUM	23	NEUTRCN		N•P		
194	UP TG	20.0 MEV	10. X	2 USA	LARSON ORL 8012	62F
			********	: 	ACTIVATION MEASUREMENT TO GUIDE MUDEL Calculations.	

11 SCDIU	:=====================================	NEUTRÜN				=======
		*************	**********		***************************************	*******
195	UP ТО	20.0 MEV	10. %	2 USA	LARSON CRL	801263R
				a:	ACTIVATION MEASUREMENT TO GUIDE MODEL	

11 SODIU	/M 23	NEUTRON		SPECIAL QUA	NTITY (DESCRIPTION BELGW)	
190	1.DU KEV	14.0 MEV	3C • X	2 USA	BUWMAN NBS	8210528
				Q:	ACCELERATION OF NUCLEUS IN NEUTRON NUCLE	SUDDEN US
				A	SCATTER (N.NºE). Incident energy resolution: 30. percent.	
				0 M	NEUTRUN SPECTRUM CALCULATION. New Request.	
						========
=======	/M 23 ====================================	*=====================================		RESONANCE F	AR AME I ER S 	=======
197	2.96 KEV	100- 654		2 ((9	M.N.NIKOLAEV FEI	7140016
					NEUTROLALY ILL	140016
				Ă	NEUTRON WIDTH FUR 2.95 KEV LEVEL WANTED WI	тн
					ALL OTHER WIDTHS REQUIRED WITH 10 PERCENT	
				Ú:	FOR FAST REACTOR CALCULATION.	
STATUS						STATUS
U	INDER CONTINUEL	IS REVIEW BY N	EANDC. SEE	APPENDIX A		
12 MAGNE	SIUN	A4 PHA		AL PHA . N		
198	100. KEV	6.50 MEV	6. X	2 USA	WALTCN LAS	781174N
				G	THICK TARGET YIELDS REQUIRED.	
				Α:	INCIDENT ÉNERGY RESOLUTION: 100 KEV. Relative error of 3.0 percent needed.	
					ALPHA ENERGY RESOLUTION 100 KEV.	
12 MAGNE	SIUM 24	NEUTRON		N,P		
					=======================================	
199	UP TO	20.0 MEV	10. %	3 USA	NCELROY HED	861224F
	,			Q:	ACTIVATION IS REQUIRED.	
				C:	FUR FMIT DUSIMETRY.	
200	20.0 MEV	40.0 MEV	20. X	USA د	MCELROY HED	801307F
				ų:	ACTIVATION IS REQUIRED.	
		·			FUR FALL DUSIMETRY.	
13 ALUMI	INUM 27	NEUTRún		ENERGY DIF	ERENTIAL INELASTIC CROSS SECTION	
201	UP TO	15.0 MEV	15.0%	2 CCP	I.N.GOLOVIN KUR	794011F
				0.	FOR NEUTRON TRANSPORT CALCULATIONS.	
13 ALUM1		NEUTRON		TOTAL PHOT	IN PRODUCTION CRUSS SECTION	
=======	***********		1===#=#=#=###			
202	25.3 MV	15.0 MEV	15. %	3 JAP	M.KASAI MAP	762075F
				ى	GAMMA-RAY HEATING CALCULATIONS	
			*********		***************************************	
SUCCESSES		NEUTRON		N,2N ==========		
20.3	UP TO	16.0 MEV	15. *	2 USA	YOUNG LAS	80111SE
203	UP TO	16.0 MEV	15. X	2 USA	YOUNG LAS	801115F
203	UP TO	16.0 MEV	15. X	2 USA Q.	YOUNG LAS : (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCHER. : NEEDED TO DESCLVE EXPERIMENTAL DISCHERANCE	801115F
203	UP TO	16.0 MEV	15 . X	2 USA ຜູ	YOUNG LAS : (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCMER. : NEEDED TO RESOLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS.	801119F 62C. 185
203	UP TO 16.C MEV	16.0 MEV 30.0 MEV	15. X	2 USA 2 Ú	YOUNG LAS : (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCMER. : NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED	801115F SEC. IES 821071F
203	UP TO 16.C MEV	16.0 MEV 30.0 MEV	15. X	2 USA 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	YOUNG LAS (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FMIT FACILITY.	801119F SEC. ES 821071F
203	UP TO 16.C MEV	16.0 MEV 30.0 MEV	15. X	2 USA Q U 2 USA M	YOUNG LAS (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCNER. NEEDED TO RESOLVE EXPERIMENTAL DISCREPANCE AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FWIT FACILITY. NEW REQUEST.	801119F SEC. ES 821071F
203 204 13 ALUMI	UP TO 16.C MEV INUM 27	16.0 MEV 30.0 MEV NEUTRGN	15. × 20. ×	2 USA Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	YOUNG LAS (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCHER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FMIT FACILITY. NEW REQUEST. E DIFF. NEUTRON-EMISSION CROSS SECTION	801119F 5EC. ES 821071F
203 204 13 ALUM I	UP TO 16.C MEV [NUM 27	16.0 MEV 30.0 MEV NEUTRGN	15. X 20. X	2 USA Q U 2 USA C M ENERGY-ANG	YOUNG LAS (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCREFANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FWIT FACILITY. NEW REQUEST. E DIFF. NEUTRON-EMISSION CROSS SECTION	801119F SEC. 821071F
203 204 1.3 ALUM I 205	UP TO 16.C MEV INUM 27 S.00 MEV	16.0 MEV 30.0 MEV NEUTR GN 15.0 MEV	15. X 20. X	2 USA Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	YOUNG LAS : (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCMER. : NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED : LONG TERM ACTIVATION OF FAIT FACILITY. : NEW REQUEST. BERK DOE	8011119F SEC. ES 821071F
204 204 13 ALUMI 205	UP TO 16.C MEV [NUM 27 S.00 MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV	15. x 20. x 20. x	2 USA Q U 2 USA ENERGY-ANG 2 USA Q	YGUNG LAS YGUNG LAS ISCNER. ISCNER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FMIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING, ACTIVATION AND	8011119F SEC. ES 821071F SEC. 821071F SEC. 821071F SEC. 821071F
204 204 13 AL UM 205	UP TO 16.C MEV INUM 27 S.00 MEV	16.0 MEV 30.0 MEV Neutrgn 15.0 Mev	15. x 20. x 20. x	2 USA Q Q Q Q Q Q Q Z Q Q Q Q Q Q Q Q Q	YOUNG LAS (N.2N) CROSS SECTION FOR PRODUCTION OF 6-S ISCNER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FMIT FACILITY. NEW REQUEST. BERK DOE BERK DOE BATA NEEDED FOR SHIELDING, ACTIVATION AND TRANSPORT CALCULATIONS.	8011115F SEC. ES 821071F
203 204 13 AL UM 1 205 206	UP TO 16.C MEV [NUM 27 S.00 MEV 15.0 MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV 35.0 MEV	15. x 20. x 20. x	2 USA Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	YOUNG LAS ISCMER. ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FHIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATION AND TRANSPORT CALCULATIONS. DURAN HED	801115F EES 821071F 761078F NEUTRGN 801054F
203 204 13 ALUM 1 205 206	UP TO 16.C MEV INUM 27 S.OO MEV 15.0 MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV 35.0 MEV	15. x 20. x 20. x	2 USA Q U 2 USA ENERGY-ANG 2 USA Q 2 USA A	YGUNG LAS ISCMER. ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCHEFANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION OF FHIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATION AND TRANSPORT CALCULATIONS. DURAN HED ACCURACY RANGE 10. TG 40. PERCENT.	801119F 5EC. 821071F 761078F NEUTRGN 801054F
203 204 13 ALUM 205 206	UP TO 16.C MEV INUM 27 S.OO MEV 15.0 MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV 35.0 MEV	15. X 20. X	2 USA Q U 2 USA ENERGY-ANG 2 USA Q 2 USA Q 2 USA	YOUNG LAS YOUNG LAS ISCMER. ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCHEPANCIAND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FHIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATION AND TRANSPORT CALCULATIONS. DURAN HED ACCURACY RANGE 10. TG 40. PERCENT.	801119F SEC. ES 821071F SES 781078F NEUTRGN 8010E4F
203 204 1.3 AL UM 1 205 206	UP TD 16.C MEV INUM 27 S.GO MEV 15.0 MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV 35.0 MEV	15. x 20. x 20. x	2 USA Q U 2 USA C M ENERGY-ANG 2 USA Q 2 USA Q U 2 USA Q U 2 USA	YOUNG LAS YOUNG LAS ISCNER. ISCNER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FMIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATION AND TRANSPORT CALCULATIONS. DURAN HED ACCURACY RANGE 10. TG 40. PERCENT. FUR MATERIALS DAMAGE CALCULATIONS.	801119F SEC. ES 821071F SEC. 821071F SEC. 801078F NEUTRGN 801054F
204 204 13 AL UM 205 206	UP TO 16.C MEV INUM 27 S.OO MEV 15.0 MEV	16.0 MEV 30.0 MEV NEUTR GN 15.0 MEV 35.0 MEV	15. x 20. x	2 USA Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	YGUNG LAS ISCNER. ISCNER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCI AND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FMIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATIGN AND TRANSPORT CALCULATIONS. DURAN HED ACCURACY RANGE 10. TG 40. PERCENT. FURMATERIALS DAMAGE CALCULATIONS.	801115F SEC. ES 821071F 781078F NEUTRGN 801054F
203 204 13 AL UM 1 205 206 13 AL UM 1 207	UP TO 16.C MEV INUM 27 S.00 MEV 15.0 MEV INUM 27 9.0C MEV	16.0 MEV 30.0 MEV NEUTRGN 15.0 MEV 35.0 MEV NEUTRGN	15. x 20. x 20. x	2 USA Q U 2 USA ENERGY-ANGG 2 USA Q 2 USA 4 U TOTAL PRGT 3 USA	YGUNG LAS ISCMER. ISCMER. NEEDED TO RESCLVE EXPERIMENTAL DISCREPANCIAND FOR USE IN FUSION DIAGNOSTICS. CARTER HED LONG TERM ACTIVATION GF FHIT FACILITY. NEW REQUEST. BERK DOE DATA NEEDED FOR SHIELDING. ACTIVATION AND TRANSPORT CALCULATIONS. DURAN HED ACCURACY RANGE 10. TG 40. PERCENT. FUR MATERIALS DAMAGE CALCULATIONS. DORAN HED	801115F EES 821071F

13 ALUMI	NUM 27 =======	NE =========	UT&CN		TOTA	L PROTCM =======	N PRODUCTION CRU	SS SECTION (C	CNTINUED)
208	15.C M	EV 35.0	MEV	20 • X	3	USA	DURAN	HED	8013C8F
						6:	MATERIALS DAMAG	É CALCULATIONS.	
					=======				
	============		*=====	**********				********************	
205	UP	10 15.0	MEV	15. *	з	JAP	MaKASAI	MAP	7620726
209	01				5		HANDONEN ACCUMU		1020721
						0.	HTDRUGEN ACCOMU	LATION CALCULATIONS	
13 ALUMI	NUM 27	NE	UTRON			=======			
210	UP	TO 15.C	MEV	15. %	з	JAP	M.KASAI	MAP	762073F
						0:	HYDROGEN ACCUMU	LATION CALCULATIONS	
3138832F			z			= = = = = = = = = = = = = = = = = = = =	=======================================		
13 ALUMI	NUM 27 ======	Nt ========	UTRCN		N.AL	PHA =======			
211	15.0 M	EV 30.0	MEV	20. X	2	USA	CARTER	HED	821070F
						0: M:	NEEDED FOR SHOR NEW REQUEST.	T-TERM FMIT ACTIVATION.	
STATUS									STATUS
u	NDER CUNT	INUOUS REVI	Ew BY J	INDC AND P	NEANDC.	SEE APP	PENDIX A.		
13 ALUMI	NUM 27	NÉ	UTRUN		TOTA	L ALPHA	PRODUCTION CRCS	S SECTION	
212	9.00 M	EV 15.0	MEV	10. %	2	USA	DORAN	HED	801056F
						0:	MATERIALS DAMAG	E CALCULATIONS AND DESIMET	R¥.
61 3	150.0			20.	•		06.000		
215	13.U M	2 30.0	MEV	20. %	2	USA	DURAN		8013096
						0:	MATERIALS DAMAG	E CALCULATIONS AND DESIMET	RY.
13 ALUMI	======== NUM 27	AL	PHA		ALPH	= = = = = = = = = = = = = = = = = = =	=======================================	=======================================	
			======	=========					
214	100 . K	EV 6.50	MEV	6. X	2	USA	WALTUN	LAS	781172N
						a :	THICK TARGET YI	ELDS REQUIRED.	
						A:	INCIDENT ENERGY	RESOLUTION: 100 KEV.	
							ALPHA ENERGY RE	SOLUTION 100 KEV.	
		============= NF					S SECTION		
	========				=======				
215	25.3 M	v 200.	KEV	10.03	ч	шк	JEELI	w i N	7421646
						0.			
						0.	EVALUATION REQU	IREMENT.	
============		NE ===========	======		ENER	G ¥-ANGLE	TRUPP. NEUTRUN-	EMISSION CROSS SECTION	
214	0.00		445 14		2		250%		
210	9.00 M	EV 15-0	MEV	10. 2	۷	USA	BERK	DOE	781045F
						0:	GENERATION D	ND TRANSPORT STUDIES OF NE -T reactor designs.	XT
	=======		=======				=======================================		
14 SILIC	ÛN ========	NÉ	UTRCN =======		TOTA	L PROTUN	PRODUCTION CRO:	SS SECTION ====================================	
217	9.00 M	EV 15.0	MEV	20. %	2	USA	BERK	DUE	761C54F
						0:	FUR RADIATION D	AMAGE STUDIES OF NEXT GENE ESIGNS.	RATION

14 SILIC	GN 2222 222 222	NE	UTR (N		TOTA	L ALPHA	PRODUCTION CRUS	S SECTION	
218	9.00 M	EV 15.0	MEV	20. %	2	USA	BERK	DOE	781063F
						0:	FOR RADIATION D.	AMAGE STUDIES OF NEXT GENE	RATION
14 SILIC	ON	NE	UTRON		SPEC	IAL QUAN	TITY (DESCRIPTI	UN BELOW)	
219	9.00 M	EV 15.0	MEV	20. %	2	USA	BERK	ŬOE	8J1044F
						Q:	ALL SIGNIFICANT	ACTIVATION REACTION CROSS	
						0:	DATA NEEDED FOR	SHIELDING. ACTIVATION AND	NEUTRUN
							TRANSPURT CAL	CULATIONS.	
16 SULFU	= == = = = = = = = = = = = = = = = = =	n£	UTRON		TOTA		SECTION		
			******					************************	
220	10.0 K	EV 500.	KEV	3. x	2	USA	HEMMIG	DOE	741021R
						٥:	FUR SHIELDING E	FFECT OF CONCRETE.	
		=================		*********					=========

16 SULE	:=====================================	======================================		======= (APTUN			== = = = =
========							=====
221	10-0 KEV	500- KEV	15. *	2	USA		10266
	IUIU KLV	JUU KLV	13. 4	2			10258
					υ.	FOR SHIELDING EFFECT OF CONCRETE.	
18 ARGCN	40	NEUTRON		CAPTUR	E CHOS	SS SECTION	32322
							=====
222	UP TU	10.0 MEV		2	JAP	M.KAWAE NIG 71	20066
					A:	ACCURACY REQUIRED TO BETTER THAN 20.0 PERCENT	•
					с:	FOR REACTOR HAZARD CALCULATION.	
223	25.C MV	15.0 MEV	15.0%	1	GER	H.KUESTERS KEK 79	21956
				-	0.	EVALUATION NANTED.	
					č:	PRODUCTION OF AR41.	
	510# 		*******	ENERGI	-ANGLE	E DIFFERENTIAL INELASIIC CRUSS SECTION	=====
0.0.4				-			
224	15.0 MEV	40.0 MEV	15. X	ł	USA	CARTER HED 80	1114
					٥:	FUR FMIT DOSIMETRY.	
19 FCTAS	SIUM 39	NEUTRGN		N, 2N		***************************************	
		************					*====
225	15.0 NEV	30.0 MEV	20. X	2	USA	CARTER HÊD 82	1069F
				-		ACTIVATION OF NAM CODEANT ARESCTING SHIT	
						MAINTENANCE.	
				_	м.	NEW REQUEST.	
19 FCTAS	SIUM 39	NEUTR CN	******	N,P			*****
				*******	.===		
226	25.3 MV	15.0 MEV	30.0%	2	JAP	T.KAWAKITA PNC 79	20766
					e:	EVALUATED DATA WANTED	
					0:	FOR REACTUR HAZARD CALCULATION. There are many experimental data in Mey Regio	N .
19 POTAS	SIUM 41	NEUTRON		N,P			
227	UP TO	15.0 MEV	30.0%	2	UK	C.G.CAMPBELL WIN 79	2128R
					0;	FUR FAST REACTOR CIRCUIT ACTIVITY.	
						EVALUATION REQUIREMENT.	
228	15.0 MEV	30.0 MEV	20. X	2	USA	CARTER HED 82	1072F
					0:	FMIT ACTIVATION.	
					м:	NEW REQUEST.	
20 CALC		======================================		CAPTU	RE CRO	ISE SECTIÓN	=====
	************		*********		******		
229	1-00 KEV	500- KEV	10. X	2	USA	HEMMIG DOE 74	10296
				-		E.D. CHIER DING REFECT OF CONCRETE	
20 CALC	UM	NEUTREN		ENERG	-ANGL	E DIFF. NEUTRON-EMISSION CRUSS SECTION	
	************		*********				=====
230	1.00 MEV	15.0 MEV	15.0%	з	JAP	Y.SEKI JAE 83	2018F
					ς:	: INCLUDED IN CONCRETE.	
					м:	FUR SHIELDING DESIGN. : New request.	
========							=====
2C CALC	[UM 12222222222222	ALPHA		ALPHA	, N == = = = = =		
231	100. KEV	6.50 MEV	6. %	2	USA	WALTON LAS 76	1173
					Q:	: THICK TARGET YIELDS REGUIRED.	
					~ •	RELATIVE ERKOR OF 3.0 PERCENT NEEDED.	
						ALFIA ENCRY RESULUTION IOU REV.	
21 SCAN	DIUM 45	NEUTRGN		CAPTU	RE CHO	DSS SECTION	
232	100. KEV	18.C MEV	10. *	2	USA	MCELRCY HED 65	0651
					a:	: ACTIVATION IS REQUIRED.	
					0:	FOR USE AS FLUENCE MONITOR.	
22 TITA				GAMMA	 •P		

233	10-0 MEV	20.0 MFV	50. ×	2	USA	BERK DOE SU	10726
				-		PRACTION USED TO IDENTIFY DUNAWAY ELECTRONE	
						HIT POX LIMITERS.	=====

22 TITAN		*==== *====	============ NEU	==2.5= TRON ==2.5=		CAPTU	RE CRU	SS SECTION	======================================	****************	
r = 4	100	EN	100		20.0*	-			(m. T. N.)		
2.54	1002	ΕV	100.	NEW	20.0%	2		EOD EAST REAL	WIN CICRS.		6926628
235	100.	ΕV	500.	ΕV	20.0%	2	FR	M.SALVATORES	CAD		8320046
							м:	NEW REQUEST.	CALCULATIONS.		
22 TITAN			======================================	TREN		TOTAL	PHOTO	N PRUDUCTION (CROSS SECTION	-*	

236	25.3	MV	15.0	MEV	15. *	з	JAP	M.KASAI	MAP		762083F
							c:	POTENTIAL COL	NSTITUENT OF STRU- Ating Calculation	CTURAL MATERI S	AL
		=====	=======================================	=====		=====					============
			=2:::::::::	=====			=======	E DIFF. NEUTRI	UN-EMISSILN CRUSS	SECTION	==========
237	15.0	MEV	35.0	MEV		2	USA	DGRAN	HED		781039F
							A:	ACCURACY RAN	GE 10. TO 40. PER	CENT.	
							6:	STUDIES.	DETERMINED FRU	M SENSILIVITY	•
			*******							~~	
22 TITAN	1 UM		NEU = = = = = = = = = = =	TRCN		TOTAL	PROTO	N PRODUCTION (CROSS SECTION	*****************	
238	9.00	MEV	15.0	MEV	20. %	2	USA	DURAN	HED		781027F
							0:	FOR MATERIAL	DAMAGE CALCULATI	0N5.	
230	15 0	MEN	30.0		30 *	2	145 4	0.20 41			301 1075
239	13.0	MC. V	30.0	MEV	20. x	2	054	ECR MATERIAL	FANAGE CALCULATE	INC.	1812234
			*********	=====						***********	
22 TITAN	10M		NEU =========	TRCN		N,ALF	9HA =======				
240	0.00	εv	15.6	MEV	15. *	3	JAP	MaKASAI	MAP		762082E
240		2.	1300	1101		0	с:	POTENTIAL CU	NSTITUENT OF STRU	CTURAL MATERI	AL
								HELIUM ACCUM	ULATIÓN CALCULATI	ENS	
22 TITAN			NEU	TRUN	***********	TÜTAL	ALPHA	PRODUCTION C	RUSS SECTION		
		_				_					
241	9.00	MEV	15.0	MEV	20. *	2	USA	DURAN	HED	CHE AND COLLA	781212F
							U .	FUR MATERIAL	DAMAGE CALCULATI	JNS AND DUSIM	EIRT.
242	15.0	MEV	30.0	MEV	20. X	2	USA	DORAN	HED		701224F
							с: 	FGR MATERIAL	JAMAGE CALCULATI	ENS AND DOSIM	IETRY.
22 TITAN	IUM		 NEU 	TRCN		SPECI	AL QUAN	NTITY (DESCRI	PTIGN BELCW)	************	
a (7			76.0		5 0.7	2					
243	0	P 10	35.0	MEV	5.0%	2	EUR	FCD RDDDUGTU	METRY GROUP	GEL	8120025
							G.	REACTION INC TI-47(N.NP).	LUDES TI-46(N+P)+ Für TI-46(N+P) T	TI-47(N.D), He energy ran	GE
							c:	SHOULD EXTEN	D TO 20MEV Rgy accelerator b	ASED NEUTRON	SCURCES
244	1.14	р ТО	35.0	MEV	5.01	2	FUR	NEUTRON DUST	METRY GROUP	651	8120C3E
244	0.		0.500			-	 a:	FOR PRODUCTI	ON OF 50-47.	ULL	012000
							_	REACTION INC. TI-48(N,NP).	LUDES TI-47(N,P), FOR TI-47(N,P) T	TI-48(N.D) A He energy ran	ND GE
					•		. 6:	EXTENDS TO 2 For High Ener	OMEV. Rgy accelerater b	ASED NEUTRON	SCURCES
245	15.0	MEV	25.0	MEV	10. X	2	USA	MCELRUY	HED		821075F
								-46SC PRODUC	TICN DESIRED.		
					-		0: M;	FMIT DOSIMETI New Request.	RY.		
246	25.0	MEV	40.0	MEV	20. X	2	USA	MCELRUY	HED		821088F
							Q:	-40SC PRODUC	TION DESIRED.		
							0: M:	FMIT DOSIMET	RY.		
22 TITAN	IUM 45		aaaaaaaaa NEU	TRON						1232228888223	
			*======	=====				************			
247	15.0	MEV	40.0	MEV	10. X	2	USA	MCELROY	HED		821079F
							0: M:	FMIT ACTIVAT	ION.		
	========		*******	=====							
		•				•					

22 TITAN	1UM 47	*****	NEU	TRON		N,P			
248	2.10	MEV	7.00	MEV	5.0%	2	EUR D:	NEUTREN DESIMETRY GROUP GEL 74 FOR NEUTRON DUSIMETRY USING SPECTRUM UNFOLDIN	12127R
								METHODS. GREATER THAN 10 PERCENT DISCREPANCY EETWEEN INTEGRAL AND DIFFERENTIAL MEASUREMENTS.	
STATUS									TATUS
U	INDER CO	INTINU	UUS REVIE	* 6Y	INDC. SEE A	APPEND.	IX A.		
23 VANAD	IUM	=====	NEU	TRÚN =====		ELAS	LIC CRUS	SS SECTION	
54.3	2 00	MEV	15-0	MEV	10.0*	,	CCP		040236
249	2.00	MEV	13.0	MEV	10.02	1	сср с:	POTENTIAL USE AS STRUCTURAL MATERIAL.	:40237
								FUR DETERMINATION OF NEUTRON TRANSMISSION.	
250	25.3	MV	20.0	MEV	3.0%	2	IND	S.E.GARG TRM 75	3304 CK
							0:	REQUIRED FOR STRUCTURAL-MATERIAL CALCULATIONS	.
23 VANAD	IUM		NEU	TRCN	*********	INEL	ASTIC CF	ROSS SECTION	.=====
251	3.00	MEV	14.0	MEV	10.0%	2	FR	B-DUCHEMIN SAC 7	32013F
							A: G:	QUDIED ACCURACY AT 2 STANDARD DEVIATIONS. POTENTIAL CUNSTITUENT OF CONTAINMENT VESSEL.	
252	U	P TO	20.0	MEV	3.0x	2	IND	S+B+GARG TRN 75	53041R
							6:	REQUIRED FOR STRUCTURAL-MATERIAL CALCULATIONS	ō•
23 VANAC			 NEU	===== Trcn		ENER	GY DIFFE	ÉRENTIAL INCLASTIC CROSS SECTION	
		=====							
253	2.00	MEV	15.0	MEV	15.0%	1	ССР	I.N.GOLOVIN KUR 72	24024F
							с:	NEUTRONICS CALCULATIONS FOR BLANKET AND SHIEL	• لا ـ
23 VANAD		*****	 Néu	TREN		CAPT	JRE CRÚ:	SS SECTION	
254	100.	Ēν	100.	KEV	10.0%	2	UK	C.G.CAMPBELL WIN 69	52C73A
							0:	FOR FAST REACTORS.	
255	1.00	KEV	2.00	MEV	15.0%	1	ССР	I.N.GULUVIN KUR 72	24027F
							0:	NEUTRON ABSORPTION, GAMMA RAY HEATING, AND Production of Higher Isctopes.	
256	14.0	MEV			15.0%	1	CCP	I-N-GULÚVIN KUR 7	24028F
200					1000	-	0:	NEUTRON ABSORPTION, GAMMA RAY HEATING, AND	
								PREDUCTION OF HIGHER ISOTOPES.	
257	25.3	MV	20.0	MEV	3.0%	2	IND	S.B.GARG TRM 7	53042F
							c:	REQUIRED FOR STRUCTURAL-MATERIAL CALCULATION	5 •
258	100.	ĒV	500-	ΕV	20.0%	2	FR	N.SALVATURES CAU 8.	32005R
							D: M:	FAST REACTUR CALCULATIONS. New request.	
========									******
23 VANAL			NEU = = = = = = = = = = = = = = = = = = =	=====		1014	=======	IN PRUDUCTION CRUSS SECTION	=====
259	300.	KÉV	15.0	MEV	15.0%	1 -	ССР	I.N.GOLOVIN KUR 7.	24025F
							a:	GAMMA RAY SPECTRUM ALSU WANTED. GAMMA RAY HEATING CALCULATIONS.	
						-	01		
260	25.3	MV	15.0	MEV	10 . X	2	JAP	M.KASAI MAP 7	6208\$F
							6.	GAMMA-RAY HEATING CALCULATIONS	
======== 23 vanal			======= NEU	TRON		 N,2N			======
			******						- 52222
261	2.00	ME V	15.0	MĖV	15.0%	1	CCP	I.N.GULOVIN KUR 7	24ú25F
							0:	NEUTRON BLANKET CALCULATIONS.	
262	14.0	NEV			15.0%	1	CCP .	I.N.GCLOVIN KUR 7	24026F
							c:	ENERGY AND ANGULAR DEPENDENCE OF SECUNDARY NEUTRONS REQUIRED.	
							0:	NEUTRON BLANKET CALCULATIONS.	
263	L	JP TO	14.0	MEV	10.0%	2	FR	B.DUCHEMIN SAC 7	32014F
							A: C:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. Potential constituent of containment vessel.	
264		ю то	16 0	MEV	10. •	2	140		620855
204	l	JF 16	13.0		10. 4	Ĕ	 C:	PATENTIAL CUNSTITUENT OF STRUCTURAL MATERIAL	52003F
		.==:==						NEUTRON NULTIPLICATION CALCULATIONS	

23 VANA	DIUM	NEUI	RON	N,P	=========	***********************		
				==========				
265	UP TO	15.0	NEV 15.	0% 1	LCP	I.N.GGLOVIN	KUR	724036F
					ە:	FOR HYDROGEN ACC	UNULATION CALCULATIONS.	
266		0 14-0	NEV 10-	0¥ 2	ED	B DUCHEMIN	SAC	7320155
200				~ 2			AT 2 STANDADD DEVIATIONS.	1520151
					ő	POTENTIAL CONSTI	TUENT OF CONTAINMENT VESSEL	•
23 VANA				======================================	DHA			======
				==========				
267	UP TO	15.0	MEV 15.	0 % 1	CCP	I.N.GOLÚVIN	KUR	724031F
					0:	HELIUM ACCUMULAT	ION CALCULATIONS.	
					-			
268	UP TO	14.0	MEV 10.	0% 2	FR	B.DUCHEMIN	SAC	732016F
					A: ();	QUOTED ACCURACY POTENTIAL CONSTI	AT 2 STANDARD DEVIATIONS. Tuent of containment vessel	•
========				====================	=========		*======================================	=========
23 VANA(DIUM 51	NEU1	FRCN 12 22 22 22 22 22 22 22 22 22 22 22 22 2	ËNEF ========	GY DIFF	ERENTIAL INELASTI	C CROSS SECTION	
269	1.50 ME	10.0	MEV 15.	X 3	USA	SMITH Hemmig	ANL DGE	6210116
					٥:	TUTAL INTEGRAL O	VER 4P1 REQUIRED.	
						SPECTRA AT SEVER ANISOTROPIC.	AL ANGLES IF SIGNIFICANTLY	
				=============				
23 VANAL	01UM 51	NEUI	[RON ===================	ENEF ========	GY-ANGLI	L DIFF. NEUTRON-E	MISSION CRUSS SECTION	
270	1 = 0 4151	, 35 0	MEN	2		0.00 41	50	7010356
270	15.0 ME		MCY	2	034	ACCURAN		1010205
					A.	ACCURACY TO BE DI	ETERMINED FROM SENSITIVITY	
					0:	FOR MATERIAL DAM	AGE CALCULATIONS.	
					Ma	SUBSTANTIAL MUDI	FICALLUNS.	
271	9.00 ME	15.0	MEV 10.	X 2	USA	BERK	DUE	781036F
					0:	DATA NEEDED FOR	SHIELDING AND NEUTRON	
					м:	SUBSTANTIAL MUDI	FICATIONS.	
23 VANAL							988482828888888888888888888888888888888	======
=======		*********		*******				******
272	9.00 ME	15.0	MEV 20.	x 3	USA	DGRAN	HED	7d1026F
					G;	FOR MATERIAL DAM	AGE CALCULATIONS.	
					M:	SUBSTANTIAL MULI	FICATIONS.	
273	15.0 ME	30.0	MEV 20.	x 3	USA	DORAN	HED	761225F
					0:	FOR MATERIAL DAM	AGE CALCULATIONS.	
========							*=================================	
23 VANA(01UM 51	NEU]	[R CN ====================================	1014 =========	L ALPHA	PRODUCTION CRESS	SECTION	
674						0000		2010110
274	5.00 ME	V 15.0	MEV 20.	x 2	USA	DURAN	HED	781211F
	•				0: M:	FOR MATERIAL DAM SUBSTANTIAL MODI	AGE CALCULATIENS. FICATIONS.	
				~ 0		0.0044		
275	15.0 ME	/ 30.0	MEV 20.	x 2	USA	DURAN		1012261
					L:	FUR MATERIAL DAM	AGE CALCULATIONS.	
23 VANAL	DIUM 51	NEU1	FR CN	SPEC	IAL QUA	NTITY (DESCRIPTIJ		
276	9.00 MEN	15.0	MEV	2	USA	BERK	DUE	801085F
					a:	ALL SIGNIFICANT	ACTIVATION REACTION CRESS	
					A: 0:	ACCURACY RANGE 1	0. TO 20. PERCENT. Shielding, activation and n	EUTRON
				•		TRANSPORT CALC	ULATIONS.	
24 CHROM		NEU1	RON	TOTA	L CROSS	SECTION	*======================================	
			*********				************************	
277	1.00 KE	/ 20.0	MEV 3.	x 2	USA	HEMMIG	DOE	721035R
					A:	5 PERCENT ACCURA	CY MINIMA.	
						ENERGY RESOLUTION	N - SUFFICIENT TO RESOLVE M	AJOR
	1 00	. 500		v ~		MELLING		
218	1.00 KE	, JUC.	NEV 2.0	* 2	USA			021040F
					0:	THE TURGIDAL F	HAGE AND HEATING CALCULATIL TELD COILS OF A FUSION DEVI	CE. NEM
						UNCERTAINTY IN	ENDF/8-V. IF CONFIRMED NEE	C NEW
					м:	NEW REQUEST.		

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24 CHRGA	IUM	=======	NEU	TRCN =====		TCTAL	_ CR05	S SECTION		(CCNTINUED)
STATUS										STATUS
ι	NDER CC	NTINUGU	S REVIE	₩ EY	INDC AND NE	ANDC.	SEE A	PPENDIX A.		
			=======							
24 CHROM	41UM =======	*====	NEU ======	TRCN		ELASI	TIC CR ======	GSS SECTION		
576	25.3	MU	20 - 0	Mark	7 0 7	2	IND	S B GADC	TOM	7530316
213	23.3		2000		5.04	2		: REQUIRED FOR	STRUCTURAL -MATERIAL	CALCHEATIONS.
#20222#		=======	******							
24 CHROM	11UM		NEU ======	TRON		DIFFE	ERENTI ======	AL ELASTIC CRC	SS SECTION	
						_				
280	100.	KEV	15.0	MEV	10. *	3	USA	HEMMIG	DUE	741032R
24 CHROM			 Nëu	TRCN		INEL	ASTIC	CROSS SECTION	************************	****************
281	3.00	MEV	14.0	NEV	10.0%	З	FR	B.DUCHEMIN	SAC	732017F
							A Ū	: QUDTED ACCUR : POTENTIAL CO	ACY AT 2 STANDARD DEV NSTITUENT OF CONTAINM	IATILNS. ENT VESSEL.
282	U	P TO	20.0	NEV	3.0%	2	IND	S.B.GARG	ŤRM	753C32R
							0	: REQUIRED FOR	STRUCTURAL-MATERIAL	CALCULATIONS.
283	U	р то	15.0	MEV	30.0%	2	UK	R.HANCUX	CUL	762238F
							0	EVALUATION R	EQUIREMENT.	
STATUS										STATUS
1	NDER CO	NTINUCU	S REVIE	w PY	INDE AND NE	ANCC -	SEF A	PPENDIX A.		314103
		\$2422 2 2				=====				
24 CHROM	41UM ========		NEU =======	TRCN		ENER	GY DIF ======	FERENTIAL INEL	ASTIC CROSS SECTION	
									2.85	
284	500.	KEV	15.0	MEV	10. X	2	USA	HEMMIG		661012F
							Q	SPECTRA AT S	AL LVER 4PI REQUIRED. Everal angles if sign	IFICANTLY
							A	ANISUTROPI	C. UTIÚN REQUIREC TO DET	ERMINE MAJOR
								STRUCTURE.		
285	U	P TO	15.0	MEV	20.0%	3	FR	M.SALVATORES	CAD	73204CR
							0 M	: FOR FAST REA : SUBSTANTIAL	CTOR CALCULATIONS. NODIFICATIONS.	
						=====				***************
24 CHRO	41UM ======		NEU	TR GN		CAPT	URÉ CR ======	OSS SECTION	********************	
	100	EV	100	KEV	20.01	,			w T bi	6640526
200	100.	2.	100.	NC V	20.04			C - G - CAMPBELL		6920628
								- FUR FAST REA	CIURS.	
287	25.3	MV	200.	KEV	10.0%	1	GER	F.FROEHNER	KFK	69208JH
							G	FOR CR-53.	RAMETERS ALSO REQUIRE	D PARTICULARY
								ADDITIONAL C DETERMINAT	APTURE MEASUREMENTS A LONS FOR INDIVIDUAL R	ND CAPTURE MIDTH ESONANCES WANTED.
							A	EMPHASIS UN Für Broad S	ACCURATE (10 PERCENT) LEVELS AND ON P LEVEL	RADIATION WIDTHS S CUNTRIEUTING TO
							c	DOPPLER COEF CAPTURE WIDT	FICIENT. HS NEEDED BECAUSE OF	LARGE
								CAPTURE RE	IES BEIWEEN DIRECILY SUNANCE INTEGRAL AND	MEASURED INFINITE THAT CALCULATED
								FROM DIFFE	RENITAL CAPTORE MEASU	REMENIS.
288	100.	Eν	500.	ĸev	10.0%	1	FŔ	M.SAL VATORES	CAD	692084R
							0 0	: NEED FOR RES EAST REACTOR	ONANCE PARAMETERS. CALCULATIONS.	
							м	SUBSTANTIAL	MUDIFICATIONS.	
289	1.00	KEV	200.	KEV	15. %	2	USA	HEMMIG	DOE	7210366
							G	RESONANCE PA	RAMETERS NEEDED. ESPE	CIALLY GANNA
							4	A: INCIDENT ENE	RGY RESOLUTION: 20. P	PERCENT.
200	25-3	MV	20-0	MEV	3.0%	2	INO	S.B.GARG	TRM	75 10.336
270	2000					-		: REQUIRED FOR	STRUCTURAL-MATERIAL	CALCULATIONS-
							Ľ			
291	25.3	MV	15.0	MEV	30.0*	2	UK	R.HANCUX	CUL	7622476
							C	FUR NEUTRON	EQUIREMENT. ECONÚMY CALCULATIONS:	•
STATUS-								·		STATUS
	UNDER CO		S REVIE	W 8Y	INDC AND NE	ANDC.	SEE 4	APPENDIX A.		
=======	=========		=======	======			======			

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24 CHR	117321252227333 Omium 2222222222223	NEUTRON		TOTA	L PHOTO	PRODUCTICN CROSS SECTION	======
292	25.3 MV	15.0 MEV	10.0%	2	FR	B.DUCHEMIN SAC	6920EUR
					0: A: D:	GAMMA SPECTRA REQUIRED. ENERGY RESOLUTION OF 250 KEV FOR GAMMA RAYS THAN 1 MEV AND 500 KEV FUR ENERGIES GREAT THAN 1 MEV. GUCTED ACCURACY AT 2 STANDARD DEVIATIONS. EVALUATION MAY BE SUFFICIENT.	LESS Er
293	0.0C EV	15.0 MEV	15. %	2	JAP	Y.SEKI JAÉ	762054F
					0: 0:	GAMMA RAY SPECTRA ALSC REGUIRED. Gamma-Ray heating calculations	
294	UP TO	10.0 MEV	10.0%	1	FR	M.SALVATORES CAD	832013R
					G: 0: M:	GAMMA SPECTRUM REQUIRED. Fast reactlr calculations. New request.	
24 CHR		NEUTRCN		N,2N			2232222
295		14.0 MEV	10.0%	3	FR A:	B.DUCHEMIN SAC QUUTED ACCURACY AT 2 STANDARD DEVIATIONS.	7320186
					C :	PUTENTIAL CUNSTITUENT OF CONTAINMENT VESSEL	•
296	LF 10	15.0 MEV	20.0%	2	UK	R.HANCUX CUL	752162F
					C:	EVALUATION REQUIREMENT FOR FUSILN REACTORS. For neutron economy.	
24 CHR	OMIUN	NEUTRON		ENER	GY-ANGL	E DIFF. NEUTRON-EMIJSIGN CHUSS SECTIUN	
297	9.00 MEV	15.0 MEV	20. X	. 2	054	FOR SHIELDING AND TRANSPORT STUDIES OF NEXT	78104SF
					-	GENERATION D-T REACTLE DESIGNS.	
298	15.C MEV	35.0 MEV		1	USA	DORAN HED	781218F
					A: L:	ACCURACY RANGE 10. TO 40. PÉRCENT. ACCURACY TO BE DETERMINED FROM SENSITIVITY FOR MATERIAL DAMAGE CALCULATIONS.	STUDIES
299	UP TÚ	15.0 MEV	15.0%	2	JAP	Y.SEKI JAE	832024F
					C: M:	FOR NEUTRON TRANSPORT CALCULATIONS. New request.	
24 CHR	sersessesses. Om I um	NEUTRCN		N,P			
322222							
300			30.0%	3	UK 0:	C.G.CAMPBELL WIN FISSION SPECTRUM AVERAGE WANTED.	6926868
					ō:	FUR FAST REACTORS.	
301	UP TO	15.0 MEV	10.0%	1	FR	M.SALVATORES CAD	712016R
					G: M:	FOR FAST REACTOR CALCULATIONS. Substantial modifications.	
302	VP TC	14.0 MEV	10.0%	2	FR	B.DUCHEMIN SAC	732619F
					A: G:	QUOTED ALCURACY AT 2 STANDARD DEVIATIONS. Putential constituent of containment vessel	•
303	ύρ το	15.C MEV	25.0%	2	UK	R.HANCÛX CUL	762241F
	,				٥:	EVALUATION REQUIREMENT. For hydrogen gas production rates and neutr Ecunumy calculations.	ON
304	UP TO	15.0 MEV	10.0%	1	GER	H.KUESTERS KFK	752155k
====== 24 CHR	======================================	NEUTRON		TOTA	L PROTO	PRODUCTION CROSS SECTION	
			********		*******		======
305	9.00 MEV	15.0 MEV	10. X	2	USA C;	BERK DOE FOR RADIATIUN DAMAGE STUDIES JF NEXT GENERA D-T REACTOR DESIGNS.	781058F Tijn
306	15.C MEV	35.0 MEV	10. X	2	USA	DORAN HED	781215F
					0:	FOR MATERIAL DAMAGE CALCULATIONS.	
======						***************************************	*******
24 CHR		NEUTRON	******	N, AL	РНА		
24 CHR ======		NEUTRON		N,AL	PHA ===t===;		
24 CFR ====== 307	GMIUM UP TO	NEUTRON 15.0 MEV	10.0%	N, AL	PHA ====================================	B.DUCHEMIN SAC	732020F
24 CHR ===== 307	GMIUM UP TO	NEUTRON 15.0 Mev	10.0X	N,AL	Рна ======= fr 4: G:	B.DUCHEMIN SAC QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. POTENTIAL CONSTITUENT OF CONTAINMENT VESSEL	732020F
24 CHR ====== 307 308	GMIUM UP TO 3.00 MEV	NEUTRON 15.0 MEV 15.0 MEV	10.0X	N, AL 2 1	Рна ======= FR а: G: FR	B.DUCHEMIN SAC QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. POTENTIAL CONSTITUENT OF CONTAINMENT VESSEL M.SALVATORES CAD	732020F • 732041F

24 CHR0	41UM ==≈==================================	NEUTRON		N.ALP	HA ======		(CONTINUED)
309	υρ το	15.0 MEV	25.0x	2	uк	R + HANCOX CUI	7622435
				-	υ:	EVALUATION REQUIREMENT. FOR HELIUM GAS PRODUCTION RATES AND ECUNUMY CALCULATIONS.	NEUTREN
310	UP TO	15.0 MEV	20.0%	2	BLG	H.TOURWE MOL	7921086
					G: 0:	TOTAL HELIUM PRODUCTION REQUIRED. For use as a fluence monitor.	
311	UP TO	15.0 MEV	30.0%	1	GER	H.KUESTERS KFK	7922CCR
312	UP TO	14.0 MEV	20. X	2	USA	PRINCE BNL	801125R
					o:	HELIUM PRODUCTION EVALUATION.	
24 CHRG		NEU TRCN		TGTAL	ALPHA	PRODUCTION CRUSS SECTION	
313	S.OG NEV	15.0 MEV	20 . x	2	USA	BERK JOE	781067F
					0:	FOR RADIATION DAMAGE STUDIES OF NEX D-T REACTOR DESIGNS.	T GENERATIUN
314	15.0 MEV	35.0 MEV	20. %	1	USA	DLRAN HED	781216F
					, o:	FOR MATERIAL DAMAGE CALCULATIONS.	
24 (HRC)		NEUTRON		SPECI	AL QUA	NTITY (DESCRIPTION BELCH)	******
315	5.00 MEV	15.C MEV	20. ¥	1	USA	BERK DOE	801046F
					۵: ۵:	ALL SIGNIFICANT ACTIVATION REACTION SECTIONS. Data Needed For Shielding, activati Transport Calculations.	CROSS On and Neutrin
316	15.0 MEV	35.0 MEV	20. X	2	USA	CANTER HED	821073F
					G: D: M:	-52V PRGDUCTIGN DESIRED. FMIT ACTIVATION. NEW REQUEST.	
317	15-0 NEV	35.0 MEV	20. X	2	USA	CARTER HED	821074F
					0: c:	-51CR PRUDUCTION DESIRED. FMIT ACTIVATION.	
							*================
24 CHRON	M1UM 50	NÉUTRON		CAPTU =======	RE CRO	SS SECTION The section	
318	160. EV	1.00 MEV	25.0%	1	UK	C.G.CAMPBELL WIN	792125R
					o:	FUR FAST REACTOR CIRCUIT ACTIVITY. Evaluation requirement.	
219	100. EV	15.0 MEV	25.0X	1	GER	H.KUESTERS KFK	752153R
					0: 0:	EVALUATION WANTED. ACTIVATION OF COULANT AND STRUCTURE GLNERATION IN STRUCTURAL MATERIALS.	ANÜ HEAT
320	25.3 MV	3.00 MEV	20.0%	1	FR	F.JOSSO CAD	792252R
					Å :	QUOTED UNCERTAINTY AT TWO STANDARD FOR FAST REACTOR FUEL CYCLE CALCULA	DEVIATIONS. TICN.
321	25.3 MV	30C. KEV	10. X	2	USA	PRINCE BNL	801124A
					:0	ACTIVATION FILE.	
24 CHRG	MIUM 50	NEUTRON	*****	N • 2N			************
522	14.C MEV	20.0 NEV	20. X	2	USA	PRINCE BNL	801123R
					٥:	ACTIVATION FILE.	
24 CHR0		NEU TRON		======= N , 2N	******		
			********			***************************************	***************
323	14.0 MEV	20.0 MEV	20 . x	2	USA O:	PRINCE BNL Activation file.	861122R
324	15.0 MEV	35.0 MEV	20. X	2	USA	CARTER HED	821080F
					С: М:	FMIT ACTIVATILN. New request.	
24 CHRON		NEU TR GN		======= N,P =======	******		*************
325	UP TO	15.0 MEV		1	GER	В.G0EL КЕК	FSZCERE
	- -			-	A:	ACCURACY 10-20 PERCENT DESIRED.	
					0:	NAIN ABSORPTION PROCESS IN MEV RANG	۱ ۲ •
326	7.00 MEV	18.0 NEV	25 . X	2	USA	PRINCE BNL	80112ER
					υ.		

24 (CHROMI	UM 52		NEU	TR ON		N.P ======				(CUNTINUEC)
	327	15.0	MEV	35.0	MEV	20. X	2	USA D: M:	CARTER FMIT ACTIVATION. NEW REQUEST.	нер	621CE4F
24	CHRGMI	UM 53		NEU	TRGN		===== N,3N			****************	
	328	15.0	MEV	35.0	MEV	20 • X	2 ·	USA 0: M:	CARTER FNIT ACTIVATION. NEW REQUEST.	HED	821381F
24	 CHROMI	 UM 54		NEU	== == = = = = = = = = = = = = = = = =		N.4N	******			
****	===== 329	15.0	====== Më∨	35.0	MEV	20 • x	2	USA	CARTER	HED	£21083F
								0: M:	FMIT ACTIVATION. Nëw Request.		
25	MANGAN	ESE		NEU	TRÊN		SPECI	AL QUA	NTITY (DESCRIPTION	N BELGW)	*******
									· ·		
-	330	2.50	EV	15.0	MEV	20. %	2	USA Q: J:	ENGHELM ACTIVATION CROSS Fusion reactor se	GA Section. Hutdown Dcse Rates.	801101F
25 I	MANGAN	ESE 55		NEU	TRCN	**********	TÜTAL	CROSS	SECTION	**==========================	
===:	*====*			*=#28322					=======================================		**************
;	331					4. X	2	USA	FU	ORL	741155 R
===:			:					0: 	NEED VALUES IN F	= WINDUWS.	
25	MANGAN	ÊSÊ 55		NEU	TRON ======		CAPTU	RE CRO	SS SECTION		
	332	100.	EV	100.	ĸev	20.0*	2	υк 0:	C.G.CAMPBELL For fast reactor:	WIN 5.	632010F
	333	100-	EV	500.	EV	10.0%	2	FR	M.SALVATORES	CAD	8320076
			-		-			C: N:	FAST REACTOR CAL	LULATIONS .	
25	MANGAN	ESE 55		NEU	TRON		N • 2N			***************************************	
	334	U	р тс	16.0	MEV	5.0%	2	EUN	NEUTRON DUSIMETR	Y GRUUP	GEL 7421256
								с:	FOR NEUTRON DOSIN Methods. Greater than 10 A Intégral and D	METRY USING SPECTRU Percent discrepancy IFFERENTIAL MEASURE	M UNFOLDING Between Ments.
	335	20.0	MEV	30.0	MEV		2	USA	MCELRGY	HED	801022F
								A: C: M:	ACCURACY RANGE 10 Dosimetry for FM Substantial Modif	0. TO 20. PERCENT. IT FACILITY. FICATIONS.	
STA	TUS			IS REVIE		NDC. SEE A	PPENDI	× 4.			STATUS
2 22	======			=======================================			======				
26 ===:	1RCN =====	======		GAM	MA =====		GA NMA	• N ======			*************
	336	U	P TO	20.0	MEV	30 . x	2	USA	DRIEMEYER	UUU	821043F
								A: 0: M:	INCIDENT ENERGY A DETERMINATION OF IN THE UPGRADE NEW REQUEST.	RÉSOLUTION: 6. PERG Phôtoneutron activ Phase of Ebt-P lpég	CENT. Ation in Eut-P. Ration.
===: 26	IRCN						TOTAL	CROSS	SECTION	*****************	
zza:											
	337	10.0	KEV	1.00	MEV	5.0%	2	С СР Ц:	M.N.NIKOLAEV Careful Measureme Needed.	FEI Ents of interference	7140C3R E minima
								A:	OBSERVATION OF P- TRANSMISSICN MEAS STRONG ATTENUA ED FOR MINIMA HIGH RESOLUTION / WAVE RESONANCE DASENTEE GEOT	-WAVE RESUNANCES IS SUREMENTS DITH POUR TIUN OF THE PRIMARY CS MEASUREMENTS. MEASUREMENTS ARE DES UBSERVATION AND RESUREMENTS	WANTED. RESOLUTION BUT DEAM ARE WANT- Sired for P- Sunance
								0:	FOR SHIELDING CAN THE TOTAL AND C REACTOR CALCUL CUMPARISON OF THE VERY INTERESTIC DENSITY DADITY	LOUATION NEEDS AND CAPTURE CROSS SECTION ATIONS S AND P-WAVE LEVEN NG FROM THE POINT OF DEPENDENCE CONFIDM	EVALUATION OF DNS FOR FAST L CENSITIES IS F VIEW OF LEVEL
===:	===== 1 R(:N				====== TH CN				SS SECTION		**************
====					======		======	100000			
	338	25.3	MV	20.0	MEV	3.0%	2	IND 0;	S.B.GARG REQUIRED FOR STR	TRM	753034R LCULATIONS.
===:	= = = = = =		_=#222;								============

26 IRCN		NEUTRON		DIFFE	RENTIAL	ELASTIC CROSS	SECTION	
		3-00 MEV	5. *				0PI	6910854
				•	G: A: G:	REQUIRED AT SET INCIDENT ENERGY REQUIRED IN VAL	VERAL PEAKS AND IN V Y RESOLUTION: 1. PE LLEYS FOR SHIELDING.	ALLEYS. RCENT.
340	1.0C KEV	15.0 MEV	10. %	1	USA	SMITH	ANL	6910E6R
					A:	ENERGY RESOLUT. INTERMEDIATE	IUN - TO AT LEAST RE Structure.	SCLVE
341	1.00 KEV	15.0 MEV	10. X	1	USA	HEMMIG	DOE	6910d7F
342	8.00 MEV	15.0 MEV	10.0%	2	GER	8.GGEL	KFK	692054R
					a: c:	MEASUREMENTS DE ANGULAR STEPS FOR SHIELDING	ESIRED IN ENERGY STE S OF 10 Degrees. Calculations.	PS CF 1 MEV. AND
343	500. EV	5.00 MEV	5.0%	1	FR	M.SALVATORES	CAD	832009R
					0: M:	FAST REACTOR C. New Request.	ALCULATIONS.	
26 IRCN		NEUTRON	==========================	INEL	ASTIC CF	OSS SECTION	***************************************	
344	UP TO	15.0 MEV	20.0*	2	υк	R HANCOX	CUI	7221026
544	0, 10	1500 1420	20004	-	0:	EVALUATION REQ	UIREMENT.	
						FOR BLANKET HE	ATING CALCULATIONS.	
345	3.0C MEV	14.0 MEV	10.0%	2	FR	B.DUCHEMIN	SAC	732021F
					ô:	POTENTIAL CONS	TITUENT OF CONTAINME	INT VESSEL .
346	UP TO	20.0 MEV	3.0%	2	IND	S.B.GARG	TRM	753035R
					0:	REQUIRED FOR S	TRUCTURAL-MATERIAL (ALCULATIONS.
347	UP TO	15.0 MEV	15. %	2	JAP	Y•SÉKI M•KAWAI	JAE NIG	762099F
					6: 0:	INELASTIC GAMM	A RAY SPECTRA ALSO P Ort and gamma-ray he	REGUIRED. Ating calc.
252255555 26 [DON				=====			TIC CROSS SECTION	
	************			a====				
348	2.00 MEV	5.00 MEV	10. %	2	USA	HEMMIG	DOE	661017F
					0: A:	TUTAL INTEGRAL SPECTRA AT SEV ANISOTROPIC. INCIDENT ENERG	OVER 4PI REQUIRED. ERAL ANGLES IF SIGNI Y RESULUTION: 20 KE	FICANTLY
							20	
349	8.00 MEV	15.0 MEV	20.0%	2	GER A:	B.GUEL ENERGY RESOLUT	KFK ICN 500 KEV FOR INC.	692106F Ident Neutrons
						AND 200 KEV	FOR SECONDARY NEUTRO	-NS
350	UP TO	14.0 MEV	5.0%	1	FR	M.SALVATORES	CAD	7020L7R
					0: M:	FINE STRUCTURE FUR FAST REACT SUBSTANTIAL MO	BELUW 2 MEV WANTED OR CALCULATIONS. Difications.	
351	900. KEV	15.0 MEV	5.0%	2	ССР	M.N.NIKOLAEV	FEI	714004R
					Q: A:	IN CONTINUUM R TEMPERATURE IN THE REGIGN UF STRUCTURE EVALUATION U TRANSMISSIGN M INDICATION M FROM INELAST MEASUREMENTS S ATTENUATIUN CRDSS SECTION THEFEMID GE	EGION ENERGY DEPEND WANTED. BELCW 3 MEV AVERAGE IN THE CROSS SECTION F SELF SHIELDING. EASUREMENTS USING TO ETHOD WITH DETECTION IC SCATTERING ARE DO HOULD EXTEND TO PRIJ JOWN TO 1/100 CR 1/2 FOR INELASTIC REMOVI U-238 ADATED WITH O	ENCE OF NUCLEAR CHARACTERISTICS IN ARE WANTED FUR TE SELF- N OF GAMMA RAYS ESIRED. MARY-EEAM 1000. AL BELOW FISSION 5-0 PERCENT
					с:	ACCURACY. LEVEL EXCITATI PERCENT ACCU SEE GENERAL CU	CN CRGSS SECTION DES RACY. MMENTS IN THE INTRO	SIREC WITH 10 DUCTION.
352	2.00 MEV	15.0 MEV	10. X	2	USA	BARTINE	ORL	761075R
					0:	TU RESULVE SPE STEEL.	CTRA MEASUREMENTS FI	RUM STAINLESS
26 IRON	******************	NEUTRON		ENER	GY-ANGL	E DIFFERENTIAL	INELASTIC CRUSS SEC	
353	UP TO	10.0 MEV		1	UK	C.G.CAMPBELL J.BUTLER	W IN W IN	69205EF
					A: 0:	ACCURACY REQUI 5 TO 10 PERC Evaluatión req FCR fast react	RED IS 5 PERCENT TO Ent above Uirement. GRS and Shielding.	4 MEV AND
354	UP TO	4.00 MEV	5.0%	1	GER	H.KUESTERS	KFK	7922658

26 1	RON =======			NEU	TRCN =======		ENERG	-ANGLE	DIFFERENTIAL IN	ELASTIC CROSS SECTION · (CO	NTINUED)
			MF 1								3600044
3:	55 4		ALV	15.0	MEV		1	GER	HARUESTERS	KEK	7922164
								A;	ACCURACY UP 5-30	PERCENT REGULARD.	
26 18	RCN			NEU	TRON		CAPTU	RE CRO	SS SECTION		
39	56 1	00.	ΕV	1.00	MEV		1	UK	C.G.CAMPBELL	WIN	692101 k
								A: 0:	ACCURACY REQUIRE 20. PERCENT AB For Fasi Reactor	D 10 PERCENT TO 130 KEV, GVE. 5.	
39	57 1		Εv	500.	KEV	5.0%	1	FR	M.SALVATORES	CAU	6921C4A
								Q:	RESENANCE PARAME	TERS BANTED.	
								0: M:	FUR FAST REACTOR SUBSTANTIAL MODIN	CALCULATIGNS. Fications.	
39	58 5	CO.	ΕV	800.	KEV	10.0%	1	CCP	N .N .NIKOLAEV	FEI	7140C5R
								G:	DESIRABLE TO USE NOT VERY SENSI	EXPERIMENTAL METHODS WHIC TIVE TO SELF-SHIELDING AND	TG
								A: 0:	CAPTURE-AFTER- 20 PERCENT ABOVE SEE GENERAL COMM FIRST PRICRITY B THE IRON CAPTUL ACCURACY FROM 1	SCATTERING EFFECTS. 100 KEV WOULD BE VERY USE ENTS IN THE INTRUDUCTION. ECAUSE IT IS DIFFICULT TO RE CRCSS SECTION TO RECUES MACROSCOPIC EXPERIMENTS ON	FUL. EVALUATE ITED LY.
39	59 2	5.3	MV.	20.0	MEV	3.0%	2	GN I	S.B.GARG	TRM	753636R
								٥:	REQUIRED FOR STR	UCTURAL-MATERIAL CALCULATI	CNS.
-		e 7			MEN	15 04	2		D. HANKOY	Cu I	7600605
30	50 2	5.3	MV	15.0	MEV	12.08	2	UK	R HANCUX		702248F
								0.	FOR HEATING AND	NEUTRGN ECUNOMY CALCULATIO	INS.
ЭE	61 1	00.	Eν	100.	KEV		1	GER	H.KUESTERS	KFK	7922C1R
								A:	ACCURACY OF 5-10	PERCENT REGUIRED.	
36	52 1	00.	ĸEV	1.00	MEV		1	GER	H.KUESTERS	KFK	792202R
								Α:	ACCURACY OF 10-2	O PERCENT REQUIRED.	
STAT	JS			·							STATUS
	UNDE	H CUN	TINUOUS	REVIE	W BY INC	C AND NEA	NDC. :	SEE API	PENDIX A.		
===== 26 If	====== RÚN			NEU	zzzzzeń TRGN				MA RAY SPECTRUM		
		=====		=====							
з	63 2	4.C	KÉV			10. X	2	USA	FU	ÜRL	741175R
								0:	NO MEASUREMENTS	AVAILABLE IN 24 KEV IRON W	INDOw.
30	64 1	.00	K£V	1.00	MEV	5. %	2	USA	FU	URL	741184R
30	65 1	.00	KEV	5.00	KEV	5. X	2	USA	DUNCALS	ME W	761035R
			=========								
26 1	~ON =======	=====		NEU	IRON =========			PHGTC	N PRODUCTION CROS	S SECTION 	
3 (66 2	25.3	MV	15.0	MEV	10.01	2	FR	8.DUCHEMIN	SAC	692056R
								Q:	GAMMA SPECTRA RE	QUIRED. N OF 250 KEY FOR CAMMA RAY	S 1 F S S
									THAN 1 MEV AND THAN 1 MEV.	500 KEV FOR ENERGIES GREA	TER
								0:	QUOTED ACCURACY FOR SHIELDING CAL EVALUATION MAY B	AT 2 STANCARD DEVIATIONS. Loulations. E sufficient.	
30	67 2	:5.3	MV.	15.0	MEV	10. X	2	JAP	M.KASAL	MAP	7621C4F
								c:	GAMMA-RAY HEATIN	G CALCULATIONS	
34	58	UE	• T O	10.0	MEV	10-08	1	FR	M.SALVATORES	CAD.	A326118
		0,					•	a:	GAMMA SPECTRUN R	EQUIRED.	0020110
								С: М:	FAST REACTOR CAL	CULATIONS .	
						********				DN COORS SECTION	
=====				=====			=====				********
30	5 9 1	•00	MEV	15.0	MEV	10.0%	2	ССР	I.N.GOLQVIN	KUR	794012F
								c:	FUR GAMMA-RAY HE	ATING AND SHIELDING CALCUL	ATIGNS.
26 11	 RCN			NEU	TRCN		====== N,2N	35555			*******
						223322 ***	20220:	*=====			
3	70	UF	P-TO	15.0	MEV	10.0%	2	UK	R .HANCOX	CUL	722166F
								0:	EVALUATION REQUI	REMENT. UNY CALCULATIENS.	
			10	· · -	ME		-	50		546	
د	/1	UF	. 10	14.0	MEV	10.02	۲	г K , , ,		SHE	132622F
====	******					********			POTENTIAL CUNSTI	TUENT OF CONTAINMENT VESSE	L.

26 IRON	9494F222222222 9887F59322C2E5	NEUTRON		ENERG	Y-ANGLE	DIFF. NEUTRON-EMISSION CROSS SECTION
372	9.00 MEV	15.0 MEV	10. X	1	USA	BERK DOE 781048F
					0:	FOR SHIELDING AND TRANSPORT STUDIES OF NEXT GENERATION D-T REACTOR DESIGNS.
373	LP TO	15.0 MEV	10.0%	2	JAP	Y.SEKI JAE 832025F
					0: M:	FOR NEUTRON TRANSPORT CALCULATIONS. New request.
374	UP TO	15.0 MEV	10.0%	2	JAP	A.TAKAHASHI DSA 832042F
					Q: 0: M:	ENERGY-ANGLE DIFFERENTIAL CRGSS SECTIONS FOR INELASTIC SCATTERING AND (N,2N) REACTIONS ARE ESPECIALLY WANTED. NEUTRUN TRANSPORT CALCULATIONS. NEW REQUEST.
26 IRGN		NEUTRÓN		N,P	=========	
375	UP TO	15.0 MEV	10.0%	1	FR	M.SALVATORES CAD 712026R
				-	0: M:	FUR FAST REACTOR CALCULATIONS. SUBSTANTIAL MCDIFICATIONS.
376	UP TO	15.0 MEV	20.0%	2	υĸ	R.HANCOX CUL 722107F
					G:	EVALUATION REQUIREMENT. For hydrogen gas production rates and neutron econgmy calculations.
377	UP TO	14.0 MEV	10.0%	2	FR	B.DUCHENIN SAC 732023F
					A: 0:	QUOTED ACCURACY AT 2 STANCARD DEVIATIONS. Potential constituent of containment vessel.
378	20.0 MEV	40.0 MEV		1	USA	MCELROY HED 781018F
					(): 4: []: M:	-54MN PRODUCTION DESIRED. Accuracy range 10. to 20. percent. Dusimetry for fmit facility. Sudstantial modifications.
379	UP IC	15.0 MEV	10.0*	1	GER	H-KUESTERS KFK 7522C3R
26 IRCN		NEUTRCN		TOTAL	PROTU	N PRGDUCTION CRUSS SECTION
380	9.00 NEV	15.0 MEV	20• X	2	USA C:	DORAN HED 781024F FOR MATERIAL DAMAGE CALCULATIONS. FOR RADIATION DAMAGE STUDIES OF NEXT GENERATION D-T REACTOR DESIGNS.
381	15.0 MEV	40.0 MEV	20 . X	2	USA	DCRAN HED 781227E
					0:	FOR MATERIAL DAMAGE CALCULATIONS. FOR RADIATION DAMAGE STUDIES OF NEXT GENERATION D-T REACTOR DESIGNS.
26 1RON		NEUTRON		N,ALP	8222222 HA	
382		15.0 MEV	20.0*	2		P. HANCOX CIU 7221085
502	0, 10		2000	L	0:	EVALUATION REQUIREMENT. FUR HELIUM GAS PRIDUCTION RATES AND NEUTRON ECONOMY CALCULATIONS.
383	UP TO	15.0 MEV	10.0%	2	FR	B.DUCHEMIN SAC 732024F
					A: 0:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. Putential constituent of containment vessel.
364	UP TO	15.0 MEV	10.0%	1	FR	N.SALVATORES CAD 732042R
					G: M:	FUR FAST REACTOR CALCULATIONS. Substantial modifications.
385	20.0 MEV	30.0 MEV		1	USA	MCELROY HED 781019F
					Q: A: C: M:	-51CR PRODUCTION DESIRED. ACCURACY RANGE 10. TO 20. PERCENT. DUSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.
386	UP TŪ	15.0 MEV	10.0%	2	BLG	H.TOURWE MOL 7921CSR
					0: C:	TOTAL HELIUM PRODUCTION REQUIRED. For use as a fluence munitor.
387	UP TÚ	15.0 MEV	30.0%	1	GER	H•KUËSTERS KFK 7922C4R
26 IRON	*************	NEUTRON		TOTAL	ALPHA	PRODUCTION CROSS SECTION
386	9.00 MEV	15.0 MEV	10. X	1	USA	DORAN HED 601066F
					٥:	TOTAL HELIUM PRODUCTION CRUSS SECTION FOR Dosimetry and radiation damage studies.

26	IRGN			NEU	TRON		TOTAL	ALPHA	PRODUCTION CROSS	SECTION	(CONTINUED)
	100	15 0	MEN		NEW	30 ¥			DERAN	HED	8013166
	909	13.0	ACV	4010		200 4	•	6:	TOTAL HELIUM PROD DUSIMETRY AND D	DUCTION CRUSS SECTIO Radiation Damage Stu	N FCR JIES.
====	setet	*******						coront.			
26 ===	1 RON 2 2 2 2 2 2			NEU	TRGN ======		SPECI	AL GUA	STITY (DESCRIPTION	N BELCW} ====================================	
	390	15.0	MEV	30.0	MEV	20. X	2	USA	CARTER	HED	821076F
								Q: 0:	- 56MN PRODUCTION FMIT ACTIVATION.	DESIRED.	
	s===#;									***********************	
26 ===	1RGN #====	54 		NEU	TRCN		CAPTU	RE CRG	SS SECTION		
	391	25.3	MV	3.00	MEV	20.0%	1	FR	F.JOSSO	CAD	7920C7F
								A : C : N :	QUOTED UNCERTAIN For fast reactor Substantial modif	TY AT TWC STANDARD D Fuel Cycle Calculat Fications.	EVIATIONS. 10n.
=== 26	IRON	======= 54	*******	 NEU	TRCN			======		******************	***********
===	*****	*******	*======					=====		******************	************
	392	25.3	MV	3.00	MEV	10.0%	1	FR	F.JUSSO	CAU	792008R
								A: C: M:	QUDTED UNCERTAIN FAST REACTUR FUEL Substantial Modif	TY AT 2 STANDARD DEV L CYCLE CALCULATION. FICATIONS.	IATIONS .
STA	TUS										STATUS
	ں :=====	NDER CCI	NTINUGU	S REVIE	• 8¥ 1	INDC. SEE AF	PENDI	X A.			
26 ===	IRCN	54		NEU	TRCN		N, ALP	+A =======			
	393	U	P TO	15.0	MEV	5.0%	2	EUR	NEUTRON DUSIMETR	Y GROUP	GEL 812008F
								ί:	FEW EXPERIMENTAL EVALUATIONS ARE	DATA EXIST AND CURR HEAVILY BASED ON CAL	ENT CULATIONS.
									NEW AND SUPPLEME	NTARY MEASUREMENTS A	RE REQUESTED
26 ===	IRON	56		NEU	TRCN		CAPTU	RE CRO	SS SECTION		
	304	10-0	KEV	1.00	MEV		,	AZL	HENNIC	005	8210735
	374	1000		1.00	424		•	A:	ENERGY AVERAGED	ACCURACY TO 10-15 PE	KCENT.
								0: M:	AS DESERVING SI NEW REQUEST.	REVIEWED BY CSENG A PECIAL EMPHASIS.	NG RECOMMENDED
	s====										*************
26		56 =======		NEU	======		SPECI		NTITY (DESCRIPTION	N BELOW) ====================================	
	395	1.00	KEV	14.0	MEV	30. X	2	USA	BOWMAN	NBS	821053R
								Q:	ELECTRUN EXCITAT	ION OR REMUVAL INCUC F NUCLEUS IN NEUTRON	ED BY SUDDEN -NUCLEUS
								A:	SCATTER (N:N'É INCIDENT ENERGY N NEUTRON SPECTRUM). RESOLUTION: 36. PERC	ENT.
								M:	NEW REQUEST.		
26	IRUN	56		NEU	== == == TRON		RESON	ANCE P	ARAMETERS	**********************	
	396	UI	⇒ TC	400.	KEV	10 . X	1	USA	FU Henmig Smith	DRL DGE ANI	7410466
								a:	ENERGY REQUESTED Neutron Width, G. Wanted.	IS A MAXIMUM VALUE Amma-width, spin and	UNLY. Farity
===	SEESE:					**********					
===	=====				======		32222	322222			
	397	UF	р та	806.	KEV	10.0%	2	JAP	M.KAWAI	NIG	812031R
								0:	FOR REACTOR SHIE	LUING CALCULATIONS	
	398	UF	от о	10.0	MEV	20 . X	1	USA	HEMMIG	DOE	821034k
								G: 0: N:	TOTAL INELASTIC : THIS REQUEST WAS AS DESERVING SI NEW REQUEST.	SCATTERING CROSS SEC REVIEWED BY CSEWG A PECIAL EMPHASIS.	TIGN NEEDEU. Nd recommendeu
===				*******							
26 ===	1RON :	58 =========		NEU	TRCN ======		CAPTU	RE CR0	SS SECTION		
	399	25.3	MV	3.00	MEV	10.0%	1	FR	F.JCSSO	CAU	8320CJR
								Q: D:	QUOTED ACCURACY A	AT 2 STANDARD DEVIAT Cycle calculation.	ICNS.
								M:	NEW REQUEST.		

27 CCBAL	T 58		NEU	TRCN		CAPTU	RE CRO	SS SECTION	
=======	*****	*****		====		=====	*****		
400					10 . X	2	USA	DEI BET 72	10456
							۵:	9.1 HR ISOMER	
								THERMAL CROSS SECTION MOST IMPORTANT. Resonance integral also needed.	
							:ئ	FOR INTERPRETATION OF NI-58(N,P) FLUENCE MUNITOR DATA.	
401					10. X	2	USA	DEI BET 72	1046R
							Q:	RADIOACTIVE TARGET 71.3 DAY THERMAL CRUSS SECTION MOST IMPORTANT.	
							0:	RESONANCE INTEGRAL ALSO NEEDED. FUR INTERPRETATION OF NI-58(N.P) FLUENCE	
								MUNITUR DATA.	
402	25.0	MV	15.0	MEV	15.0%	1	GER	H.KUESTERS KFK 75	21566
							a:	EVALUATION WANTED.	
							0:	REDUCTION OF CO58.	
403	25.3	мv	100.	Eν	20.0%	2	HLG	H.TGURNE MOL PI	2046N
						-	0:	META-STARLE STATE CADTUDE CORSS SECTION	201911
							č:	FUR BURN-UP CALCULATION OF NI-58(NP)CG-58 IN	HIGH
27 CUBAL	T 59		NEU	TRUN		CAPTU	RE CRO	SS SECTION	
									22222
404	1.00	KEV	18.0	MEV	10. X	2	USA	MCELROY HED 69	1166R
							٥:	ACTIVATION IS REQUIRED.	
							٥:	TO GROUND AND METASTABLE STATES. For use as a fluence monitor.	
STATUS									TATUS
U	NDER CO		OUS REVIE	W 8Y	INDC. SEE A	PPENDI	X A.		
=======		======					=======	***************************************	=====
27 COBAL	T 59	======	NEU	TRCN =====		N, 3N		***************************************	
405	U	P TO	40.0	MEV		1	USA	MCELROY HED 78	1015F
							A:	ACCURACY RANGE 10. TO 20. PERCENT. Dosimetry for emit facility.	
							0.		
406	24.C	MEV	40.0	MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 81	201CR
							υ:	MEASURED UP TO 24MEV. EXTENSION TO 40MEV REGU	IRED
								FOR HIGH ENERGY ACCELERATOR BASED NEUTRON SOC	RCE5
27 CGBAL	T 59		NEU	TRCN		N • 4 N			
407	Ų	IP TO	50.0	MEV		1	USA	NCELRUY HED 7d	1016F
							A :	ACCURACY RANGE 10. TO 20. PERCENT.	
							61	DUSIMEIRY FOR FMIL FACILITY.	
27 COBAL	1 59		======= NEU	===== Tricn	**********	N+P	352232		122204
========	=======	=====						***************************************	
408	20.0	MEV	28.0	NEV		1	USA	MCELROY HED 78	31017F
							Α:	ACCURACY RANGE 10. TO 20. PERCENT.	
							G: M:	DUSIMETRY FÜR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	
409	Ĺ	IP TO	25.0	MEV	5.0%	2	EUR	NEUTRON DUSIMETRY GROUP GEL 81	12005R
							с:	FOR HIGH ENERGY ACCELERATOR BASED NEUTRON SOL	RCES
410	4.00	MEV	15.0	MEV	20. X	2	USA	HALE LAS 8	210E2F
							٥:	DATA INCONSISTENCY BETWEEN 4 AND 10 MEV AND	-
							<u>.</u>	AT 14 MEV. FUSION DOSINETRY.	
							M:	NEW REQUEST.	
27 (084)	======= T 5C								****
=======		*****	=======	======					
411	20.0	MEV	30-0	MEV	20 - *	2	USA	CARTER HED BO	1077F
	2000		5000		200 2	-			
							M:	NEW REQUEST.	

27 CUBAL			NEU	=====		IUTAL SECONS	. ALPHA	A PRODUCTION CRUSS SECTION 	
						~			
412	15.0	MEV	25.0	MEV	10. %	2	USA	MCELRUY HED 80	01004F
							A: 0:	ONLY SELECTED ENERGIES NEEDED. Needed for fmit dosimetry.	
413	25.0	MEV	40.0	MEV	20. X	2	USA	MCELRUY HED 80	01311F
							A:	ONLY SELECTED ENERGIES NEEDED. Needed for fait dusinetry.	
		=====		=====		======			

28 NIC	<pre></pre>	NEUTRON		ELAST	IC CRO	DSS SECTION	:#= =#=
	25 3 MV	20 0 NEV	3 O.Y	2		S.H.GADC TRM 25303	76
414	ZJOJ MV	EC.U MLV	5.04	2	0:	REQUIRED FOR STRUCTURAL-MATERIAL CALCULATIONS.	
222222				======= D/FEF	DENTIA	A FLASTIC CROSS SECTION	: = =
20 810			********		======		:==
415	1.50 NEV	3.00 MEV	15.0%	2	GER	8.GOEL KFK 69212	20R
					Α:	ABOUT 100 KEV ENERGY RESOLUTION AND ABOUT 5 Degrees Angular. Resolution 10 percent on average (CCS).	
416	8.00 MEV	15.0 MEV	20.0X	2	GER	B.GDEL KFK 69212	22F
					0:	FOR SHIELDING CALCULATIONS.	
417	100. KEV	15.0 MEV		2	USA	SMITH ANL 72104 HENNIG DOE	1er
					A:	ACCURACY RANGE 5. TO 10. PERCENT. ENERGY RESOLUTION - RESOLUTION OF INTERMEDIATE STRUCTURE PROBABLY ADEQUATE.	
418	500. EV	5.00 MEV	10.0%	1	FR	N+SALVATORES CAD 83201	1 CR
					0: M:	: FAST REACTOR CALCULATIONS. : New Request.	
28 NIC	= <u>= = =</u> = = = = = = = KEL	NEUTRON	*********	INEL A	STIC C	CROSS SECTIÓN	:==
******					===3==:		:52
419	3.00 MEV	14.0 MEV	10.0%	З	FR	B.DUCHEMIN SAC 73202	25F
					A: 0:	QUDTED ACCURACY AT 2 STANCARD DEVIATIONS. Potential cunstituent of containment vessel.	
420	UP TG	20.0 MEV	3.0%	2	IND	S+B+GARG TRM 7536:	38R
					٥:	REQUIRED FOR STRUCTURAL-MATERIAL CALCULATIONS.	
421	UP TO	20.0 NEV	5. %	1	JAP	Y•SEKI JAE 76210 M•KASAI MAP	35F
					a:	INELASTIC GAMMA RAY SPECTRA ALSU REGUIRED	
STATUS							TLS
	UNDER CONTINUCU	S REVIEW BY I	NDC AND N	EANDC .	SEE AP	PPENDIX A.	
28 NIC		NEUTRON		ENERG	Y DIFF	FERENTIAL INELASTIC CROSS SECTION	:==
	*******			========	******		:3=
422	UP TO	15.C MEV	10.0%	1	FR	M.SALVATORES CAD 70200	as:
					M:	SUBSTANTIAL MODIFICATIONS.	
423	UP TU	15.0 MEV	10. X	2	USA	HEMMIG DOE 82108	85R
					0: A:	: TOTAL INTEGRAL OVER 4PI REQUIRED. SPECTRA AT SEVERAL ANGLES IF SIGNIFICANTLY ANISOTROPIC. : INCIDENT ENERGY RESOLUTION: 10. PERCENT. DELTA E(N') = 10 PERCENT. ENERGY RESOLUTION REQUIRED TO DETERMINE MAJOR STRUCTURE. EOR INCODEL SHIELD DESIGN.	
					M:	NEW REQUEST.	
28 NIC	 KEL 			ENERG	Y-ANGL	E DIFFERENTIAL INELASTIC CROSS SECTION	:==
424	UP TO	7.00 MEV		1	UK	C.G.CAMPBELL WIN 64200)4F
					A: C:	: ACCURACY REQUIRED 5.0 PERCENT BELUW 4.0 NEV, 5.0 TO 10.0 PERCENT ABOVE. : Evaluation reguirement. For fast reactors.	
425	UP TO	4.00 MEV	5.0%	1	GER	H.KUESTERS KFK 79221	118
426	4.00 NEV	15.0 MEV		1	GER	H.KUESTERS KFK 75225	51R
					A:	ACCURACY OF 5-30 PERCENT REQUIRED.	
28 NIC	 Kél 	NEUTRON		CAPTU	RE CRO	DSS SECTION	:== ===
407	100 EV						
421	100. 24	1.00 M24		•	A: 0:	COURT AND A CONTRACT OF A CONT	:04
428	25.3 MV	300. KEV	10.0%	1	GER	F.FRDEHNER KFK 69213	1H
					A:	HIGH RESULUTION RESONANCE CROSS SECTIONS AND Multilevel parameterisation wanted. Radiation widths should be accurate to 10 percent or gette for Broad S levels and for p levels contributing to doppler coefficient.	1£

28 NIC	KEL = = = = = = = = = = = = = = = = = = =		NEUTRCN CA				RE CR	OSS SECTION	***********	(CGNTINUED)
425	100.	EV	500.	KEV	5.0%	1	FR	N.SALVATORES RESONANCE PARAM FOR FAST REACTO	CAD METERS WANTED. DR Calculations. Distations	702005R
430	1.00	KEV	1.00	NEV	10. X	2	USA	DIVADEENAM HEMMIG SMITH DONCALS	BNL DDE ANL WEW	741053R
431	25.3	MV	20.0	MEV	3.0%	2	1 ND	S.d.GARG	TRN TRUCTURAL-MATERIAL C	753039R
4 7 2	25.3	MIV	15-0	MEV	30-08	2	LIK		CIII	7622465
452	2343		1300	<i></i>	30.04	2	0	: EVALUATION REQU FOR NEUTRON ECO	JIREMENT. DNOMY CALCULATIONS.	1022496
433	100.	EV	100.	KEV	10.0%	1	GER	H.KUESTERS	KFK	792207k
434	100.	KEV	1.00	MEV	20.0%	1	GER	H.KUESTERS	KFK	792208R
STATUS	UNDER CC		REVIE	 W EY	INDC AND	NEANDC.	SEE A			STATUS
				52222 Togn						
======	*****		======	=====		========	=====			====*=:==
435	25.3	MV	15.0	MEV	10.0%	2	FR	B.DUCHEMIN	SAC	692125R
							Q A Q	: GAMNA SPECTRA F : ENERGY RESOLUTI THAN 1 MEV AN THAN 1 MEV QUOTED ACCURACY : FOR FAST REACTO	REQUIRED. Ion of 250 kev for 0 ND 500 kev for energ Y at 2 standard devi Or shielding calcula	ANNA RAYS LESS IES GREATER Aticns. Itiuns.
								EVALUATION MAY	BE SUFFICIENT.	
436	25.3	MV	15.0	MEV	10 . X	2	JAP D	M . KASAI : GAMMA-RAY HEATI	NAP Ing Calculations	762111F
437	U	P TC	10.0	MEV	10.0%	1	FR	M.SALVATORES	CAD	8320126
							0	: GAMMA SPECTRUM : FAST REACTOR CA : NEW REQUEST.	REQUIRED. Alculatiuns.	
28 NIC			NEU	TRON	*********	ENERG	Y DIF	F. PHOTON-PRODUCT	TION CRCSS SECTION	
438	25.3		600-		20. *	2		HENNIG	00F	7210528
430	23.3	~ •		NC.	200 2	-	 	ALL GAMMA'S AR	E OF INTEREST.	CITATIONS
*=====		=======							TERRETERES	
28 NIC	KEL	=========================	NEU	TRON		N+2N ======				***************
439	i u	P TO	14.0	MEV	10.0%	3	FR	B.DUCHEMIN	SAC	732026F
							A C	CONTED ACCURACY POTENTIAL CONS	Y AT 2 STANDARD DEVI TITUENT OF CONTAINME	ATIONS. ENT VESSEL.
440	U	P 10	15.0	MEV	30.0%	2	UK	R .HANCOX	CUL	762240F
							C	FOR NEUTRON ECO	UIREMENT. ONOMY CALCULATIONS.	
28 NIC		========	NEU	TRGN		ENERG	5 Y - ANG	LE DIFF. NEUTRON	-EMISSION CROSS SECT	:=====================================
======				.====:						
441	15.0	MEV	35.0	MEV		1		DORAN A: ACCURACY RANGE ACCURACY TO BE STUDIES. D: FOR MATERIAL D	HED 10. TO 40. PERCENT DETERMINED FRUM SEI AMAGE CALCULATIONS.	781037F SITIVITY
442	9.00	MEV	15.0	MEV	10. X	1	USA	BERK	DOE	781044F
							C	: FOR SHIELDING GENERATION	AND TRANSPERT STUDIO D-T REACTOR DESIGNS	S OF NEXT
222355	======== K FI	*******	======= NEU			========= N.P				
		*******					*****			
443	i U	P TO	15.0	MEV	10.0%	1	FR	M.SALVATORES		702010R
							1	4: SUBSTANTIAL NG	DIFICATIONS.	
444	. u	PTO	14.0	MEV	10.0%	3	FR	B.DUCHEMIN	SAC	732027F
								A: QUOTED ACCURAC D: POTENTIAL CONS	Y AT 2 STANDARD DEV Tituent of containme	IATIONS. Ent vessel.
445	i U	Р ТО	15.0	MEV	20.0%	2	UK	R.HANCOX	CUL	762242F
							ſ	SEVALUATION REG FOR HYDROGEN G ECONOMY CALCUL	UIREMENT. AS PRODUCTION RATES ATIONS.	AND NEUTRON

28 ===	NICKEL			NEU	FRGN		N.P))) ***********************	NTINUED
	446	UP	то	15.0	NEV	10.0%	i	GER	H.KUESTERS	KFK	792209R
28	NICKEL			NEU	TRON		TOTAL	PROTO	N PRODUCTION CROS	S SECTION	********
	447	9.00	MEV	15.0	NEV .	10. X	2	USA n:	DORAN	HED AGE CALCULATIONS AND NEXT	761025F
									GENERATION D-T	REACTOR DESIGNS.	
	448	15.0	MEV	40.0	MEV	20. X	2	USA	DORAN	HED	781228F
								0:	FOR MATERIAL DAM GENERATION D-T	AGE CALCULATIONS AND NEXT REACTOR DESIGNS.	
=== 28	NICKEL		======	NEU	recn		N,ALP	====== HA			£=====≈
===			********				*****				*******
	449	UP	70	15.0	MEV	10.0%	2	FR	B.DUCHEMIN	SAC	732028F
								A: - G:	QUOTED ACCURACY POTENTIAL CUNSTI	AT 2 STANDARD DEVIATIONS. TUENT OF CONTAINMENT VESSE	L•
	450	UP	10	15.6	MEV	10.0%	1	FR	M.SALVATORES	CAD	732044R
								0: N:	FUR FAST REACTOR SUBSTANTIAL MODI	CALCULATIONS. Fications.	
	451	UP	то	15.0	MEV	30.0%	3	UK	R .HANCOX	CUL	762244F
								0:	EVALUATION REQUI FOR HELIUM GAS P ECONOMY CALCULAT	REMENT. Ruduction rates and neutro Ions.	N
	452	υP	τa	15.0	MEV	10.0x	2	BLG	H.TOURME	MOL	79211CF
								0: D:	TOTAL HELIUM PRO For use as a flu In fission and i	DUCTION REQUIRED. Ence Monitor. N Fusion reactors, cusimet	RY.
	453	UP	TO	15.0	MEV	30.0X	1	GER	H.KUESTERS	KFK .	792210k
	454	25.3	MV	20.0	MEV	10. X	2	USA	DIVADEENAM	BNL	801147R
								:0	FOR EVALUATION A	ND MODEL TESTING PURPOSES.	
28	NICKEL		=========	NEU	FRON		TOTAL	ALPHA	PRODUCTION CROSS	SECTION	
	455	9.00	MEV	15.0	MEV	20. X	1	USA O:	FOR RADIATION DA	DOE MAGE STUDIES OF NEXT GENER	781062F
									D-T REACTOR DE	SIGNS.	
	456	LP	то	40.0	MEV	10. X	1	USA	DURAN	HED	8010ć4F
								o:	FMIT RADIATION D	AMAGE STUDIES.	
28	NICKEL			NEU	TRON		SPEC1	AL QUA	NTITY (DESCRIPTIC	N BELCW)	========
	457	2.50	EV	15.0	MEV	20 . X	1	USA	ENGHELM	GA	801015F
								0:	ACTIVATION CROSS	SECTION.	
= 23									FUSION REACTOR 5	MUTDUWN DUSE RATES.	
28 	NICKEL	58 	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NEU	TR ON =======		TOTAL	CRUSS	SECTION	\$*************************************	
	458	1.00	MEV	15.0	MEV	10.0%	2	FR	E .FORT	CAD	792012H
								0:	EVALUATION PROBL	EMS	
28 28	NICKEL	58 58		NEU	TRCN		ELAST	IC CRO	SS SECTION		
	459	1.00	MEV	15.0	MEV	10.0%	2	FR	E "FORT	CAD	792013R
								0:	EVALUATION PROBL	EMS	
=== 28	NICKEL	58	*******	NEU	======== fron		CAPTU	RE CRO	SS SECTION	************************	
2. <u>74</u>				:=====:				5522 <i>22</i> :	***************		12172212
	460	25.3	MV	3.00	MEV	20.0%	1	FR	F.JCSSO	CAD	79201CR
								0: M:	GUOTED UNCERTAIN FOR FAST REACTUR SUBSTANTIAL MODI	FUEL CYCLE CALCULATION. Fiel Cycle Calculation. Fications.	S•
	461	1.00	KEV	2.00	MEV	10. X	2	USA	DIVADEENAM	8NL	801136A
								0:	FOR EVALUATION N AVERAGE CAPTURE FOR HELIUM BUILD	EEDS. CRUSS SECTION. -UP VIA NI-59(N.ALPHA) REA	CTION.
28	NICKEL	58	87977777 8752377	NEU	18222222 TRCN		N,2N	******			
	462	20-0	MEV	30 - 0	MEV		1	1154		HED	7810205
	70C	- V 8 U	r-rika V		~ .		1	A: 0:	ACCURACY RANGE 1 FNIT ACTIVATION.	0. TU 20. PERCENT.	, JIV20F

28 NICKI	EL 58 	NEUTRON		N.2N	*====	(CG)	TINUEDJ
463	UP TO	15+0 MEV	10.0%	2	ик 0:	J.BUTLER WIN ACTIVATION DETECTOR.	792121A
464	20.0 MEV	30.0 MEV	5.0%	2	EUR G:	NEUTRON DOSIMETRY GROUP GEL For High Energy Acceleratic based Neutron :	812012R Sources
67 A 711C					M:	SUBSTANTIAL MODIFICATIONS.	
51A105	UNDER CONTINUGU	S REVIEW EY IN	DC. SEE	APPENDI	 х А.		STATUS
	61 58						

465	20.0 MEV	40.0 MEV		1	USA	CARTER HED	781021F
					õ:	FMIT ACTIVATION.	
28 NICK	EL 58	NEUTRON		N+P	****** ******		********
466		15.0 MEV	5. *	3	115.4	051 957	7210555
400		13.0 MLV	J. A	3	03.	FOR USE AS FLUENCE MONITOR.	7210338
467			2.0*	1	FUR		7421158
			2004	•	2.0K Q:	AVERAGE CROSS SECTION IN A U-235 FISSION S	PECTRUM
					٤:	DESIRED. FOR NURMALIZATION OF AVERAGE CROSS SECTION DOSIMETRY PURPOSES.	S FOR
468	25.3 MV	3.00 MEV	10.0%	1	FR	F.JOSSO CAD	792011F
					A: 0: #:	QUOTED UNCERTAINTY AT 2 STANDARD DEVIATION FOR FAST REACTUR FUEL CYCLE CALCULATION. Substantial Modifications.	S•
465	UP TO	25.0 NEV	5.0%	2	EUR	NEUTREN DOSIMETRY GROUP GEL	812011F
					G:	FUR HIGH ENERGY ACCELERATCR BASED NEUTRON	SOURCES
470	2.00 MEV	10.0 MEV	5. X	2	USA	NCGARRY NBS	821054R
					A: 0: M:	INCIDENT ENERGY RESOLUTION: 5.0 PERCENT. Required for reactor pressure vessel dosim New request.	ETRY.
STATUS-							STATUS
	UNDER CUNTINGUC	5 REVIEW BY 17	WC. SEE	APPENDI	X A.		
28 NICK	EL 58 ====================================	NEUTRCN		N.T =======			
471	15.0 MEV	40.0 MEV	20. X	2	USA	NCELROY HED	8010C3F
					0:	ALL REACTIONS LEADING TO CG-56 ARE NEEDED. Needed for FMIT ACTIVATION AND GGSIMETRY.	
28 NICK		NEUTRGN		RESON	ANCE P	======================================	= = = = = = = = = = = = = = = = = = =
472		100- KEV	10. *	2			7410565
472			10	£	0,54	SMITH ANL	1410305
					G:	ENERGY REGUESTED IS A MAXIMUM VALUE ONLY. Neutron Width, gamma-Width, spin and parit Wanted.	Y
473	100. KEV	700. KEV	10. X	2	USA	DIVADEENAM BNL	801135F
					0:	FOR EVALUATION NEEDS. PRECISE CAPTURE CROSS SECTION NECESSARY FO ESTIMATING HELIUM BUILD-UP VIA NI-55(N.4	R LPHA)
28 NICK	<u></u> EL 59	NEUTRON		N.ALP			
728 2 2 2 3					======		*******
474	25.3 NV	500. EV	10.0%	2	8LG	H.TOURWE MOL	742023F
					A: 0:	EVEN AN ACCURACY OF 50 PERCENT WOULD BE US EVALUATION OF HE PRODUCTION IN STEEL IN HI REACTORS THROUGH THE REACTION CHAIN NI-58(N,GAMMA)NI-59(N,ALPHA)FE-56. FOR CALCULATION OF THE HE-PRODUCTION IN FU SIMULATION IRRADIATIONS IN FISSION REACT	EFUL. GF FLUX SIGN GRS.
			·		N :	SUBSTANTIAL MUDIFICATIONS.	
475	25.3 MV	10.0 MEV	25.0%	2	GER C:	B.GOEL KFK For Neutron Damage prediction.	7622516
476	5.0C KEV	14.0 MEV	10. X	2	USA	DIVADEENAM UNL	801128F
					a: 0:	RADIDACTIVE TARGET 7.5X(10**4) YR Alpha Channel is open at zero neutrun ener Impgrtant fur helium productign.	GY.

28 NICKE		**************************************	**********	RESONA	NCE PA	R AMETER S
477	25.3 MV	500. KEV	10. X	2	USA (DIVADEENAM ENL 80112
				-	a: (0: (RADIDACTIVE TARGET 7.5X(10++4) YR Elastic, gamma, Alpha and Pruton Bidths.
						REACTION.
28 NICKE	L 60 	NEUTR CN ====================================		N.P ======		
478	UF TO	50.0 MEV		2	USA	CARTER HED 78102
					A: 0:	ACCURACY RANGE 10. TO 20. PERCENT. FMIT ACTIVATION.
28 NICKE		NEUTRLN		N,T		
479	15.0 MEV	40.0 MEV	20. 1	2 (USA I	NCELRUY HED BOLOG
				_	Q:	ALL REACTIONS LEADING TO CO-58 ARE NEEDED.
					=======	RECED FOR FAIL DUSIMERT AND ACTIVATION.
	L OU ====================================			RESUNAL		x AME EK 5 ====================================
480	UP TO	100. KEV	10. %	2	USA I	HENMIG DOE 74105 Smith Anl
					0: I I	LNERGY REQUESTED IS A MAXIMUM VALUE CNLY. Neutron width, gamma-wiûth, spin and parity banted.
481	100. KEV	700. KEV	10. %	2	USA	DIVAJEENAM BNL 80114
					0:1	FUR EVALUATION NEEDS.
28 NICKE	L 61	NEU TRGN		RESONA	NCE PA	K AMÉ TERS
482	UP TO	100. KEV	10. X	3 1	USA	HEMMIG DUE 74106
					0: 1	SAITH ANL
					4.	NEUTRON WIDTH, GANMA-WIDTH, SPIN AND PARITY WANTED.
483	100. KEV	700. KEV	10. X	3	USA I	DIVADEENAM BNL 60114
					0: I	FOR EVALUATION NEEDS.
28 NICKE		NEUTRON		TOTAL	CRÚSS	SECTION
404	1.00 MEV	15.0 MEV	10.0%	2 1	FR i	E.FCRT CAU 79201
					o: 1	EVALUATION PROBLEMS
26 NICKE	L 62	NEUTRON		ELASTI	C CROS	S SECTION
465	1.00 MEV	15.0 MEV	10.02	د ۱	ек 1 0: (E OF URI CAD 75201 EVALUATION PROBLEMS
2222222222		NEUTRON		CAPTUR	====== E CROS	S SECTION
				======	sesazo:	
48 C	25.3 MV	3.00 MEV	20.0%	1	FR I	F.JOSSO CAD 76213
					A: 0 0: 1 M: 5	QUQTED UNCERTAINTY AT 2 STANDARD DEVIATIONS. FOR FAST REACTUR FUEL CYCLE CALCULATION. Substantial modifications.
487	100. EV	1.00 MEV	25.0%	2	υκ (C.G.CAMPBELL BIN 79213
					c: 1	FUR FAST REACTOR CIRCUIT ACTIVITY. Evaluation reguirement.
28 NICKE	_ 62	NEUTRCN		RESGNA	NCE PA	RAMETERS
*******	====================	===================		=======		
488	UP 10	100. KEV	10. X	3 (USA	HEMMIG DOE 74106 Smith anl
					a: 1	ENERGY REQUESTED IS A MAXIMUM VALUE UNLY. Neutrun Width, gamma-width, spin and farity Wanted.
489	100. KEV	700. KEV	10. %	2	บรล เ	DIVADEENAM BNL 60115
					0:1	FOR EVALUATION NEEDS.
28 NICKE	_ 63	NEUTRON		CAPTUR	E CROS	S SECTION
490	1.00 MV	10.6 MEV	10. X	2	USA (DEI BET 76105
					0: 0	RADIUACTIVE TARGET 100 YR Flux Monitor From (U/N_P) reaction.
		=======================================	*********			

28 NICKEL	64	NEUTRON		RESON	ANCE P	AR AMETER S
491	UR TO	100. KEV	10. *	3		
491		1000		5	0.34	SMITH ANL
					u:	ENERGY REGUESTED IS A MAXINUM VALUE UNLY. Neutron width, gamma-width, spin and parity wanted.
492	100. KEV	700. KEV	10. X	3	USA	DIVADEENAM BNL 801143R
********					o:	FOR EVALUATION NEEDS.
29 COPPER		GA M MA		GAMMA	•N	
493	UP TU	20.0 MEV	30. X	2	USA	DRIEMEYER MDD E21044F
					A: G: M:	INCIDENT ENERGY RESOLUTION: 5. PERCENT. DETERMINATION OF PHOTCNEUTRON ACTIVATION IN EOT-P. NEEDED IN ASSESSING POTENTIAL ACTIVATION PROBLEMS IN THE UPGRADE PHASE OF EDT-P CFERATION. NEW REQUEST.
29 CCPPER			***********	TOTAL	CRUSS	SECTION
406				2	1104	NCINC (10 0010375
494	1.00 KEV	2.000 MEV	1.0 %	2	05A C: M:	FOR RADIATION DAMAGE AND FEATING CALCULATIONS IN THE TURDIDAL FIELD COILS OF A FUSION DEVICE. NEW REQUEST.
495	13.0 MEV	15.0 MEV	1.0 X	2	USA	YOUNG LAS 821038F
					ט: M:	FOR RADIATION DAMAGE AND HEATING CALCULATIONS IN The tordidal field coils of a fusion device. New request.
29 CCPPER	======================================	NEUTRON		ELAST	IC CRO	SS SECTION
496	8.00 MEV	15.0 MEV	10.0%	2	сср о:	I.N.GULUVIN KUR 724032F NEUTRON TRANSMISSION CALCULATIONS.
497	13.0 MEV	15.0 NEV	4.C %	2	USA	YLUNG LAS 821039F
					c:	FOR RADIATION DAMAGE AND HEATING CALCULATIONS IN THE TOROLOAL FIELD COLLS OF A FUSION DEVICE.
					M:	NEW REQUEST.
29 COPPER	=====================================	NEUTRON		CAPTU	RE GAM	MA RAY SPECTRUM
498	25.3 NV	60C. KEV		2	USA	FU JRL 821049F
					A: C: M:	10-20 PERCENT ACCURACY. TO RESULVE DISCREPANCIES IN EXISTING CATA AT 0.0253 EV. NO DATA BETWEEN 0.0253 EV AND 600 KEV. NEW REQUEST.
29 CGPPER	:=====================================	NEUTRON		 Рнот и	 N PROD	UCTION CROSS SECTION IN INELASTIC SCAT.
			*********	******		
455	UP TC	15.0 MEV	15.0%	2	CCP	I.N.GCLUVIN KUR 724033F
						NEUTRUNICS CALCULATIONS FOR ELANKET AND SHIELD.
29 CCFPEF	} 	NEU TRÙN ====================================		TCTAL	PH010	N PREDUCTION CROSS SECTION
500	500. KEV	15.0 MEV	15.0%	2	ССР	I.N.GGLUVIN KUR 724034F
					0: C:	GANHA RAY SPECTRA ALSC BANTED. Gamma Ray Heating and shielding calculations.
501	25.3 MV	15.0 MEV	15. X	2	JAP	Y.SEKI JAE 762113F
					c: 0:	GAMMA RAY SPECTRA ALSG RECUIRED. Gamma-Ray Heating in Magnets
29 COPPER		NEUTRON		ENERG	Y-ANGL	E DIFF. NEUTRON-EMISSION CROSS SECTION
					X 22222	
502	15.0 MEV	35.0 MEV		2	USA	DCRAN HED 78104CF ACCURACY RANGE 10. TO 40. PERCENT.
					0:	ACCURACY TO BE DETERMINED FROM SENSITIVITY Studies. For material damage calculations.
503	9.00 NEV	15.0 MEV	10. X	2	USA	BERK DUE 781046F
					c:	FOR SHIELDING AND TRANSPORT STUDIES OF NEXT Generation D-T reactor designs.
29 COPPER	<pre></pre>	NEUTRCN		N.P		
		16 6 464	15 04	=		
204	UP IU	10+0 MEV	1J+UA	ء ===	0:	HYDROGEN ACCUMULATION CALCULATIONS.

29 COPPE	0	NEUTRON			N PRODUCTION CROSS SECTION

605	0.00	16 0 MEV	20 x	A211 E	DORAN HED 7610285
505	9.00 NEV	IJIO MET	20. 4	3 034	
				0.	GENERATION D-T REACTOR DESIGNS.
506	15.C MEV	30.0 MEV	20. X	3 USA	DURAN HED 76122SF
				0	FOR MATERIAL DAMAGE CALCULATIONS AND NEXT GENERATION D-T REACTOR DESIGNS.
29 CGPPE	R	NEUTRON		N, ALPHA	
507	UP TO	15.0 MEV	15.0%	2 CCP	I.N.GULOVIN KUR 724036F
				٥	HELIUM ACCUMULATION CALCULATIONS.

29 CCPPE	R	NEUTRON		TOTAL ALPH	A PRODUCTION CROSS SECTION
508	9.00 MEV	15.0 MEV	20 • X	2 USA	DŪRAN HEÐ 761064F
				С	FMIT DOSIMETRY, ACTIVATION AND RADIATION DAMAGE
					STUDIES.
60S	15.0 MEN	30-0 MEV	20. *	2 454	DORAN HED 28123CE
,	1000 420		200 %		
				0	STUDIES.

29 COPPE	R ====================================	NEUTRON		SPECIAL QU	ANTITY (DESCRIPTION BELGW)
510	9.00 MEV	15.0 MEV	20. X	2 USA	BERK DOE 801049F
				Q	: ALL SIGNIFICANT ACTIVATION REACTION CROSS
				0	SECTIONS. : DATA NEEDED FOR SHIELDING, ACTIVATION AND NEUTRON
					TRANSPORT CALCULATIONS.
511	20.0 MEV	30-0 MEV	20. *	2 USA	CARTER HED 821078F
	2000		200 1		
				0	FRIT ACTIVATION.
				м	NEW REQUEST.
29 COPPE	R 63	NEUTRON		CAPTURE CR	DSS SECTION
29 COPPE	R 63	NEUTRON		CAPTURE CR	DSS SECTION
29 COPPE	25.3 MV	NEUTRON		2 USA	DSS SECTION HEMNIG DOE 6710C1F
29 COPPE	R 63	NEUTRON		CAPTURE CR 2 USA	HEMNIG DOE 6710CIR
29 COPPE	R 63 25.3 MV	NEUTRON		CAPTURE CR 2 USA A	HEMMIG UDE 6710CIR ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE
29 COPPE	R 63 25.3 MV	NEUTRON		CAPTURE CR 2 USA A 0	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE THERMAL. : FOR DETECTOR APPLICATIONS.
29 COPPE 512	25.3 MV	NEUTRON 1.00 KEV 16.0 MEV	10 . x	CAPTURE CR 2 USA A 0 2 USA	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. MCELROY HED 691132K
29 COPPE 512 513	25.3 MV 1.00 KEV	NEUTRON 1.00 KEV 16.0 MEV	10. X	CAPTURE CR 2 USA A 0 2 USA c	DSS SECTION HEMMIG DOE 6710CIR : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. MCELROY HED 691132R : ACTIVATION OF CU-64 IS REGUIRED.
29 COPPE 512 513	R 63 25.3 MV 1.00 KEV	NEUTRON 1.00 KEV 16.0 MEV	10 . X	CAPTURE CR 2 USA A 0 2 USA C 0	DSS SECTION HEMMIG DOE 6710CIR : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABEVE THERMAL. : FOR DETECTOR APPLICATIONS. MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR.
512 513	25.3 MV	NEUTRON 1.00 KEV 18.0 MEV	10. X	2 USA A Q 2 USA G Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	HEMMIG DOE 6710CIR ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. FOR DETECTOR APPLICATIONS. MCELROY HED 691132K ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. DEL DET 2410640
512 513	R 63 25.3 MV 1.00 KEV 1.00 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV	10. X 5. X	CAPTURE CR 2 USA A 0 2 USA G 0 2 USA	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE : FOR DETECTOR APPLICATIONS. MCELRUY HED 691132R : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DE1 BET 761056R
512 513	R 63 25.3 MV 1.00 KEV 1.00 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV	10. X 5. X	CAPTURE CR 2 USA A Q 2 USA G 0 2 USA O	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE : FOR DETECTOR APPLICATIONS. MCELRUY HED : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DEI BET : NEEDED FOR LONG TERM FLUX MONITOR.
512 513 514	R 63 25.3 MV 1.00 KEV 1.00 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV	10. X 5. X	CAPTURE CR CAPTURE CR A Q 2 USA G 0 2 USA Q 0 N,P	HEMMIG DOE 6710CIR ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. FOR DETECTOR APPLICATIONS. MCELROY HED 691132K ACTIVATION OF CU-64 IS RECUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761356R NEEDED FOR LONG TERM FLUX MONITOR.
512 513 514	R 63 25.3 MV 1.00 KEV 1.00 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON	10 • X 5 • X	CAPTURE CR 2 USA A Q 2 USA G Q 2 USA Q N,P	DSS SECTION HEMMIG DDE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABEVE THERMAL. 5 PERCENT ABEVE : FOR DETECTOR APPLICATIONS. 691132R MCELROY HED 691132R : ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MENITOR. 761056R
512 513 514	R 63 25.3 MV 1.00 KEV 1.00 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON	10. X 5. X	CAPTURE CR 2 USA A 0 2 USA G 0 2 USA 0 N,P	DSS SECTION HEMMIG DDE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE : FOR DETECTOR APPLICATIONS. MCELROY HED : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DEI BET : NEEDED FOR LONG TERM FLUX MONITOR.
512 513 514 29 COPPE 515	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON	10. X 5. X 5. X	CAPTURE CR A Q 2 USA G Q 2 USA Q N,P 2 USA	DSS SECTION HEMMIG DDE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THEMAL. 5 PERCENT ABOVE S PERCENT ABOVE thermal. : FOR DETECTOR APPLICATIONS. 691132N MCELROY HED 691132N : ACTIVATION OF CU-64 IS REGUIRED. 691132N : FOR USE AS FLUENCE MONITOR. 0 DE1 BET 761056R DE1 JET 761055R
512 513 514 29 COPPE 515	R 63 25.3 MV 1.00 KEV 1.00 MV 1.00 MV R 63	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV	10. X 5. X 5. X	CAPTURE CR 2 USA 4 0 2 USA 0 2 USA 0 N.P 2 USA 0 0 2 USA 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. 691132R MCELRUY HED 691132R : ACTIVATION OF CU-64 IS REQUIRED. 691132R : FOR USE AS FLUENCE MONITOR. 051132R DE1 BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. 061055R
29 COPPE 512 513 514 29 COPPE 515 29 COPPE	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON	10. X 5. X 5. X	CAPTURE CR 2 USA 4 0 2 USA 0 2 USA 0 2 USA 0 N.P 2 USA 0 	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. 691132R MCELRUY HED 691132R : ACTIVATION OF CU-64 IS REQUIRED. 691132R : FOR USE AS FLUENCE MONITOR. 05132R DEI BET 761056R DEI BET 761055R DEI GET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 051055R
29 COPPE 512 513 514 29 COPPE 515 29 COPPE	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON	10. X 5. X 5. X	CAPTURE CR 2 USA A 0 2 USA C 2 USA 0 N.P 2 USA 0 N.ALPHA	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. 691132H MCELROY HED 691132H : ACTIVATION OF CU-64 IS RECUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R DEI BET 761055R DEI JET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 761055R
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTR CN 18.0 MEV	10 . X 5. X 5. X	CAPTURE CR 2 USA 4 0 2 USA 2 USA 0 2 USA 0 N.P 2 USA 0 N.P 2 USA 0 1 BLG	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. 5 PERCENT ABOVE THERMAL. : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS RECUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. DEI DEI JET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. TOURWE MOL
29 COPPE 512 513 514 29 CCPPE 515 29 CCPPE 516	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRCN 18.0 MEV	10 • X 5 • X 5 • OX	CAPTURE CR CAPTURE CR A 0 2 USA 0 2 USA 0 N.P 2 USA 0 N.P 1 BLG	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABEVE THERMAL. 5 PERCENT ABEVE : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. 691132K : FOR USE AS FLUENCE MONITOR. 761056R DEI BET 761055R DEI JET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 792111F H.TOURWE MOL 792111F
29 COPPE 512 513 514 29 CCPPE 515 29 CCPPE 516	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRCN 18.0 MEV	10 • X 5 • X 5 • X	CAPTURE CR CAPTURE CR A 0 2 USA 0 2 USA 0 N.P 2 USA 0 N.P 1 BLG 0 0 0 0 0 0 0 0 0 0 0 0 0	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE THERMAL; 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. 5 FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. 761055R : NLEDED FOR LONG TERM FLUX MONITOR. 792111F : REQUIRED IS ACTIVATION. 5 FUR USE AS A FLUENCE MUNITOR.
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRCN 18.0 MEV	10 • X 5 • X 5 • X 5 • OX	CAPTURE CR 2 USA A 0 2 USA 0 2 USA 0 N.P 2 USA 0 N.P 1 BLG 0 0 0 0 0 0 0 0 0 0 0 0 0	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE THERMAL. 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. 691132K : FOR USE AS FLUENCE MONITOR. 761056R DEI BET 761055R DEI JET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 792111F H.TOURWE MOL 792111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR.
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON	10 • X 5 • X 5 • OX	CAPTURE CR CAPTURE CR A Q 2 USA Q 2 USA Q 2 USA Q N.P 2 USA Q N.P 1 BLG Q TOTAL CRUS	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE THERMAL. 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. DEI JET DEI JET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. TOP2111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR.
29 COPPE 512 513 614 29 COPPE 515 29 COPPE 516 30 ZINC	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV	10 • X 5 • X 5 • 0 X	CAPTURE CR CAPTURE CR A Q 2 USA Q 2 USA Q 2 USA Q N.P 2 USA Q N.ALPHA 1 BLG Q TOTAL CRUS	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE THERMAL. 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. 691132K MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. 5 DEI JET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. 792111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR.
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 517	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON 15.0 MEV	10 • X 5 • X 5 • 0X	CAPTURE CR CAPTURE CR A Q 2 USA Q 2 USA Q 2 USA Q N.P 2 USA Q N.P 1 BLG Q TOTAL CRUS 2 IND	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. DEI BET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. H.TUURWE MOL 792111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR. 5 SECTION K.SHANKAR SINGH KAL B3304\$R
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 517	R 63 25.3 MV 1.00 KEV 1.00 MV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON 18.0 MEV	10 • X 5 • X 5 • 0X 15 • 0X	CAPTURE CR CAPTURE CR A Q 2 USA Q 2 USA Q 2 USA Q N.P 2 USA Q N.ALPHA 1 BLG Q TOTAL CRUS 2 IND	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. MCELROY HED 691132K : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DEI BET 761056R : NEEDED FOR LONG TERM FLUX MONITOR. DEI BET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. H.TUURWE MOL 792111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR. 5 SECTION
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 517	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 18.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON 15.0 MEV	10 • X 5 • X 5 • X 5 • 0X	CAPTURE CR 2 USA A 0 2 USA 0 2 USA 0 2 USA 0 N.P 2 USA 0 N.P 1 BLG 0 1 BLG 0 1 TOTAL CRUS 2 IND 0 0 0 0 0 0 0 0 0 0 0 0 0	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. MCELROY HED 691132h : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DE1 BET 761056R : NEEDED FOR LONG TERM FLUX MGNITCR. DE1 BET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. H.TOURWE MOL 792111F : REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR. 33304\$R : SECTION K.SHANKAR SINGH KAL 83304\$R : FOR IMPURITIES ESTIMATIONS IN THE FUELS NEW REQUEST.
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON 15.0 MEV	10 - X 5 - X 5 - X 5 - 0X	CAPTURE CR CAPTURE CR A Q 2 USA Q 2 USA Q 2 USA Q N.ALPHA 1 BLG Q TOTAL CRUS 2 IND Q M CAPTURE CR	DSS SECTION HEMMIG DOE 6710C1R : ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABLVE : FOR DETECTOR APPLICATIONS. MCELRUY HED 691132h : ACTIVATION OF CU-64 IS REGUIRED. : FOR USE AS FLUENCE MONITOR. DE1 BET 761056R : NEEDED FOR LONG TERM FLUX MGNITCR. DE1 GET 761055R : NEEDED FOR LONG TERM FLUX MONITOR. H.TOURWE MOL 792111F : REQUIRED IS ACTIVATION. FUR USE AS FLUENCE MUNITOR. S SECTION K.SHANKAR SINGH KAL 833045R : FOR IMPURITIES ESTIMATIONS IN THE FUELS NEW REQUEST.
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 30 ZINC	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 18.0 MEV NEUTRON 15.0 MEV NEUTRON	10 - X 5 - X 5 - X 5 - 0X	CAPTURE CR 2 USA A Q 2 USA Q 2 USA Q 2 USA Q N.ALPHA 1 BLG Q TOTAL CROS 2 IND D M CAPTURE CR	DSS SECTION HEMMIG LOE 6710C1R ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABEVE FOR DETECTOR APPLICATIONS. MCELROY HED 691132R ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. DEI BET 761056R NEEDED FOR LONG TERM FLUX MONITOR. DEI DEI GET DEI DEI GET 761055R NEEDED FOR LONG TERM FLUX MONITOR. H.TOURWE MOL 792111F REQUIRED IS ACTIVATION. FUR USE AS A FLUENCE MUNITOR. SECTION N.SHANKAR SINGH KAL B33045R SS SECTION SECTION SECTION
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 517 30 ZINC 518	R 63 25.3 MV 1.00 KEV 1.00 MV 1.00 MV R 63 UP TO 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV	10 . x 5. x 5. x 5. ox 15. ox	CAPTURE CR 2 USA A Q 2 USA Q 2 USA Q 2 USA Q 2 USA Q 1 BLG Q 1 BLG Q 0 TOTAL CROS 2 IND Q 2 IND	DSS SECTION HEMMIG DOE 6710C1R ACCURACY - 2 PERCENT NEAR THERMAL. 5 PERCENT ABEVE FOR DETECTOR APPLICATIONS. MCELROY HED 691132R ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. 691132R DEI BET 761056R NEEDED FOR LONG TERM FLUX MONITOR. 691132R DEI BET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 792111F REQUIRED IS ACTIVATION. FGR USE AS A FLUENCE MUNITOR. K.SHANKAR SINGH KAL 833045R NEW REQUEST. SECTION R.SHANKAR SINGH KAL 83305CR
29 COPPE 512 513 514 29 COPPE 515 29 COPPE 516 30 ZINC 517 30 ZINC 518	R 63 25.3 MV 1.00 KEV 1.00 MV R 63 UP TO R 63 6.00 MEV 25.3 MV	NEUTRON 1.00 KEV 16.0 MEV 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV NEUTRON 15.0 MEV	10 - X 5 - X 5 - X 5 - 0X 15 - 0X	2 USA A Q 2 USA G 2 USA Q 2 USA Q 2 USA Q 2 USA Q 1 BLG Q 0 TOTAL CROS 2 IND Q 2 IND Q	DSS SECTION HEMMIG DOE 6710C1R ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE FOR DETECTOR APPLICATIONS. MCELROY HED 691132K ACTIVATION OF CU-64 IS REGUIRED. FOR USE AS FLUENCE MONITOR. 691132K DEI BET 761056R NEEDED FOR LONG TERM FLUX MONITOR. 601055R DEI DET 761055R DEI DET 761055R NEEDED FOR LONG TERM FLUX MONITOR. 601132K H.TUURWE MOL 792111F : REQUIRED IS ACTIVATION. 792111F : REQUIRED IS ACTIVATION. 833045R : FOR IMPURITIES ESTIMATIONS IN THE FUELS 833045R : REQUEST. 63305CR : FOR IMPURITIES ESTIMATIONS IN THE FUELS 83305CR

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						======	=======		==
519	25.3	MV	15.0	MEV	20.0%	2	JAP	T.KAWAKITA PNC 79207	7R
							6: 0:	EXPERIMENTAL DATA WANTED. FOR ESTIMATION OF RADIOACTIVITY OF SPENT STRUCTURAL MATERIALS IN FAST REACTORS. BOTH EXPERIMENTAL AND EVALUATED DATA ARE SCARCE.	
520	25.0	MV	15.0	MEV	15.0%	1	GER	H.KUESTERS KFK 79219	76
							c: 0:	EVALUATION WANTED. Production of ZN65.	
			********					***************************************	==
30 ZINC 6	4		NEU	TR ON == ====		N.P			= =
531	2 70	MEN	7 60	A4 1. 1/	E 0*	2	E 1.0		
J21	2.30	ALV	/.80	AEV	5.04	2	- UR 0:	FOR NEUTRON DOSIMETRY USING SPECTRUM UNFOLDING	16
								METHODS. About 20 percent discrepancy eetween integral and differential measurements.	
522	U	P TO	15.0	MEV		1	USA	BERK DGE 80107	OF
							A: G:	ACCURACY RANGE 10. TO 50. PERCENT. ACCURACY TO 10 PERCENT NEAR 15 NEV AND 50 PERCEN NEAR 2.5 MEV. Data needed for diagnostics.	T
		======							:==
35 8RCMIN	E 81		NEU NEU	TRCN =====		CAPTU	RE CRU:)SS_SECTION ====================================	
523	25.3	MV	10.0	KEV	10 . X	2	USA	RAWLINS HED 80111	16
			• •			-	G:	NEED BETTER MEASUREMENTS OF RESONANCE PARAMETERS	;
								FROM THERMAL TO 10 KEV FOR ISOTOPES IN WHICH Capture leads to build-up of Gas-tag isotopes For FFTF.	
36 KRYPTO	122222.		NEU	==== TRGN		RESON	ANCE P	PRESERVED AND A CONTRACT OF A	-==
	62 22 2 2	======	.32222222	=====					.==
524	Ŭ	р то	1.00	KEV	10. 1	2	USA	PRINCE BNL 80112	1R
							0:	CALCULATION OF (N.GANMA) CROSS SECTION AND Resonance Integral. Data needed for tagging material study. Also important for fission product files.	
36 KRYPTO	====== N 78	======	NEU	TRON	*=========	CAPTU	====== RE CRU	:=====================================	
3555555555	======				**********	======	======		:==
525	25.3	MV	10.0	ĸev	10. X	2	USA	RAWLINS HED 80110)4R
							0:	NEED BETTER MEASUREMENTS OF RESUMANCE PARAMETERS FROM THERMAL TO 10 KEV FOR ISOTOPES USED IN GAS-TAGGING OF FFTF.	i
36 KRYET	====== N 80		======================================	===== TRON		CAPTU	====== RE CR0		: # =
				=====					:= a
526	25.3	MV	10.0	KÉV	10. X	2	USA	RAWLINS HED 80110	: 5H
							0:	NEED BETTER MEASUREMENTS OF RESONANCE PARAMETERS FROM THERMAL TO 10 KEV FOR ISOTOPES USED IN GAS-TAGGING OF FFTF.	5
36 KRYPTC	N 82	******	NEU	TRON	=======================================	CAPTU	RE CHO	DSS SECTION	:==
527	40-0	EΨ			10. ¥	2	LSA	BOWNAN NBS 76111	166
		2.				-	Q:	VALUES FOR A FEW HIGHER RESONANCES ALSO NEEDED.	
600	26.3			~ ~ ~ ~		2	0:	FOR GAMMA-RAY LASER.	:5
258	20+J	MV	10.0	KEV	10. 4	2	054	NEED RETTED MEASUDEMENTS FE DESENANCE DADAMETEDS	,0H
								FROM THERMAL TO 10 KEV FOR ISOTUPES USED IN GAS-TAGGING OF FFTF.	,
36 KRYPTO	N 83		NEU	TRON		RESON	ANCE P	PAR AMETERS	
529	1.00	MV	1.00	KEV	10 • X	2	USA	DEI BET 67115	5 C F
							a:	FEINER RAP ; FOR FISSION PRODUCT ABSORFTIGN CALCULATION.	
									==-
39 YTTRI	M 89		NEU	TRON		N.2N			
530	20.0	MEV	30.0	NEV		2	USA	NCELROY HED 80103	33F
							A :	ACCURACY RANGE 10. TU 20. PERCENT.	
									===

39 Y	TTRIUM	====== 89	======	NEU1	IZZZZI FRON		N,3N				1222222
	****	532324		******	*****		====	322622	****************	*****************************	
5	531	20.0	MEV	35.0	MEV		2	USA	MCELRDY	HED	801032F
								A:	ACCURACY RANGE 10	0. TO 20. PERCENT. I FACILITY.	
		=====									
39 Y	TTRIUM	89		NEUI	TRCN		N,P				
	532	20.0	MEV	30.0	MEV		2	USA	MCELRUY		801034F
								0:	DOSIMETRY FOR FM	IT FACILITY.	
====						* == == * = * = * = * = *			STARSTELEELEELEE	*************************	
====	=======	332222	******				=====				
	533	5.00	MEV	15.0	NEV	10.0%	2	ССР	I.N.GOLUVIN	KUR	724037F
								0:	NEUTRON TRANSMIS	SION CALCULATIONS.	
====		1;:::::		=======			=====	======		_ == & = 5 # # # # # # # # # # # # # # # # # #	
40 2	LIRCONI	UM ======		NEUI	FRON ======		ENERG	Y DIFF ======	ERENTIAL INELASTI	C CROSS SECTION	*******
							2				3040306
:	534	01	, 10	12=0	MEV	12.0%	2			NUR	7240386
									NEUTRONICS CALCU	LATIONS FOR ELANKET AND SH	IELU.
40 2	IRCCNI	UM		NEU	TRCN		CAPTU	RE CRO	SS SECTION		
5	535	25.3	MV	1.00	KEV	5. X	2	USA	ORTON	RL	671005R
								0:	FOR REACTOR MODE	RATION AND REACTIVITY EFFEC	CTS.
•	536	1.00	NV	50.0	KEV	10. X	2	USA	DEI	BET	761057R
								۵:	LOW RESOLUTION M	EASUREMENT ABOVE THERMAL D	ESIREC.
								A: 0:	FOR VERIFICATION	CCURACY IN THERMAL VALUE. OF RECENT MEASUREMENTS.	
5	537	25.0	MV	2.50	KEV	5.00%	1	FR	H.TELLIER	SAC	762137R
								A: 0:	QUDTED ACCURACY	AT 2 STANDARD DEVIATIONS. Re material	
5	538	25.3	MV	3.00	MEV	10.0%	1	FR	B.DUCHEMIN	SAC	792017R
								A: 0:	QUUTED ACCURACY	AT 2 STANDARD DEVIATIONS. Lculations - Evaluation Ma	Y BE
		~									
40 2	ZIRCCNI	UM		NEU	TRON		TUTAL	PHOTU	N PRUDUCTION CROS	S SECTION	
4	539	U	р то	15.0	MEV	15.0%	2	CCP	I.N.GGLOVIN	KUR	724035F
								0:	GAMMA RAY HEATIN	G AND SHIELDING CALCULATIC	NS.
9	540	25.3	MV	15.0	MEV	10.0%	1	FR	B.DUCHENIN	SAC	792016R
								Q: A:	GAMMA SPECTRA RE Energy Resolution Than 1 Mev and 50	QUIRED N UF 250 KEV FOR GAMMA RAY 00 KEV FOR ENERGIES GREATEI	S LESS R TH a n
									1 MEV QUOTED ACCURACY	AT 2 STANCARD DEVIATIONS.	
								0:	FOR SHIELDING CA	LCULATIONS - EVALUATION MA	¥ 8ē
====							=====		************		=======
40 2	21RCGN1	UN ======		NEU:	TR CN =====	************	N,2N =====				
	541	u	P T O	15-0	MEV	15-0*	2	CCP		KUR	7240 40 F
	541			1000		1000	-	o:	FOR NEUTRON MULT	IPLICATION CALCULATIONS.	
				========	=====	***********					
40 ä ≈===	ZIRCONI	UM		NEU:	TRGN =====		ENERG	Y - ANGL	E DIFF. NEUTRON-E	MISSION CROSS SECTION	
			NE 11			10 -	~		64 IN60	KAD	
	542	3.00	MEV	14.0	MEV	10. *	2	USA	FEINER		6710034
								6:	DELTA E(N*) = 10 FOR DESIGN LF PR	PERCENT. ESSURIZED WATER REACTORS U	SING ZR.
•	543	3.00	MEV	14.0	MEV	10. *	2	USA	SMITH	ANL	6710045
							•	A:	INCIDENT ENERGY	RESULUTION: 10. PERCENT.	
									$DELTA E(N^{\dagger}) = 10$	PERCENT.	
40 2	ZIRCGNI	= == = = = = UM		NEU	TRON		N•P		*****************		
=== :											
:	544	U	P TO	15.0	MEV	15.0%	2	ССР	I.N.GOLOVIN	KUR	724041F
								0:	HYDROGEN ACCUMUL	ATION CALCULATIONS.	
222 40	ZIRCON			NEU	TRON		 N,ALP		***************	=92====================================	

:	545	UF	» TC	15.0	MEV	15.0%	2	ССР	I.N.GOLOVIN	KUR	724042F
								0:	HELIUM ACCUMULAT	IGN CALCULATIENS.	

40 ZIRCO	IUM	******	 NEU	== == == TRGN	*********	SPEC	IAL QUA	NTITY (DESCRIPTIO	N BELGW)	=========
*******		*:	*********	== == ==		=====;	G.#2223=:		=======================================	
546	20.0	MEV	40.C	MEV	20. X	3	USA	MCELRGY	HED	8012C7F
							a: c:	ACTIVATION IS RE Reaction to ZR-8 For FMIT Dosimet	GUIRED. 9. KY.	
40 ZIRCO			NEU	TRON		CAPT	URE RES	GNANCE INTEGRAL		
547	0.50	Eν			2. X	1	USA	FEINER DEL	KAP BET	691143R
							o:	SHIELDED INTEGRA INTEGRAL ALSO TO RESOLVE DISCR	LS DEWN TE 0.4 TIMES CILUT WANTED. REPANCIES IN EXISTING DATA.	E
548	0.50	ΕV			5.00%	1	FR	H.TELLIER	SAC	762136R
							A: 0:	QUDTED ACCURACY CLAD AND STRUCTU	AT 2 STANDARD DEVIATIONS. IRE MATERIAL	
40 ZIRC(NIUM SC		NEU	TRCN		N,3N				
549	U.	PTO	50.0	MEV		з	USA	MCELROY	HED	801035F
							A: 0:	ACCURACY RANGE 1 Dusimetry for fm	0. TO 20. PERCENT. NIT FACILITY.	
40 ZIRC(NIUM 91		0#202222 NEU \$22222292	TRON		RESO	NANCE P	======================================		
550	290.	ΕV				1	USA	FEINER	KAP	801120R
							0:	G-FACTOR IS IMPO ABSORPTION RAT The Long-Standin Ornl Shguld Be NEED TO KNOW IF	RTANT IN DETERMINING THE S E. 16 Descrepancy between geel 2 Resolved. J IS 2 OR 3.	HIELDED And
STATUS										STATUS
ı	JNDER CU	NTINUO	US REVIE	16 EY .	INDC AND N	EANDC.	SEE AP	PENDIX A.		
40 21RC0	ONIUM 93	*****	 NEU	TRON		CAPT	URE CRO	SS SECTION		
551	100.	εv	500.	KEV	20.0%	2	JAP G:	S.IIJIMA H.MATSUNDEU For fast reactor	NIG SAE 8 Burnup Calculations.	7520C4R
								SEE ALSO REQUEST NO EXPERIMENTAL	NUMBER 792068. Data Above 100 ev.	
552	10.0	KEV	106.	KEV	30 . %	2	USA	SCHENTER	HED	801266R
							A: 0;	ACCURACY DETERMI FLUX WEIGHTING FOR CALCULATIONS REACTORS.	INATION SHOULD REFLECT FAST 5 Spectrum. 5 OF Reactivity and Eurn-Up	I REACTOR
40 ZIRC	STREET		NEU	=====: TR CN		RESO	NANCE P	TERRETERS		
			1017233	=====						
553	100.	EV	500.	KEV	20 .0 X	2	JAP	H.MATSUNÚÐU S.IIJIMA	SAE NIG	792068F
							0:	SEE ALSO REQUEST MGRE RESONANCE D ONLY CNE RESONAN FOR FAST REACTOR	F NUMBER 752004. Data are required. NGE LEVEL AT 110 EV. NO KEN R BURNUP CALCULATIENS.	DATA
40 ZIRC	CN IUN 95		======== NEU	===== TRON		CAPT	URE CRO	SS SECTION	***************************************	
				====:		=====				
554	1.00	Eν	10.0	ΚΕν	20. %	З	USA	DEI	₽EI	67101CR
							Q: A: Q:	RADIUACTIVE TARC THERMAL CROSS SE ENERGIES ABUVE 1 10 PERCENT IN 100-1000 BARNS DECAYS TO IMPORT	SET 64.0 DAY CCTION AND RI WANTED. I EV OF INTEREST TC GIVE - RI IF >1000 BARNS, 20 PER(Sint Fission Product.	ENT IF
555	0.50	Eν	10.0	KEV		2	USA	FEINER	KAP	671011R
							0:	RADIDACTIVE TARG	GET 64.0 DAY Ectiun and RI Wanted.	
							A:	ACCURACY - 10 PERCENT IF 10-100 BARNS. ENERGIES ABOVE 10 PERCENT IN 100-1000 BARNS	SIGMA>100 BARNS, 20 PERCEN 1 EV OF INTEREST TC GIVE - RI IF >1000 BARNS, 20 PERC 5.	NT IF CENT IF
							0:	DECATS TO IMPORT	IANI FISSILN PRUDUCT.	
55 6	25.3	MV				3	CAN	W.H.WALKER	CRC	691802F
_						_	A: 0:	ACCURACY REQUIRE FISSION PRODUCT	D 20 HARNS. , UNKNOWN CROSS SECTION.	_, _
557	25.3	MV			5.0%	3	CCP	S.A.SKVORTSOV G.A.MILLER	KUR KUR - 06 EV INCIDENT NEUTODNO	7040031
							G:	FUR ASSAY OF U A	AND PU IN FUEL ELEMENTS FRO CT GAMMA RADIATION.	ĴM.

40 2 =====	ZIRCCN	IUM 95		NEU1	TRON =====		CAPT(URE CROS	SS SECTION	((L	NTINUED)
:	558	10.0	KEV	100.	κεν	30 . %	2	USA	SCHENTER	ΗΕυ	8012€7R
								Q: A:	RADIDACTIVE TARGE ACCURACY DETERMIN FLUX WEIGHTING FOR CALOU ATTORS	ET 04.0 DAY Nation Should Reflect Fast Spectrum. Of Reactivity and Burn-up	REACTOR
		=======		==========					REACTORS.		
40	ZIRCON	IUM S6		NEU	TREN	===============	RES0	NANCE P	ARAMETERS		
:	559	300.	Eν			10. X	1	USA	FEINER	кар	7410746
								a: o:	NEUTRON AND GAMMA NEEDED TJ VERIFY	A- WIDTHS REQUIRED. Measurement on 300 ev res Geedancies.	UNANCE
STAT	rus								AND REHOVE DIS		STATUS
	UN	DER CON	NTINUO	US REVIE	6 8 Y J	INDC AND NE	ANDC.	SEE APP	PENDIX A.		
41 1	NICBIU	M 93		NEU	TRON		ELAS	TIC CRO	S SECTION	***************************************	
:	560	25.3	MV	20.0	MEV	3.0%	2	IND	S.B.GARG	TRM	753043R
								0:	REQUIRED FOR STRU	JCTURAL-MATERIAL CALCULATI	GNS.
41 4		M 93		NEU	TRON		DIFFE	ERENTIAL	ELASTIC CROSS SE	CTION	
	561	1.00	MEV	15.0		10.0%	2	6F8			222125E
-		1.00		1		10104	٤	ULN .	H BROCKMANN		
								a: 0	ANGULAR DISTRIBUT WOULD BE SUFFIC RADIATION DAMAGE	TIGNS AT A FEW SELECTED EN Cient. Estimates.	ERGIES
5	562	3.00	MEV	15.0	MEV	10.0%	1	CCP	I.N.GOLOVIN	KUR	724043F
								G:	NEUTRON TRANSMIS	SION CALCULATIONS.	
41 1	10810	M 53		NEU1	RCN		INEL	ASTIC CH	RUSS SECTION		=====
5	563	UF	• 1 0	25.0	MEV	10.0%	1	SWT	F.HEGEDUES	ÞUR	692155R
								0: 0: M:	FGRMATIGN OF THE FOR FAST FLUX MEJ FOR FAST FLUX MEJ SUBSTANTIAL MODIG	15.0 YEAR ISOMER (Eº = 29 ASUREMENTS. ASUREMENTS. FICATIONS.	KEV).
:	564	UF	• T O	15.0	MEV	10.0%	2	GER	J.DARVAS	JUL	722126F
								0: D:	FORMATION OF 13.0 CALCULATION OF HE AFTERHEAT.	5 YEAR ISCMER WANTED. EAT GENERATION AND RADIGAC	TIVE
:	565	UF	∍ то	8.00	MEV	5.0%	1	EUR	NEUTRON DOSIMETRY	Y GROUP GEL	742121R
								Q: 0:	PRODUCTION OF 3.1 PROMISING FAST NE THRESHOLD ENERG	7 YÉAR ISCMER NEEDED. Eutron fluence munitur due Gy.	TO LEW
5	566	UF	» то	20.0	MEV	3.0%	2	IND	S.B.GARG	TRM	753044F
								0:	REQUIRED FOR STRU	JCTURAL-MATERIAL CALCULATI	ONS.
5	67	UF	P TO	15.0	MEV	20. X	2	JAP	M.KASAI	MAP	762117F
								A: 0:	NB-93M PREDUCTION 15.0 % REQUIRED F TRANSMUTATION AND	FOR NEUTRON TRANSPORT CALC D NEUTRON TRANSPORT CALCUL	ULATIONS
5	5 6 8	UF	ο το	15.0	MEV	10.0%	1	UK	J.BUTLER C.G.CAMPBELL	bin Win	792122R
								0:	DETECTOR FOR DAM	AGE MONITORING.	
5	569	٩IJ	• TO	15.0	MEV	10.0%	2	GER	H.KUESTERS	KFK	79219CF
								Q:	PRODUCTION OF ISO	DMER.	
5	570	10-0	MEV	30.C	MEV	20. X	1	USA	MCELROY	HED	801260F
								Q: A: C:	ACTIVATION IS REC REACTION TO ISOM ACCURACY 20 PERCE FOR FMIT DOSIMETE	QUIRED. Eric State. Ent Above 15 Mev. Ry.	
5	571	UF	• то	20.0	MEV	10.0%	2	JAP	M.SASAKI	мар	812025R
								a:	RODUCTION OF 13	JAE 6 YR ISOMER	
								0: M:	FOR NEUTRON DOSIN	METRY. FICATIONS.	
5	572	500.	KEV	10.0	MEV	10. X	2	USA	MCGARRY	NBS	82105of
								A: 0: M:	INCIDENT ENERGY REACTOR PRESSURE NEW REQUEST.	RESOLUTION: 10. PERCENT. Vessel dosimetry.	
5	573	UF	0 T O	8.00	MEV	5-0%	1	FR	M.SALVATORES	CAD	832016R
								G: M:	FAST REACTOR CALC	CULATIONS .	

41 NICB)	IUM 93 ====================================	NEUTRON		INELA	STIC CH	COSS SECTION	(CCNTINUED)
STATUS-							STATUS
1	UNDER CENTINUE	US REVIEW EY I	NDC AND N	EANDC.	SEE API	PENDIX A.	
41 NIC8	IUM 93	NEUTRCN	98 98	ENERG	GY DIFF	RENTIAL INELASTIC CROSS SECTIO	\$#====================================
634			15 05		660		704.0445
574	00 10	13+0 NEV	15.0%	ł	۵:	NEUTRON CALCULATIONS FOR FLANK	FT AND SHIFLD.
			********				*****
41 NIOB	IUM 93 	NEUTRGN ====================================	*******	CAPTL	JRE CRUS	SS SECTION	*****************
575	100. EV	100. KEV	20.0%	2	UK	C.G.LAMPBELL WIN	682020F
					٥:	FOR FAST REACTORS.	
576	10.0 MEV	15.0 MEV	15.0%	1	ССР	I.N.GOLOVIN KUR	724045F
					0:	HEAVIER ISOTOPE ACCUMULATION C	ALCULATIONS.
577	25.3 MV	20.0 MEV	3.0%	2	IND	S.B.GARG TRM	753045R
					0:	REQUIRED FOR STRUCTURAL-MATERI	AL CALCULATIONS.
578	100. EV	500. EV	20.0×	2	FR	M.SALVATORES CAD	8320C6R
					u:	FAST REACTOR CALCULATIONS.	
					N:	NEW REQUEST.	
41 NICB	IUN 93	NEUTR CN	=========	PHOTO	N PROD	JCTION CROSS SECTION IN INELAST	IC SCAT.
576	1.00 NEV	15.0 MEV	20.0*	2	CER		7221305
			20004	-	ULK	H-BRGCKMANN JUL	1221501
					o: c:	ENERGY AND ANGULAR DISTRIBUTIC REQUIRED. RADIATIUN DAMAGE ESTIMATES.	N CF GAMMA RAYS
41 NIØ8	IUM 93	NEUTRCN		TCTAL	PHOTO	N PRODUCTION CRUSS SECTION	
						······································	
580	UP TO	15.0 MEV	15.0%	1	CCP	I.N.GOLOVIN KUR	724046F
					0.	GARMA KAT HEATING AND SHIELDIN	G CALCULATIONS.
581	1.0C EV	20.0 MEV.	20.0%	2	JAP	K-SHIN KTO	812027F
					u: 0:	MEASURED AT ORNL, LASL AND KYO Cunfirmatory fxpfrimental data	RIMENTAL DATA TO UNIV. RECUIRED
		-*===========	========	.=======			
41 NIUB	IUM 93 ***************	NEUTRUN #===#===#====		N,N ========			
582	UP TO	15.0 MEV	10.0X	1	BLG	H.TGURWE MUL	792112R
					Q:	FORMATION OF THE 14 YEAR ISOME	R.
	******		=\$======				
41 NICE	10M 93 	NEUTRON		N,2N ======	.,		
583	UP TO	15.0 MEV	10.0%	2	GER	J.DARVAS JUL	722134F
					o:	A MEASUREMENT COUNTING THE GUT	CCMING NEUTRONS
						WOULD BE PREFERRED TO CLARIF HITHERTS UNCOSERVED DECAY MC	Y THE SITUATION OF DES.
					01	FUR RADIATION DAMAGE ESTIMATES	•
584	UP TG	15.0 MEV	10.0%	1	ССР	I.N.GOLUVIN KUR	, 724047F
					u: 0:	ENERGY AND ANGULAR DEPENDENCE NEUTRONS REQUIRED. For Neutron Multipiication and	OF SECENDARY
						ESTIMATES.	
585	UP TO	15.0 MEV	5.0%	2	EUR	NEUTRUN DOSIMETRY GROUP	GEL 742133R
					٥:	FOR NEUTRON DOSIMETRY USING SP METHODS+	ECTRUM UNFOLDING
						GREATER THAN 10 PERCENT DISCRE INTEGRAL AND DIFFERENTIAL ME	PANCY BETWEEN Asurements.
586	20.0 MEV	28.0 NEV	20. X	1	USA	MCELROY HED	801028F
				-	0:	DOSIMETRY FOR FMIT FACILITY.	
******			*= == * * = = :	SZEESS			
		321222122122122					2222222222222222222
587	20.0 MEV	35.0 MEV		3	USA	DORAN HED	781222 F
					A:	ACCURACY HANGE 10. TO 50. PERC	ENT. SENSITIVITY STUDIES
					0:	FOR NATERIAL DAMAGE CALCULATIO	INS+
588	UP TO	15.0 MEV	10.03	2	JAP	A.TAKAHASHI USA	832043F
					a:	ENERGY-ANGLE DIFFERENTIAL CROS	S SECTIONS FLR TOTAL
					0:	FOR CALCULATION OF THE NEUTRON FUSION BLANKETS.	MULTIPLICATION IN
		*===========	a = == == == :		M: ======	NEW REQUEST.	******************

41 NIUBI	======= UM 53		NEU	===== Trgn		N, P				*******
589	3.00	MEV	15.0	MEV	20.08	2	GER	J.DARVAS JUL H.BROCKMANN JUL		722136F
							0:	RADIATION DAMAGE ESTIM TRANSMUTATION RATES	ATES, CALCULATION OF AND RADIGACTIVE AFTE	RHEAT.
590	U	РТО	15.0	MEV	15.0%	1	CCP	I.N.GOLUVIN KUR		724048F
							0:	HYDREGEN ACCUMULATION	CALCULATIONS.	
591	0.00	Ē٧	15.0	MEV	20 . X	2	JAP	MaKASAI MAP		762115F
							٥:	K.IUKI MAP Hydrggen accumulation	CALCULATIONS	
========	=======			=====			======			
592	9.00	MEV	14.0	MEV	20. %	2	USA	BERK DOE		7ð1165F
							0:	FOR RADIATION DAMAGE C	ALCULATIONS.	
593	15.0	MEV	30.0	MEV		3	USA	DURAN HED		781219F
							A:	ACCURACY RANGE 10. TO ACCURACY TO BE DETERMI	50. PERCENT. NED FRCM SENSITIVITY	STUDIES
		ss:22=:						FUR MATERIAL DAMAGE CA	LCULATIONS.	
41 NIGBI	UM 93 ======		NEU NEU	TRON =====	********	N,ALP	HA ======			
594	U	P TO	15.0	MEV	15.0%	1	ССР	I.N.GOLOVIN KUR		724049F
							c:	HELIUM ACCUMULATION CA	LCULATIONS.	
41 NIOBI	a====== UM 93		NEU	TRCN		TCTAL		PRUDUCTION CROSS SECTI	*=====================================	
========							======			
595	0-00	EV	15.0	MEV	15. %	2	JAP	K.IOKI MAP		762121F
							0:	HELIUM ACCUMULATION CA	LCULATIENS	
596	9.00	MEV	15.0	NEV	20 • X	2	USA	BERK DOE		781093F
					,		ς:	FOR RADIATION DAMAGE C	ALCULATIONS .	
597	15.0	MEV	35.0	MEV		3	USA	DORAN HED		781220F
							A: :	ACCURACY RANGE 10. TO ACCURACY TO BE DETERMI FOR MATERIAL DANAGE CA	50. PERCENT. Ned From Sensitivity	STUDIES
	========									
41 NICBI *=======	UM 93 ======		NEU	======		SPECI	AL QUA	TITY (DESCRIPTION BELG	} ====================================	
598	9.00	MEV	15.0	MEV	20. X	2	USA	BERK DOE		801088F
							a:	ALL SIGNIFICANT ACTIVA SECTIONS.	TION REACTION CROSS	
							C:	DATA NEEDED FOR SHIELD TRANSPORT CALCULATIC	ING.ACTIVATION AND N NS.	EUTRCN
41 NIOBI	 UM 93		NE U	===== TRON		CAPTU	RE RES	DNANCE INTEGRAL		
		=====:		======						
595	1.00	ΕV	10.0	KEV	3.0%	2	EUR	NEUTRON DOSIMETRY GROU		7921C6H
							C: N:	PRODUCTION OF NB-94 (2 POSSIBLE LONG TERM FLU SUBSTANTIAL MODIFICATI	ENCE MONITOR.	
				===== TO(N			=======			
	UM 94 2222832		NEU					JJ JECTION 		
600	100-	E∀	1.00	MEV	25.0%	2	UK	C.G.CAMPBELL WIN		792131H
							0:	FOR FAST REACTOR CIRCU EVALUATION REQUIREMENT	IT ACTIVITY.	
41 NLOBI			NEU	TRON		CAPTU	====== RE CRU:	S SECTION		======

601	25.3	NV				2	USA	FEINER KAP		671012F
							Q:	RADIOACTIVE TARGET 35. THERMAL AVERAGE USEFUL	1 DAY	SECTION
							 o:	IS 10-100 BARNS, 10 DECAYS TO IMPORTANT FI	PERCENT IF GREATER. SSICN PRODUCT POISCN	•
		*=====	NEU	TRCN		DIFFE	RENTIA	ELASTIC CROSS SECTION		
602	1.00	MEV	15.0	MEV	10.0%	2	GER	J.DARVAS JUL H.BROCKMANN JUL		722140F
							٥:	DISTRIBUTIONS FOR ENER	GY STEPS OF 10 TO 20	PERCENT
							с:	CONFIRMATION OF ANL DA RADIATION DAMAGE ESTIM	TA USEFUL. Ates.	
603	3.00	MEV	15-0	NEV	10.01	1	CCP			7240505
							c:	NEUTRON TRANSMISSION C	ALCULATIGNS.	
		=								=

42 MOLYB	DENUM	NEUTRON		INEL AS	STIC CH	USS SECTION		
604	3.00 MEV	14.0 MEV	10.0%	3	FR	B.DUCHEMIN	SAC	732C29F
					A: 0:	QUOTED ACCURACY A POTENTIAL CUNSTIT	T 2 STANDARD DEVIATIONS. UENT OF CONTAINMENT VESSEL	•
========				=====		*****************		
42 MCLY80	DENUM ====================================	NEUTRON		ENERGY	Y DIFFE	RENTIAL INELASTIC	CROSS SECTION	
				_				
605	UP TO	15.0 NEV	15.0%	1	ССР	I.N.GOLUVIN		724051F
					0:	NEUTRON CALCULATE	ONS FOR BLANKET AND SHIELD	ING.
42 VGLYE	DENUM	NEUTRON		CAPTUR	RE CROS	S SECTION		
606	100. EV	1.00 MEV		2	UK	C.G.CAMPBELL	WIN	692157R
					A: 0:	ACCURACY 10 PERCE FOR FAST REACTORS	NT TE 100 KEV. 20 PERCENT	ABOVE.
607		16 0 MEV			660		KUD.	30406 26
607	10.0 M2V	IS.U MEV	13.04	1		HEAVY LEDTODE ACC	NUR	724U32F
					0;	HEAVY ISUTUPE ACC	UMULATIER CALCULATIONS.	
608	100. EV	500. EV	20.0%	1	FR	M.SALVATORES	CAU	8320C8R
					0:	FAST REACTOR CALC	ULATIONS.	
42 MGLYB		NEUTRON		TOTAL	PHOTON	N PRODUCTION CRUSS	SECTION	
609	25.3 MV	15.0 MEV	15.0%	1	ССР	I.N.GOLOVIN	KUR	724053F
					0:	GAMMA RAY HEATING	AND SHIELDING CALCULATION	15.
610	25.3 MV	15.0 MEV	15. %	2	JAP	Y.SEKI K.IGKI	JAË MAP	762131F
					Q: D:	GAMMA RAY SPECTRA Neutron balance a	ALSC REQUIRED. ND GAMMA-RAY HEATING CALCU	JLATION
*******					******	****************		
42 MOLYER	DENLM 	NEUTRCN		N.2N =====	•=====			
				_				
611	UF TO ,	15.0 MEV	10.0%	2	GER	J•DARVAS H•BROCKMANN		722146F
					Q:	COUNTING OF OUTGO	ING NEUTRONS TO DETERMINE	
						REQUIRED, SINCE	ACTIVITY IS PRODUCED BY N	5 10-52
					0:	AND MO-100 UNLY CALCULATION OF NE	UTRON MULTIPLICATION AND	
						RADIATION DAMAG	• •	
612	UP TO	15.0 MEV	15.0%	1	ССР	I.N.GOLOVIN	KUR	724054F
					0:	SECONDARY ENERGY	SPECTRUM REQUIRED AT 14.0	MEV.
				-				2222222
613	UP TO	15.0 MEV	10.0%	3	FR	B.DUCHEMIN	SAC	73203CF
					A: 0:	QUOTED ACCUARCY A POTENTIAL CONSTIT	T 2 STANDARD DEVIATIONS. "UENT OF CONTAINMENT VESSEL	- •
		==============		=====	======			
42 MULTB	DENCM 			=====	T-ANGLI	E DIFF. NEUTRUN-EM		
614	1.00 MEV	15.0 NEV	10. X	2	JAP	Y.SEKI	JAE	762126F
		-			Q:	CROSS SECTION FOR	EACH ISCTOPE ARE ALSO REG	QUESTEC.
					0:	NEUTRON TRANSPORT	CALCULATIONS	
615	9.00 MEV	15.0 MEV	20. X	2	USA	6ERK	DOE	7810E4F
					0:	DATA NEEDED FOR S	HIELDING AND NEUTRON	
						TRANSPORT CALCU	JLATIONS.	
42 MOLYB	DENUM	NEUTRON		N,P				
				===				*====
616	υρ τα	14.0 MEV	10.0x	2	GER	B.GCEL	KFK	692159R
617	1.50 MEV	15.C MEV	20.0X	2	GER	J.DARVAS	JUL	722148F
					0:	RADIATION DAMAGE	ESTIMATES, CALCULATION OF	
						TRANSMUJATIUN R	CATCO AND KAUTUACTIVE AFTER	ANCAI.
618	UP TO	15.0 MEV	15.0%	1	ССР	I.N.GOLDVIN	KUR	724055F
					C:	HYDREGEN ACCUMULA	ATION CALCULATIONS.	
619	UP TG	14.0 MEV	10.0%	з	FR	B.DUCHEMIN	SAC	732031F
					A:	QUDTED ACCURACY A	AT 2 STANDARD DEVIATIONS.	
					0:	POTENTIAL CONSTIT	IVENT OF CONTAINMENT VESSEL	L.
42 MOLY80	DENUM	NEUTRCN	********	N,P		(CCN1) 	INUED) ======	
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£20	0.00 EV	15+0 MEV	10. X	2	JAP	Y•SEKI JAË 76 K•ICKI MAP H•IIDA JAE	62129F	
					o:	CROSS SECTION FOR EACH ISOTOPE ARE ALSO REQUE ESPECIALLY, DATA OF MO 95,96 ARE REQUIRED FOR ESTIMATION OF DOSE RATES ARGUND THE MOLYBDEN STRUCTURES. HYDROGEN ACCUMULATION CALCULATIONS AND FOR CALCULATION OF INDUCED ACTIVITIES.	ESTEC - R Un	
42 MOLYB		NEUTRCN		TOTAL	PROTO	N PRODUCTION CROSS SECTION		
:==#######								
621	9.00 MEV	15+0 MEV	20. X	2	USA	BERK DOE 78	611CEF	
					0:	FOR RADIATION DAMAGE CALCULATIONS.		
42 VCLY80	DENUM	NEUTRON		N,ALPH	(A			
6 22	5.00 MEV	15.0 MEV	20.0%	2	GER	J.DARVAS JUL 72 H.BROCKMANN JUL	22145F	
					٥:	RADIATION DAMAGE ESTIMATES, CALCULATION OF TRANSMUTATION RATES AND RADIOACTIVE AFTERHE	EAT.	
£23	UP TO	15.0 NEV	15.0%	1	ССР	I.N.GOLUVIN KUR 72	24056F	
					υ:	HELIUM ACCUMULATION CALCULATIONS.		
624	UP TO	14.0 MEV	10.0%	3	FR	B.DUCHEMIN SAC 7.	32632F	
					A: 0:	QUUTED ACCURACY AT 2 STANDARD DEVIATIONS. POTENTIAL CONSTITUENT OF CONTAINMENT VESSEL.		
625	0.00 EV	15.0 NEV	20 . X	2	JAP	Y.SEKI JAE 70 K.IOKI MAP	62130F	
					0: 0:	CRUSS SECTIONS FOR EACH ISOTOPE ARE ALSO REGU Helium accumulation calculations	UESTEL	
A2 MOLYE	DENUM	NEUTRON		TOTAL	ALPHA	PRODUCTION CROSS SECTION		
:========	============							
626	9.00 NEV	15.0 MEV	20 . X	2	USA	BERK DOE 70	81056F	
					U:	FUR RADIATION DAMAGE CALCULATIONS.		
2 MOLYE	DENUM	NEUTRON		SPECIA	L QUA	NTITY (JESCRIPTION BELGW)		
627	2.50 EV	15.0 MEV	20 . X	2	USA	ENGHOLM GA 80	011026	
					Q:	ACTIVATION CROSS SECTION.		

42 MOLY60	DENUM 92	NEUTRÛN		N.NP				
628	UP TO	15.0 MEV	20.0%	2	JAP	H.IIDA JAE 79	92078F	
					o: 0	EXPERIMENTAL DATA REQUIRED. FOR CALCULATION OF INDUCED ACTIVITIES ARGUND MOLYBDENUM STRUCTURES.		
	DENUM CA							
			********				*==*==	
629	UP TO	15.C MEV	10. X	2	JAP	K.ICKI MAP 76	62133F	
			.===========					
42 MCLYE	DENUM 95	NEUTRON		RESONA	NCE P	AR AMETER S 		
630	UP TO	10.C KEV	10.0%	2	JAP	M.KAWAI NIG 8:	32027F	
					0: G: N;	RESONANCE ENERGY, NEUTRON WIDTH, RADIATIVE W Spin and orbital angular momentum wanted. For burn-up calculations. New request.	10TH,	
						AD AM ST FO S		
	/LAUM 3/ 1925222222222	NEUIRLN	*******	*C3UN/			*****	
631	UP TO	10.0 KEV	10.0%	2	JAP	M.KAWAI NIG 83	3202êF	

42 NOLYB	DENUM 99	NEUTRON		CAPTUR	RE CRO	SS SECTION		
								9=3====
632	1.00 MV	1.00 KEV		3	USA	DEI Feiner	BET KAP	671013R
					٥:	RADIDACTIVE TARGE RESONANCE PARAMET	ET 66 HR Ters also wanted.	
					Α:	ACCURACY -	SIGMA>100 BARNS, 20 PERCENT	IF
						10-100 BARNS. ENERGIES ABOVE 1	EV CF INTEREST TO GIVE -	
					٥:	10 PERCENT IN F 100-1000 Barns. Decays to import.	RI IF >1000 BARNS, 20 PERCE ANT FISSICN PRODUCT.	NT IF
633	25.3 MV			3	CAN	W+H+WALKER	CRC	6918036
					A: 0:	FISSION PRODUCT,) 600 B. Unknown cross section.	
43 TECHN	ETIUM 99	NEUTRGN		RESON	ANCE P	AR AMETERS		*******
674				•		14 17 A 17 A 1		
634	UP TO	10.0 KEV	10.0x	2	JAP	M .KAWAI	NIG	8320295
					0: 0: N:	RESONANCE ENERGY, SPIN AND GRBITAL FOR BURN-UP CALCU TU RESOLVE DISCRE INTEGRAL DATA. NEW REQUEST.	, NEUTRON WIDTH, RADIATIVE Angular McMentun Wanted. Jlations. Spancies Eetween differenti	WIDTH,
				RESON	ANCE P	23 ====================================	************************	
635	UP TO	10.0 KEV	10.0%	2	JAP	M.KAWAI	NIG	8320366
					Q:	RESCNANCE ENERGY	NEUTRON WIDTH, RADIATIVE	ы10TH,
					0: M:	SPIN AND ORBIATL FOR BURN-UP CALCU NEW REQUEST.	ANGULAR MOMENTUM WANTED. JLATIGN.	
44 RUTHE	NIUM 102	NEUTRON	*******	RESON	ANCE P	ARAMETERS		
636	UP TC	15.0 KEV	10.0%	2	JAP	S.IIJIMA H.MATSUNGBU	NIG SAE	8120331
					Q:	RESONANCE ENERGY	• NEUTRON WIDTH. RADIATIVE	WIDTH.
					0: M:	SPIN AND LRBITAL FOR FAST REACTOR SUBSTANTIAL MODIF	MOMENTUM WANTED. Burn-up calculations Ications.	
44 RUTHE		NEUTRON	=======		RE CRO	SS SECTION		=====
=========				=====		======================================		SE22222
637	25.3 MV			3	CAN	W.H.WALKER	CRC	6918G4R
					0:	FISSION PRODUCT,) 35 8. Unknown cross section.	
638	100. EV	500. KEV	20.0%	2	JAP	S.IIJIMA H.MATSUNOBU	NIG Sae	792079N
					Q: C:	EXPERIMENTAL DATA FUR FAST REACTOR NO DIFFERENTIAL (VERY LARGE DISCR	A REQUIRED. Burnup calculation,40 days Dr Integral data exist. Epancies Between evaluation	6 T(1/2) S.
639	10.0 KEV	100. KEV	30. X	2	USA	SCHENTER	HED	801272R
					Q :	RADIOACTIVE TARG	ET 39.4 DAY	
					A: 0:	ACCURACY DETERMIN FLUX WEIGHTING FOR CALCULATIONS REACTORS.	NATION SHOULD REFLECT FAST Spectrum. Of reactivity and burn-up	REACTOR
			*********	RESON	ANCE P	AR AMETERS	********************************	
=======							***********************	
640	UP TO	15.0 KEV	10.0%	2	JAP	S.IIJIMA H.MATSUNDBU	N I G SAE	812034N
					a: 0: M:	RESCNANCE ENERGY SPIN AND ORBITAL For Fast Reactor Substantial Modif	, NEUTRON WIDTH, RACIATIVE Momentum Wanted. Burn-up Calculatichs Ficaticns.	WIDTH,
seferraz								
44 RUTHE		REUIRUN	*******	SEFEE		55 SECTION		
641	25.3 MV		10.0%	3	ССР	S.A.SKVORTSOV O.A.MILLER	KUR KUR	7040C6N
					0: 0:	ALSO WANTED FOR For Assay of U An	.06 EV INCIDENT NEUTRONS. ND PU IN FUEL ELEMENTS FROM	4
						FISSION PRODUC	T GAMMA RADIATION.	
642	1.00 KEV	1.00 MEV	20. X	2	USA	SCHENTER	HED	801273R
					Q: A:	RADIGACTIVE TARG	ET 367 DAY NATION SHOULD REFLECT FAST	REACTOR
					0:	FLUX WEIGHTING FOR CALCULATIONS	SPECTRUM. OF REACTIVITY AND EURN-UP	IN FAST
						REACTORS.		

45 RHCD	IUM 103	NEUTRON		INELA	STIC LR	IDSS SECTION	
643	UP TO	15.0 MEV	5.0%	1	GER	M.KUECHLE KFK 65243	776
					a: D:	CROSS SECTION LEADING TO ISOMERIC STATE AFTER Gamma de-excitation is Wanted. Threshold detector.	
644	UP TO	15.0 MEV	5.0%	1	GER	H.KUESTERS KFK 79215	5 1 R
					۵:	PRODUCTION UF ISOMER. Evaluation Wanted.	
645	10.0 MEV	30.0 MEV	20. X	3	USA	MCELROY HED 80125	58F
					e: 0:	ACTIVATION IS REQUIRED. Reaction to isomeric state. For Fmit dusimetry.	
646	500. KEV	10.0 MEV	10 . X	2	USA	MCGARRY NBS 82105	5 7 F
					A: 0: M:	INCIDENT ENERGY RESULUTION: 1C. PERCENT. Reactor pressure vessel dosimetry. Absolute measurement needed. New request.	
STATUS-						STA1	rus
	UNDER CONTINUCUS	S REVIEW EY I	NDC AND NEA	NDC.	SEE APP	'ENDIX 4.	
45 RHOD	IUN 103	NEUTRON		CAPTU	RE CROS	S SECTION	:=s :=s
647	1.00 MV	1.00 KEV	5.0%	3	DEN	C.F.HOEJERUP RIS 71204	44R
					:	WANTED FUR FISSION PRODUCT CALCULATIONS.	
€48	10.C MV	5.00 KEV	10.0%	2	FR	H.TELLIER SAC 73205	58F
					A:	QUOTED ACCURACY AT 2 STANCARD DEVIATIONS.	
							423
45 AHOD	IUM 105 	NEUTRON		CAPTU	RE CROS	S SECTION	= = =
649	10.C MV	500. EV		3	CAN	W.H.WALKER CRC 65180	05R
					A: 0:	ACCURACY 5. PERCENT TO 10 EV, 20 PERCENT ABOVE. AVAILABLE DATA SUGGEST LARGE RESCHANCE NEAR CADMIUM CUT-OFF. Additional data needed to determine dependance l Neutron temperature and epithermal flux.	N
46 PALL	ADIUM 104	NEUTRON		RESON	ANCE PA	RAMETERS	===
	*				=====a=		- = \$
650	UP TO	15.0 KEV	20.0%	2	JAP	MJKAWAI NIG 2320.	31R
					Q: G: M:	RESUNANCE ENERGY. NEUTRUN WIDTH. RADIATIVE WIDTH Spin and orbital angular mumentum wanted. Fur Burn-up calculations. New request.	۰.
46 PALL	ADIUM 105	NEUTR CN		RESON	ANCE PA	RAMETERS	
							: = 3
651	UP TO	10.0 KEV	10.0%	2	JAP	S.IIJIMA NIG E1203 H.MATSUNDBU SAE	35N
					Q: 0: M:	RÉSÉNANCE ENERGY, NEUTREN WIDTH, RACIATIVÉ WIDTH Spin and Orbital mumentum Wanted. For Fast Reactur Burn-up calculations. Sudstantial Modifications.	₩
46 PALL	ADIUN 106	NEUTRON		RESCN	ANCE PA	RAME TERS	
652	UP 10	15.0 KEV	20.0%	2	JAP a:	M.KAWAI NIG 83202 RESONANCE ENERGY, NEUTRON WIDTH, RAGIATIVE WIDTH	12R
					C: M:	SPIN AND ORBITAL ANGULAR MÜMENTUM WANTED. Für Burn-up calculatigns. New Request.	•
46 PALL	ADIUM 107	NEVTREN		CAPTU	RE CROS	S SECTION	***
653	25.3 NV			Ŀ	CAN Al	W.M.WALKER CRC 65180 ACCURACY REQUIRED 10 BARNS.)6F
					<u>.</u>	PU FISSION PRODUCT. UNKNOWN CROSS SECTION.	
654	500. EV	500. KEV	10.0x	1	JAP	S.IIJIMA NIG 75201 H.MATSUNÜBU SAL	126
					0:	FUR FAST REACTOR BURNUP CALCULATIONS. Evaluations are very discrepant.	
655	1.00 KEV	1.00 MEV	10. X	2	USA	SCHENTER HED 80127	74R
					Q: A:	RADIOACTIVE TARGET 6.5X(1C++6) YR ACCURACY DETERMINATION SHOULD REFLECT FAST REACT FLUX WEIGHTING SPECTRUM.	IOR
						REACTORS.	

47 SILVE	R 109		 NEU	===== TRON =====		CAPTU	RE CRO	SS SECTION		
656	3.00	KEV	1.00	MEV	10.0%	1	FR O:	E.FORT REACTOR CALC	CAD CULATIONS	7920186
STATUS										STATUS
ι	UNDER CO	NTINUC	US REVIE	W 8Y	NEANDC. SEE	APPEN	DIX A.			
48 CADM	UM 113	====== =======	NEU	===== TRCN =====		CAPTU	IRE CRO	SS SECTION	*********************	
657	U.	р то	100.	EV	5.0%	3	FR	H.TELLIER	SAC	7320636
							A: 0:	QUOTED ACCUP	RACY AT 2 STANDARD POISON.	DEVIATIONS.
48 CADM 1	UM 113	====== ======	NEU	== === TR UN == = = = =		TGTAL	PHOTO	N PRODUCTION	CROSS SECTION	
658	25.3	MV	1.00	ĸev	20.0%	1	FR	B.DUCHEMIN	SAC	832017F
							0: A:	GAMMA SPECTA ENERGY RESOL LESS THAN 1 THAN 1 MEV. DEVIATIONS.	RA REQUIRED. Lution of 250 kev Mev and 500 kev F Qudted accuracy a	FGR GAMMA RAYS GR ENERGIES GREATER T 2 STANDARD
							о: м:	FOR REPROCES EVALUATION N NEW REQUEST	SSING PLANT SHIELD May be sufficient. •	ING CALCULATION.
49 INDIL			GAM	===== MA		SPECI		NTITY (DESCRI	IPTION BELOW)	
							222222			52222232222222222222
659	500.	KEV	10.0	MEV	20.0%	3	JAP	Y . OK A	ток	792080R
							0: 0:	EXPERIMENTAL Für Currecti In-115(n.nº) Dosimetry Af	L DATA WANTED FOR Ion of In-115m Pro }In-115m, for read Pplications.	(G.G•) REACTION. Duction Through Tor Shielding And
49 INDI	JM 115	======	NEU	TRON		INELA	STIC C	ROSS SECTION		
		222222				******	******		129899792052479222	
660	U	P TO	15.0	MEV	3.0%	1	GER	N.KUECHLE	KFK	6921E0R
							a: 0:	CRUSS SECTIO GAMMA DE-8 THRESHOLD DE	ON LEADING TÙ ISOM Excitation is need Etector.	ERIC STATE AFTER HED•
661					2.0%	1	EUR	NEUTRON DOS	IMETRY GROUP	GEL 742116R
							a: 0:	PRODUCTION O AVERAGE CROS DESIRED. FOR NORMALIZ	DF IN-115 (4.5 HOU SS SECTION IN A U- ZATION OF AVERAGE	R) ISCMEF. 235 FISSION SPECTRUM CROSS SECTIONS FOR
667		B T O	15.0	MCV	6 A *		650		PUNPUSES.	76.01.665
662	U.	PIU	15.0	MCV	5.0%	1	Q:	PRODUCTION (EVALUATION)	OF ISOMER. WANTED.	/92192k
STATUS										STATUS
L	UNDER CC	NTINUC	US REVIE	W EY	INDC. SEE A	PPENDI	[X A.			
50 TIN			NEU	TRON		TUTAL	CROSS	SECTION		
663	23.3	MV	15.0	MEV	15.0%	2	IND	R.SHANKAR S	INGH KAL	833047R
							0: M:	FOR IMPURIT	IES ESTIMATIONS IN •	THE FUELS
50 TIN 30 TIN			NEU	TRON		CAPTU	JRE CRO	SS SECTION		
664	25.3	MV	15.0	MEV	15.0%	2	IND	R.SHANKAR S	INGH KAL	83304ER
							0: M:	FOR IMPURITE	IES ESTIMATIONS IN	THE FUELS
********						ENED	=======			
			=======	22222		======	======			
665	15.0	MEV	35.0	MEV		з	USA	DORAN	HED	781041F
							A: 0:	ALCURACY RAI ACCURACY TO STUDIES. FOR MATERIA	NGE 10. TO 40. PER Be determined fro L Camage Calculati	CLENI. M SENSITIVITY CNS.
666	9.00	MEV	15.0	MEV	20 • X	2	USA	BERK	DOE	781083F
							c:	DATA NEEDED Transport	FOR SHIELDING AND CALCULATIONS.	DNEUTRON
50 TIN		z = = = = = = = = = = = = = = = = = = =	NEU	TRON		TOTAL	PROTO	N PRODUCTION	CROSS SECTION	
	********			****		======	******			
667	9.00	MEV	15.0	MEV	10. X	3	USA	DORAN	HED	781025F
							0:	FOR MATERIAL	L DAMAGE CALCULATI	UNS.

50 ===	TIN		*====:	NEU	TRON		TOTAL	PROTO	N PRODUCTION	CROSS SECTION	(CONTINUED)
	668	15.0	Mëv	30.0	MEV	20. *	3	USA	DORAN	HED	7812316
							-	o:	FOR MATERIAL	DAMAGE CALCULATI	IGNS.
=== 50	 T1N	======	*====				TOTAL	ALPHA	PRODUCTION C	ROSS SECTION	
			*****				55522222				
	669	9.00	MEV	15.0	MEV	10. %	3	USA	DORAN	HEO	781214F
								0:	FOR MATERIAL	DAMAGE CALCULATI	ICNS.
	670	15.0	MEV	30.0	MEV	20. X	3	USA	DORAN	HED	761232F
===			**====	5353 <u>55</u> 56				:0 ======	FOR MATERIAL	CAMAGE CALCULATI	[ŰNS.
50 ====	TIN 12	6 	*****	NEU	TRCN		CAPTU	RE CRÚ	SS SECTION		****************
	671	25.3	MV				3	CAN	W.H.WALKER	CRC	691807k
								A :	ACCURACY REQ	UIRED 120 BARNS.	S SECTION
222			=====				==========				
51 ===	ANTIMO	INY 124		NEU	TRGN =====		CAPTU =========	RE CRU	SS SECTION		
	672	25•3	MV			20.0%	3	JAP	K.NISHIMURA	JAÉ	792082R
								o: G:	EXPERIMENTAL FOR ESTIMATI	DATA REQUIRED. ON GE SH 124 PROD	NUCTION IN SE-RE
									NEUTRON SCUR VERY LARGE D	CE. ISCREPANCIES EXIS	ST AMENG EXPERIMENTAL
s 14									DATA.		
51 ===	ANT 1 MO	NY 125	=====	NEU ========	TRON		CAPTU =========	RE CRO	SS SECTION	===============================	*****************
	673	25.3	MV				з	CAN	W.H.WALKER	CRC	6918CER
								A:	ACCURACY REQ	UIRED 300 BARNS.	C CECTI N
===					=====	*					
51 ===	ANTIMO	NY 127		NEU	TRGN		CAPTU	RE CRO	SS SECTION		
	674	25.3	MV				з	CAN	W.H.WALKER	CRC	691809R
								A: 0:	ACCURACY REQ FISSIGN PROD	UIRED 4000 BARNS. UCT. UNKNOWN CROS	S SECTION.
===	152232 TGU UD		=====:								****************
===	======				=====		========		=======================================		
	675	1.00	MV	1.00	ΕV	20 . %	2	USA	FEINER	KAP	671022R
								۵:	169 DAY ISOM Thermal Aver	ER Age or 0.025 ev N	ALUE USEFUL.
								0:	FÜR CALCULAT	ION OF FISSION PF	COUCT POISONS.
	676	25.3	MV				3	CAN	W.H.WALKER	CRC	69181CR
								Q: A: G:	FOR THE ISON ACCURACY RED FISSION PROD	ERIC STATE (105 0 UIRED 900 BARNS.))•
===	******									***************	
52	TELLUR	IUN 12	9 ======	NEU	18 CN	*******	CAPTU =========		55 SECTION	*=*=***	
	677	25.3	MV				3	CAN	W.H.WALKER	CRC	651811R
								Q: A:	FOR THE ISOM	ERIC STATE (33 D) UIRED 1000 BARNS.	•
								o:	FISSICN PRLD	UCT •	
53	IGDINE	127	3=# = =	NEU	TRON		N , 2N				
	£78	10.0	MEV	14.6	MEV	5.0%	2	EUR	NEUTRON DOSI	METRY GROUP	GEL 7421346
								0:	FOR NEUTRON	DUSIMETRY USING S	SPECTRUM UNFULDING
									MORE THAN 25 AND DIFFER	PERCENT DISCREPA	NCY BETWEEN INTEGRAL
		120	======				======================================				
	======	******	=====			==\$====			222222222222		
	679	10.0	MV	1.00	MEV	20.0%	1	GER	H.KUESTERS	KFK	792223R
								0: 0:	MEASUREMENT FOR THERMAL	WANTED REACTORS.	
	680	100.	εv	500.	KEV	20.0%	2	JAP	S.IIJIMA	NIG	812036N
							_	- -	H.MATSUNDBU	SAE	
===								Q: C:	EXPERIMENTAL FOR FAST REA	UATA ARE SCARCE. CTOR BURN-UP CALC	, Culatiūns ====================================

=== 53	IGDINE	129		NEU	===== TRÜN		RESON	ANCE PA	AR AME TERS	======================================	
====	*=====		55322 \$ 5								
	681	100.	Eν	500.	KEV	20.0%	2	JAP	S.IIJIMA H.MATSUNDBU	NI G SAE	812037N
								Q: C: M:	RESONANCE ENERGY Spin and orbital For fast reactor Substantial modif	, NEUTRON WIDTH, RACIATIVE Momentum Wanted. Burn-up Calculatiuns Fications.	WIDTH,
=== 53	ICDINE	133	******	NEU	== == == TR GN		CAPTU	RE CRUS	SS SECTION		*******
	682	1.00	MV	1.00	KEV	20. %	2	USA	DEI	BET	671024H
								4: 6:	ACCURACY 10 PERC ABOVE 1 EV WANT 9000-90.000 BA FOR CALCULATION	ENT IF SIGMA>9000 BARNS. RI TO 20 PERCENT IF IN RAN RNS, TG 10 PERCENT IF LARG OF FISSIEN PRODUCT PUISONS	GE ER.
=== 53 ===	IODINE	135		=======================================			G A M M A		IELD		*******
	693					10 7		140	H CHIMO IIMA	TCS	7620041
	685					10. 4	J	JAF Q:	YIELD PER DISINT	EGRATION CF 527.1132.1260	AND 1458
								0:	KEV GAMMA RAYS R (FCLLGWING BET Detection of fai	EQUIRED. A GECAY EVENT) Led fuel	
54	XEN6N	24	=======	NEU	TRON		CAPTU	RE CROS	SS SECTION		
===								=======			
	684	25.3	MV	10.0	KEV	10. %	2	U SA	RAWLINS	HED	8011076
								0:	NEED BETTER MEAS FROM THERMAL T GAS-TAGGING OF	UREMENTS OF RESONANCE PARA 0 10 Kev for isotopes used fftf•	METERS IN
54	XENON	126		NEU	TRGN		CAPTU	RE CRG	SS SECTION		
	€85	25.3	MV	10.0	KEV	10 . X	2	USA	RAWLINS	HED	ECIICER
_								υ.	FROM THERMAL TO GAS-TAGGING OF	G 10 KEV FOR ISOTOPES USED FFTF.	IN
54	XENUN	128		NEU	TRGN		CAPTU	IRE CRG	SS SECTION		
	ć 86	25.3	MV	10.0	KEV	10. X	2	USA D:	RAWLINS NEED BETTER MEAS FROM THERMAN T	HED UREMENTS OF RESONANCE PARA D 10 Key For Isotopes Used	8C11CSH Meters In
									GAS-TAGGING OF	FFTF.	•••
=== 54	XENON 1	129		NEU	====== TRON		CAPTU	RE CR0	SS SECTION	***************************************	********
	******	193355					822222	.=====	***============	***************************************	
	687	25.3	MV	10.0	KEV	10 - X	2	USA	RAWLINS	HED	EC1110A
								0:	NEED BETTER MEAS FROM THERMAL T GAS-TAGGING OF	UREMENTS OF RESONANCE PARA O 10 KEV FÜR ISOTOPES USED FFTF•	METERS In
=== 54	XENON	====== 131	******	NEU	====== TRON	**********	CAPTU	RE CRU	SS SECTION		
===									================================	***************************************	
	688	10.0	MV	5.00	KEV	10.0x	2	FR	H.TELLIER	SAC	732064R
								A: U:	QUDTED ACCURACY Réactor calculat	AT 2 STANDARD DEVIATIONS. Ions.	
	689	4.00	KEV	500.	KEV	20.0%	1	JAP	S.IIJIMA H.MATSUNOBU	N I G SAE	752014N
								0: M:	FOR FAST REACTOR Resonance parame Substantial modi	BURNUP CALCULATIONS. Ters are known up to 4 kev Ficatiuns.	•
	690	1.00	KEV	1.00	MEV	20. X	2	USA	SCHENTER	HED	8012776
								A: 0:	ACCURACY DETERMI FLUX WEIGHTING FDR CALCULATIONS REACTURS.	NATION SHOULD REFLECT FAST SPECTRUM. OF REACTIVITY AND EURN-UP	REACTGR In Fast
====			======			**********					
এ4 ২===		132 153722	========				======		55 SECTION ====================================		
	691	100.	EV	500.	KEV	20.0%	2	JAP	S • I IJ IMA H • M AT SUNG EU	NIG Sae	E12638M
								0:	FOR FAST REACTOR	BURN-UP CALCULATIONS	
=== 54	XENON	 132	======	NEU	TRON		RESO	NANCE P	AR AME TER S	*************************	
===	******		======	*******					=============================		
	692	U	Р ТО	40.0	KEV	20.0X	2	JAP	S.IIJIMA H.Matsundbu	NIG SAE	612039N
					an 19			C: 0: N:	ONLY 5 LEVELS BE RESONANCE ENERGY SPIN AND ORBITAL FOR FAST REACTOR SUBSTANTIAL MODI	LOW 3.85 KEV ARE KNOWN , NEUTRON WIDTH, RADIATIVÉ , MOMENTUM WANTED. R BURN-UP CALCULATIONS FICATIONS.	WIDTH.

54	XENGN	133	***	NEU	TRON		CAPTU	JRE CHUS	S SECTION		*******
			******				525521				======
	693	1.00	MV	1.00	KEV	5.0%	3	DEN O:	C.F.HOEJERUP WANTED FOR FISSI	RIS ON PRUDUCT CALCULATIONS.	712045R
	694	1.00	MV	5.00	KEV	10. 2	2	USA	DEI	вет	741088R
							·	a: 0:	RADIOACTIVE TARG THERMAL CRUSS SE FOR FISSION PRUD	ET 5.29 DAY CTION AND RI BANTED. UCT POISON CALCULATIONS.	
===	===== XENON			========			PESON	ANCE PA			
===	======			#======							*******
	695	U	р то	40.0	KEV	20.0%	2	JAP	M.KAWAI	NIG	832033R
								o:	RESONANCE ENERGY SPIN AND ORBITAL VERY FEW EXPERIM FOR BURN-UP CALC	 NEUTRON WIDTH, RADIATIVE Angular Momentum Wanted. Ental Data. Ulaticns. 	WIDTH.
								M:	NEW REQUEST.		
54 ===	XENUN	135		NEU	TRON		CAPTU	JRE CRO	SS SECTION		
	696	10.0	MV	5.00	KEV	10.0%	2	FR	H.TELLIER	SAC	732065R
								A: (;	QUUTED ACCURACY Reactor Calculat	AT 2 STANDARD DEVIATIONS. Ions.	
	6 57	1.00	MV	5.00	ΕV	2• X	2	USA	DEI	BET	7410E9F
								Q: A: Q:	RADIGACTIVE TARG THERMAL CRUSS SE FUR FISSION PROD	ET 9.17 HR GTION WANTED TG 2 PERCENT. UCT POISON CALCULATIONS.	
	698	5.00	ΕV	5.00	KEV	5 . X	2	USA	DEI	867	741224R
								G: A: D:	RADIOACTIVE TARG THERMAL CROSS SE FUR FISSION PROD	ET 9.17 HR CTIÚN WANTED TO 2 PERCENT. UCT POISON CALCULATIONS.	
	696	1.00	MV	5-00	ĒΨ	3. 1	2	USA	FFINER	KAP	761076R
	.,,	1000		5000	2.		-	Q: A: 0:	RADIGACTIVE TARG THERMAL CROSS SE FOR FISSION PROD	ET 9.17 HR CTION WANTED TO 2 PERCENT. UCT POISON CALCULATIONS.	
==3	azz===0		**====		*=====		=======				
54 ===	XENON ======	135	======	NEU 1222222	TRCN ======		TOTAL	_ PHOTO ===================================	N PRODUCTION CROS	S SECTION	
	700	25.3	MV	1.00	KEV	20.0%	1	FR	B.DUCHEMIN	SAC	E12055R
								Q: A:	GAMMA SPECTRA RE ENERGY RESOLUTIO THAN 1 MEV AND 5 1 MEV.	QUIRED In UF 250 KEV FOR GAMMA RAYS 00 KEV FOR ENERGIES GREATER	S LESS R THAN
								с:	FOR INSTRUMENTAT	ION AND SHIELDING CALCULAT	ICNS
=== 54 ===	XENÚN	135		NEU	 TRON 		ENER	GY DIFF	• PHÚTON-PRÓDUCTI	UN CRCSS SECTION	
	701	25.3	MV				2	USA	FEINER	KAP	6710296
								Q:	RADIGACTIVE TARG FOR GAMMA ÉNERGI ACCURACY RANGE 1	ET 9.17 HR ES 1-8 MEV. 0. TC 20. PERCENT.	
						-		0:	GAMMA-ENERGY RES For Gamma Shield	DLUTION - 10-20 PERCENT. Ing and heat calculations.	
55 ===	CESILM	133		NEU		*********	CAPT	URE CRO	SS SECTION		
	702	25.3	MV			3.0%	2	ССР	S.A.SKVURTSUV	KUR	7040C7N
					•			۵:	0.A.MILLER ALSO WANTED FOR	KUR •06 EV INCIDENT NEUTRONS•	
								6:	FOR ASSAY OF U A FISSION PRODUC	ND PU IN FUEL ELEMENTS FROM T GANMA RADIATION+	4
=== 55			******	NEU	******				SS SECTION		
∓ ==	*****				******		======				
	703	25.3	MV			3.0%	2	ССР	S.A.SKVÛRTSOV G.A.MILLER	KUR	7040C8N
								c: 0:	ALSG WANTED FOR For Assay of U A Fission produc	•06 EV INCIDENT NEUTRONS• IND PU IN FUEL ELEMENTS FRCM IT GAMMA RADIATION•	4
	704	25.3	MV			3.0%	1	JAP	H.QKASHITA	JAE	722022N
								0: 0:	RESUNANCE INTEGR FOR BURN UP CALC MEASUREMENT.	AL ALSC WANTED. ULATIGN FRGM NON-DESTRUCTIV	/E
	705	25.3	MV	10.0	MEV	20. %	1	JAP	K.TASAKA	JAE	762024N
								۵:	CROSS SECTION VA	LUES AT HIGHER NEUTRON ENER	GIES
								A: C:	10 PER CENT ACCU 26 PER CENT ACCU BURN-UP DETERMIN MEASUREMENT OF A ESTIMATION OF TH	RACY FOR 25.3 NV, RACY FOR HIGHER ENERGY REGI Ation based on Absolute (Ctivity Ratio CS-134/CS-13) (E decay PGWER of Fissign Pf	ION. 7 RGDUCTS

55 CESIU	M 134 ====================================	NEUTRON		CAPTU	RE CROS	SS SECTION	(CC) ===================================	TINUED
706	10.0 MV	1.00 MEV	20.08	1	GER 0: 0:	H•KUESTERS MEASUREMENT WAN FOR THERMAL REAG	KFK TED CTORS.	792224F
55 CESIU		NEUTRON	*======	CAPTU	RE CRUS	S SECTION		
707	100. EV	500. KEV	10.0%	1	J A P	S.[IJIMA H.MATSUNOBU	N I G SAE	752016R
					a:	FOR FAST REACTOR Evaluations are	R BURNUP CALCULATIONS. Very discrepant.	
708	1.00 KEV	1.00 MEV	20. X	2	USA	SCHENTER	HED	801278R
					0: A: 0:	RADIOACTIVE TAR ACCURACY DETERM FLUX WEIGHTIN FOR CALCULATION REACTURS •	GET 3.0X(10**6) YR Inatiun Should Reflect fast G Spectrum. S of Reactivity and Burn-up	REACTGR In fast
55 CESIU	M 135	NEUTR CN		RESON	ANCE PA	12 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	***************************************	
709	100. EV	500. KEV	10.0%	1	JAP	S • I I J I MA H • MATSUNDBU	NIG SAE	812040N
					a: c:	RESUNANCE ENERG SPIN AND ORBITAL FOR FAST REACTO	Y, NEUTRON WIDTH, RACIATIVE L MOMENTUM WANTED. R BURN-UP CALCULATIONS	WICTH.
55 CESIU		NEUTRÓN		CAPTU	 Ré CROS	SS SÉCTION		
	<u> </u>		* = = = = = = = = =					
710	25.3 MV		10.0%	2	ССР	S.A.SKVÜRTSOV Ü.A.MILLER	KUR KUR	704013N
					0: 0:	ALSO WANTED FOR FOR ASSAY OF U FISSIGN PRODU	.06 EV INCIDENT NEUTRONS. AND PU IN FUEL ELEMENTS FROM CT GAMMA RADIATION.	4
56 EARIU	N 137	NEUTRON	*********	RESON	ANCE P	ARAMETERS		
711			20 . O.Y	2		м. Кањат	N17	8320346
711			2000	٤	0: 	RESCNANCE ENERG SPIN AND GRBITA FOR BURN-UP CAL FOR BURN-UP CAL	Y, NEUTRON WIDTH, RADIATIVE L ANGULAR MOMENTUM WANTED. CULATICNS. CULATICNS.	∎IDTH,
=======	2== <i>=3</i> =2=2===#4				M; 522222:	NEW REQUEST.		
56 BARIU ======	M 140 722235555888888	NEU IR GN		CAPTU	RE CROS	SS SECTION		
712	25.3 MV		5.0%	3	ССР	S.A.SKVORTSOV O.A.MILLER	KUR KUR	7C4015N
					0: 0:	ALSC WANTED FOR FOR ASSAY OF U FISSION PRODU	.06 EV INCIDENT NEUTRINS. AND PU IN FUEL ELEMENTS FRG CT GAMMA RADIATION.	м
57 LANTH	ANUM 140			GAMMA	RAY Y	LELD		
713			1.0x	2	ССР	S.A.SKVURTSUV	KUR	704016N
					c:	VIELD OF GANMA FOR 328-8 AND	KUR QUANTA PER BETA DECAY EVENT 815-8 KEV GAMMAS-	WANTEC
					U:	FISSION PRODU	AND PU IN FUEL ELEMENIS FRU CT GAMMA RADIATION•	•
58 CERIU	212122222222222 M 144 212222222222222		=======================================	GAMMA	RAY Y	IELD 		*******
714			1.0%	2	CCP	S.A.SKVORTSOV D.A.MILLER	KUR KUR	704C18N
					a: 0:	YIELD OF GAMMA FOR 133.5 KEV FUR ASSAY OF U FISSIGN PRODU	QUANTA PER BETA CECAY EVENT Gamma. And Pu in fuel elements fru CT gamma radiation.	WANTED M
	*=====================================	NEUTRON		CAPT!		SS SECTION	======================================	
	*==============================	*********	********	======				\$\$\$2222\$
715	10.0 KEV	100. KEV	30 . x	2	USA	SCHENTER	нер	801279H
					0: A: 0:	RADIGACTIVE TAR ACCURACY DETERM FLUX WEIGHTIN FOR CALCULATION REACTORS.	GET 284 DAY INATION SHOULD REFLECT FAST G SPECTRUM. S OF REACTIVITY AND BURN-UP	REACTOR In fast
60 NEGDY	MIUM 146	NEUTRON	:5====================================	CAPTU	RE CRO	2233222223222222 SS SECTIÓN 22322222222222		=========
716	500. EV	200. KEV	20.0%	2	FR	M.SALVATORES	CAD	732075R
			*********		C: M:	FOR FAST REACTO SUBSTANTIAL MOD	R CALCULATIONS. Ifications. The second	*******

60 NEOD	YMIUM 14	7	NEU	TR CN		CAPT	JRE CRO	======================================	***************************************	********
717	1.00	MV	1 -00	KEV		2	USA	FEINER	КАР	671039R
							Q: A:	RADIOACTIVE TARGE Thermal cross sec Accuracy range e	T 11 DAY TION AND RI WANTED. 5. TJ 10. PERCENT.	
718	1.00	NV	1.00	KEV		2	USA	DEI	8ET	E71046R
							Q: A:	RADIOACTIVE TARGE Thermal cross sec Accuracy range e	T 11 DAY TION AND RI WANTED. 5. TG 10. Përcent.	
719	25.3	MV				3	CAN	W.H.WALKER	CRC	691812R
							: A : ل	REQUIRED WITH 350 Fission Product W) BARN ACCURACY. IITH UNKNOWN CRUSS SECTION	•
720	1.00	MV	1.00	KEV	5.0%	з	DEN	C .F . HOE JERUP	RIS	712046R
							с:	WANTED FOR FISSIO	IN PRODUCT CALCULATIONS.	
721	10.0	MV	5.00	κev	10.0%	1	FR	H.TELLIER	SAC	732076R
							A: 0:	QUDTED ACCURACY A Burn up physics.	AT 2 STANCARD DEVIATIONS.	
 60 NEOD		8	NEU	TRON		CAPT	JRE CRO	SS SECTION		
722	500.	ЕV	200.	KFV	20.0%	2	FR	M-SALVATORES	CAD	7 120770
						-	: د	FUR FAST REACTOR	CALCULATIONS.	
								SUBSTANTIAL MODIF	ICATIONS.	
61 PRÚM 	ETHIUN 1	47	NEU	TRCN		CAPTO	JRE CRO	SS SECTION		
723	1.00	MV	1.00	KEV	5.0%	з	DEN	C.F.HGEJERUP	RIS	7120476
							٥:	WANTED FUR FISSIC	IN PRODUCT CALCULATIONS.	
724	100.	ΕV	500.	KEV	10.0%	1	AA L	S-11JIMA H•NATSUNJBU	NIG SAE	752019N
725	1.00	KEV	1.00	MEV	10. *	2	USA	SCHENTER	HED	801280R
							0: A: C:	RADIGACTIVE TARGE ACCURACY DETERMIN FLUX WEIGHTING FOR CALCULATIONS REACTORS.	T 2.6234 YR MATIUN SHCULD REFLECT FAST SPECTRUM. OF REACTIVITY AND BURN-UP	REACTOR In Fast
61 FROM	ETHIUM 1	48	NEU	TRON		CAPT	JRE CRO	SS SECTION		
726	1.00	MV	1.00	KEV	10. %	2	USA 0:	RADIDACTIVE TARGE	31 5.37 DAY	6710466
							a:	THERMAL CRESS SEC LOOK FOR 1/V ABOV FOR CALCULATION D	TIÓN AND RI WANTÉD. VE 1 EV. DF FISSION PRODUCT POISUNS.	•
727	1.00	MV	1.00	Eν	10. X	2	USA	FEINER	КАР	671048R
							a: 0:	RADIUACTIVE TARGE Thermal Cross Sec For Calculation C	ET 5.37 DAY Tiùn and Ri Wanted. De Fission product poisons.	•
728	10.0	MV	1.00	MEV	20.0%	1	GER	H.KUESTERS	KFK	792226R
							a: 0:	TARGET IN METASTA Measurement wante Fur thermal react	NBLE STATE. D Tors.	
61 FRCM	ETHIUM 1	51	NEU	TR CN		CAPT	JRE CRO	SS SECTION		
729	1.00	MV	1.00	KEV	10 • X	2	USA	DEI RADIGACTIVE TARGE	BET	671057R
							4: U:	THERMAL CROSS SEC ENERGIES ABOVE 1 10 PERCENT. FOR CALCULATION L	TIÚN AND RI WANTÉD. EV OF INTÉREST TO GIVE RI JF FISSIGN PREDUCT POISCNS.	тс •
62 SAMA	======================================		NEU	TRON		CAPT	JRE CRU	SS SECTION		
730	500.	ΕV	200.	KEV	20.0%	1	FK	M.SALVATORES	CAD	732075R
							0: M:	FOR FAST REACTOR SUBSTANTIAL MODIF	AUGS CHERGT LA VALUE RELA NOTHER NUCLEUS SUCH AS U CALCULATIONS. ICATIONS.	238.
62 SAMA	======= RIUM 149			== === TRCN == = = =		CAPT(JRE CRU			********
731	1 00	MU	1.00	2 EV	E 0*	2		C.E.HCE.E000	D1C	7100.00
731	1.00	-1 V	1.00	~ = ¥	3 • V A	L.	0:	WANTED FOR FISSIC	NN PRODUCT CALCULATIONS.	/12048k

62 ===:	SAMARI	M 149		NEU	[RCN ========	••••••	APTUR	E CR09	S SECTION	(CGN	TINUED)
	732	25.0	KEV			5.0%	1	JAP	S.IIJIMA H.MATSUNUBU	N I G SAE	75202CN
								0:	FOR FAST REACTOR Discrepancy betwe Differential data GNE Absolute data	BURNUP CALCULATIONS. En Stek Cata and Recent Point at 25 kev Required.	
==== 62	 SAMAF 1 (NEU	TRON	=======================================	OTAL	PHOTON	PRODUCTION CROSS	SECTION	=======
522	2222233	:st=:23	.======	=====:							
	733	25.3	MV	1.00	KEV	20.0%	1	FR	B.DUCHEMIN	SAC	E12060R
								A:	ENERGY RESOLUTION THAN 1 MEV AND 50 1 MEV.	DIRED 1 UF 250 KEV FOR GAMMA RAYS 10 KEV FOR ENERGIES GREATER	LESS THAN
								0:	FOR INSTRUMENTATI	ION AND SFIELDING CALCULATI SUFFICIENT	CNS-
==== 62	SAMARI	M 151		NEU	tr CN	*=====***	APTUR	E CROS	SS SECTION		
***	====\$21										======
	734	1.00	MV	1.00	KEV	5. X	2	USA	DEI	BET	671054F
								Q: A: O:	RADIGACTIVE TARGE THERMAL CRGSS SEC INCIDENT ENERGY F ENERGIES ABOVE 1 IC PERCENT. FUR CALCULATION (I 90 YR TION AND RI WANTED. RESOLUTION: 5. PERCENT. Ev of interest to give ri of fission product puisons.	TO
	735	10.0	MV	5.00	KEV	10.0%	2	FR	H.TELLIER	SAC	732082R
								A: 0:	QUUTED ACCURACY A REACTOR CALCULATI	AT 2 STANDARD DEVIATIONS. Ions.	
	736	100.	ΕV	500.	KEV	10.0%	1	JAP	S.IIJIMA H.MATSUNDBU	NIG Sae	7520216
								0:	FOR FAST REACTOR NG KEV DATA.	BURNUP CALCULATIONS.	
	737	10.0	MV	1.00	MEV	20.0%	1	GER	H.KUESTERS	KFK	792225R
								G:	MEASUREMENT MANTE	ED	
	738	1.00	KEV	1.00	MEV	20 . X	2	USA	SCHENTER	HED	8012826
								Q: A: C:	RADIOACTIVE TARG ACCURACY DETERMIN FLUX WEIGHTING FOR CALCULATIONS REACTORS.	ET 90 YR Nation Shguld Reflect Fast Spectrum. GF Reactivity and Burn-up	REACTOR In Fast
=== 62	======= SANAR [JM 151		NEU	====== TR ON		I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	PHOTON	N PRODUCTION CROSS	S SECTION	
				=====	*======						
	739	25.3	мл	1.00	KEV	20.0%	1	FR	B.DUCHEMIN	SAC	8120E1F
								C: A:	GAMMA SPECTRA RE ENERGY RESCLUTIU THAN 1 MEV AND 5 1 MEV.	DUIRED N OF 250 KEV FOR GAMMA RAYS Do KEV FOR ENERGIES GREATER	LESS
								0:	FOR INSTRUMENTAT	ION AND SHIELDING CALCULATI E SUFFICIENT	CNS-
=== 62 ===	SAMAR 1	UM 153	=_========= =_=====	NEU	==s===== TRON ==s=====		CAPTUR	RE CRO	SS SECTION		********
	740	1.00	MV	1.00	KEV		2	USA		8ET	671061R
								C: A: L:	RADIUACTIVE TARG THERMAL CROSS SE ACCURACY - 10 PEL 20 PENCENT IF ENERGIES ABOVE 1 10 PERCENT IN 30-300 BARNS. FOR CALCULATION	LT 46.5 HR CTIDN AND RI WANTED. RCENT IF SIGMAJ30,00C BARNS LOWER. EV UF INTEREST TO GIVE - RI IF J300 BARNS, 20 PERCEN DF FISSICN PRODUCT PLISCNS.), (T IF
	741	25.3	MV				3	CAN	W.H.WALKER	CRC	691814R
								A: 0:	REQUIRED WITH A	10000 BARN ACCURACY. With Unknown Cress Section.	
==== 63 ===	EUKUPI	UM 151		NEU	== == == == == TRON == == == ==		===== CAPTU ======		SS SECTION		
	742	25.7	MV	5.00	KEV	5.0×	3	FR	H.TFLIIER	SAC	7320544
	142	20+0		5.00	KL •	5.02	5	A: 0:	QUDTED ACCURACY REACTOR CALCULAT	AT 2 STANDARD DEVIATIONS. IONS.	
	743	1.00	KEV	1.00	MEV	5 . x	2	USA	HEMMIG	DOE	741055R
	744	0.50	EV	5.00	KEV	5. X	2	USA	MUGHABGHAB	BNL	761076F
	745	1.00	EV	2.00	MEV	10.0%	2	FR	M.SALVATORES	CAD	792015R
								0: M:	FOR FAST REACTOR SUBSTANTIAL MODI	CALCULATIONS. Fications.	
====	******			======	=========			_====			

ï

63 E	UROPIL	JM 152		NEU	TRUN		CAPTU	RE CRO	SS SECTION	****************		
7	46	1.00	MV	1.00	KEV	10. X	2	USA	MUGHABGHAB	BNL		761077R
								01	ALSU REQUIRE I INTEGRAL.	RESONANCE PARAM	ETERS AND RESON	ANCE
7	47	100.	EV	500.	KEV	10.0%	L	JAP	S.IIJIMA H.MATSUNOBU	N I G SAE		812041N
								0: 0:	NG KEV DATA For control r calculations.	OD AND THERMAL	REACTER EURN UP	
===== 63 E	UROPI	JM 152		NEU	===== TR (N		RESON	ANCE P	AR ANETERS		************	
		*====					******	===±±=:				*****
7	48	100.	EV	500.	KEV	10.0%	1	JAP	S•IIJIMA H•MATSUNOBU	NIG SAE		812042N
								a: 0:	NO DATA EXIST (1977) IN 0-8 Resonance ene spin and orbi for control r calculations.	EXCEPT THOSE B 8 TO 17 EV RGY, NEUTRON WI TAL MOMENTUM WA OD AND THERMAL	Y VERTENENJE ET DTH, RADIATIVE NTED. REACTOR BURN-UP	AL WIDT⊬∎
 63 E	UROP I	JM 153		 NEU	====== TRON		CAPTU	RE CRO	SS SECTION	*		======
====	=652.81				*****			==25251	***********		=======================================	
7	45	1.00	MV	5.00	KEV		2	USA	MUGHAEGHAB	BNL		671064R
								A: C:	ACCURACY RANG ACCURACY - 2 ABOVE. ENERGIES ABOV 10 PERCENT. FGR CALCULATI	E 2. TC 5. PE PERCENT NEAR TH E 1 EV OF INTER GN OF FISSION P	RCENT. ERMAL. 5 PERCEN Est to give ri Roduct Poisons.	т ТС
7	50	1.00	ΕV	5.00	KEV	10.0%	з	FR	H.TELLIER	SAC		732085R
								A: 0:	QUOTED ACCURA Reactor Calcu	CY AT 2 STANDAR Lations.	D DEVIATIONS.	
7	51	1.00	KEV	1.00	MEV	5. %	2	USA	HEMMIG	DOE		7411C5R
7	52	1.00	ËV	2.00	MEV	10.0%	2	FR	M.SALVATORES	CAD		792020F
								0: M:	FOR FAST REAC	TOR CALCULATION ODIFICATIONS.	S•	
-	- 7	25 3				10.05	,	BLC		MOL		612065N
'	23	2303	PIV			10.0%	•	020	FOR BURN UP M	EASUREMENTS FRC	M NGN-DESTRUCTI	VE FUEL
									ANALYSIS.			
63 E	UROPI	UM 153		NEU	TRCN		CAPTU	RE RES	DNANCE INTEGRA	L ====================================		
-	54	0 50	C 1/					BL C		M(3)		9120661
,	J 4	0.50	2.4	1.00	MEV	5.04	•	0:	FOR BURN UP M	HEASUREMENTS FRO	M NUN-DESTRUCTI	VE FUEL
									ANALYSIS.			
63 E	UROP L	UM 154		NEU	TRON		CAPTU	RE CRO	SS SECTION			
7	55	26.3	MV			5.01	,		HAGKASHITA	.IAF		7220355
	55	23.3				500	-	Q:	RESONANCE INT	EGRAL ALSO WANT	ED.	
								0:	FOR BURN UP C MEASUREMENT	ALCULATION FROM •	NON-DESTRUCTIV	£
7	56	100.	ΕV	500.	KEV	10.0%	1	JAP	S.IIJIMA H.Matsunobu	NIG Sae		812043N
								0: .:	NU EXPERIMENT FUR CONTROL R Calculations	AL DATA. CD AND THERMAL	REACTOR BURN-UP	
7	57	25.3	MV			2.0%	1	6L G	L .LEENDERS	MOL		E12067N
								a: G:	HALF-LIFE ALS For Burn up M Analysis.	O REQUIRED TO 1 IEASUREMENTS FRO	FERCENT ACCURA M NUN-DESTRUCTI	CY. VE FUEL
		======		*******	======					******		
63 E		UM 154		NEU	186N 2222==	*******	RESUN	ANCE P	AR AMEIERS ====================================			
7	58	100.	Eν	500.	KEV	10.0%	1	JAP	S.IIJIMA H.MATSUNDEU	NIG Saë		812C44N
								a: 0:	INSUFFICIENT RESONANCE ENE SPIN AND ORBI FUR CONTROL R CALCULATIONS	RESONANCE DATA. RGY, NEUTRON WI Tal Momentum Wa Rod and Thermal	DTH, RADIATIVE NTED. Reactor Burn-up	wIDTH,
==== 63 E	UROPI	====== UM 154		NEU	TRON		CAPTU	RE RES	ONANCE INTEGRA			
						-42 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
7	59	0.50	Eν	1.00	MEV	20.0%	1	BLG	L .LEENDERS	NOL	MINCHEDECTOUST	812068N
	8#3g=:							:0	FUR BURN UP M Analysis. ===================================	:=====================================		

63	EUROPI	UM 155					GAMMA	RAY Y		
	760					1.0%	2	JAP	K.TASAKA JAE	722015N
									GAMMA RAYS REQUIRED. (FOLLOWING BETA DECAY EVEN)	()
								u:	NEASUREMENT.	NUN-DESTRUCTIVE
=== 63	EUROPI	SE S		NEU	======= TR ON	********	CAPTUR	RE CROS	S SECTION	
222:	======									
	761	1.00	MV	1.00	KEV	5.0%	3	DEN	C.F.HCEJERUP RIS	712050R
								6:	WANTED FOR FISSION PRODUCT C	ALCULATIONS.
	762	100.	Eν	500.	KEV	20.0%	2	JAP	S.IIJIMA NIG H.MATSUNDBU SAE	812045N
								0: 0:	NU EXPERIMENTAL DATA FOR FAST REACTOR BURN-UP CAL	CULATIONS
===:	eseses EUROP I				====== TRON		RESON	ANCE PA	======================================	
====					=======	*=**=***				*********************
	763	100.	£٧	500.	KEV	20.0%	2	JAP	S.IIJIMA NIG H.Matsunobu sae	£1204cN
								G :	INSUFFICIENT RESONANCE DATA.	TH. RACIATIVE WIDTH.
								c :	SPIN AND ORBITAL MUMENTUM WA FUR FAST REACTOR BURN-UP CAL	NTED. CULATIONS
===: 63	EUROPI	 UM 156		NEU	====== T&GN		CAPTU	RE CRG	S SECTION	
===		======	*******				======			***********************
	764	25.3	MV				3	CAN	W.H.WALKER CRC	691815R
								A: 0:	REQUIRED WITH A 700 BARN ACC FISSIGN PRUDUCT WITH UNKNOWN	URACY. CROSS SECTION.
=== 64	GADOLI	 NIUN 1	 55	====== Nëu	====== TR CN	*********	CAPTU	RE CRU	SECTION	
 .	=======		143355555	=====	======					
	765	10.0	MV	5.00	KEV	5.0%	2	FR	H.TELLIER SAC	732086R
								A: 0:	QUOTED ACCURACY AT 2 STANDAR Consumable Poison.	D DEVIATIONS.
=== 64	 GADGI I			==== NFU	====== TRON		CAPTU		SECTION	**********************
===		======			=======		======	======		
	76 6	1.00	MV	1.00	KEV	5.0 x	3	DEN	C.F.HUEJERUP RIS	712051R
	7 6 6	1.00	MV	1.00	KEV	5.0%	3	DEN O:	C•F•HüEJERUP RIS ₩ANTED FÜR FISSIGN PRODUCT C	712051R Alculatiúns.
	766 767	1.00	MV MV	1.00	KEV KEV	5.0x	3 2	DEN O: FR	C.F.HGEJERUP RIS Wanted for fission product C H.Tellier Sac	7120E1R Alculatiuns. 7320E7R
	766 767	1.00	MV MV	1.00 5.00	KEV KEV	5.0x	3 2	DEN O: FR A: G:	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON.	712051R Alculatiúns. 7320e7r D deviatiens.
	766 767	1.00	MV MV	1.00 5.00	KEV KEV	5.0x	3 2	DEN 0: FR 4: 0:	C.F.HGEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON.	712051R Alculatiuns. 7320e7r D deviatiens.
 66 	766 767 DYSPRO	1.00 10.0 SIUM 1	MV MV 62	1.00 5.00	KEV KEV Trcn	5.0x	3 2 Total	DEN O: FR A: G: CROSS	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION	712051R Alculatiúns. 7320e7r D Deviatiens.
==== 66 ====	766 767 DYSPRO 768	1.00 10.0 5104 1	MV MV 62 EV	1.00 5.00 NEU	KEV KEV TRCN EV	5.0x	3 2 TOTAL	DEN O: FR A: G: CROSS	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F
 66 	766 767 DY SPRO 768	1.00 10.0 SIUM 1 1.00	MV MV 62 EV	1.00 5.00 NEU 10.0	KEV KEV TRCN EV	5.0x 5.0x	3 2 TOTAL 3	DEN G: FR A: G: CROSS USA A:	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUOTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION:	712051R ALCULATIUNS. 732067R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT.
 66 	766 767 DY SPRO 768	1.00 10.0 SIUM 1	MV MV 62 EV	1.00 5.00	KEV KEV TRCN EV	5.0x	3 2 T OT AL 3	DEN O: FR A: G: CROSS USA A: G:	C.F.HUEJERUP RIS WANTED FUR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE 15 A DUBLET AND	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047R RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORRESPONDING
-=== 66 -===	766 767 DY SPRO 768	1.00 10.0 SI UM 1 1.00	MV MV 62 EV	1.00 5.00 NEU 10.0	KEV KEV TRCN EV	5.0x 5.0x	3 2 TOTAL	DEN G: FR A: G: USA A: G:	C.F.HGEJERUP RIS WANTED FOR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DOUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1, PART B.F	712051R ALCULATIONS. 732087R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHER THE 5.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS QURTH EDITION.
	766 767 DYSPR0 768	1.00 10.0 SIUM 1	MV MV 62 EV	1.00 5.00	KEV KEV TRCN EV	5.0x	3 2 T OT AL 3	DEN D: FR A: G: USA A: G: M:	C.F.HUEJERUP RIS WANTED FUR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1, PART B.F NEW REQUEST.	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047F 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OURTH EDITICN.
 66 69	766 767 DYSPR0 768	1.00 10.0 SIUM 1 1.00	MV MV 62 EV	1.00 5.00	KEV KEV TRCN EV	5.0x	3 2 TOTAL 3	DEN G: FR CROSS USA A: G: M:	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUOTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DOUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST.	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHER THE S.4 EV THE CORRESPONDING ERS. SEE NEUTRON CROSS OURTH EDITION.
 66 	766 767 DYSPRO 768 THULIU	1.00 10.0 SIUM 1 1.00 M 169 8.00	MV MV 62 EV	1.00 5.00 NEU 10.0	KEV KEV TRCN EV TRCN MEV	5.0x	3 2 TOTAL 3 N,2N	DEN D: FR A: G: USA A: G: M: USA	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1, PART B.F NEW REQUEST.	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORRESPONDING ERS. SEE NEUTRON CROSS OUNTH EDITICN. 801031F
 66 	766 767 DYSPRO 768	1.00 10.0 SIUM 1 1.00	MV MV 62 EV	1.00 5.00	KEV KEV TRCN EV	5.0x	3 2 TOTAL 3 3 N.2N	DEN G: FR CROSS USA A: G: W: USA A:	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047R RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHER THE S.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OURTH EDITION. 801031F RCENT.
-=== 66 -=== 69	766 767 DYSPRO 768 THUL IU 769	1.00 10.0 51 um 1 1.00 M 169 8.00	MV MV 62 EV MEV	1.00 5.00 .NEU 10.0	KEV KEV TRGN EV TRCN MEV	5.0x	3 2 TOTAL 3 N,2N	DEN G: FR A: G: USA A: G: M: USA A: M:	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIGNS VOL. 1, PART B.F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FUR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047R RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OUNTH EDITICN. 801031F RCENT.
66 	766 767 DYSPRO 768 THULIU 769	1.00 10.0 SIUM 1 1.00 (M 169 8.00	MV MV 62 EV EV	1.00 5.00 	KEV KEV TRGN EV TRCN MEV TRGN	5.0x	3 2 Total 3 N.2N 2	DEN G: FR A: G: USA A: G: USA A: M: USA A: M:	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUDLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732007R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORRESPONDING ERS. SEE NEUTRON CROSS GURTH EDITION. 801031F RCENT.
 66 69 	766 767 768 768 769 769	1.00 10.0 51 um 1 1.00 M 169 8.00	MV MV 62 EV MEV	1.00 5.00 10.0	KEV KEV TRGN EV TRCN MEV	5.0x	3 2 T OT AL 3 3 N.2N 2 2	DEN C: FR A: C: USA A: C: USA A: C: USA A: C: USA A: USA	C.F.HUEJERUP RIS WANTED FÜR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1, PART B.F NEW REQUEST. NCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F RCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OURTH EDITICN. 801031F RCENT.
66 	766 767 768 768 769 769	1.00 10.0 510M 1 1.00 M 169 8.00 M 169 15.0	MV MV 62 EV EV MEV	1.00 5.00 10.0	KEV KEV TRGN EV TRCN MEV	5.0x	3 2 TOTAL 3 3 N.2N 2 N.3N	DEN 0: FR 4: G: USA A: C: USA A: M: USA A: USA A: A:	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DOUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE MCELRGY HED ACCURACY RANGE 10. TG 20. PE	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE S.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OURTH EDITION. 801031F RCENT. 801030F
 66 	766 767 768 768 769 769	1.00 10.0 SIUM 1 1.00 M 169 8.00 M 169 8.00	MV MV 62 EV EV	1.00 5.00 	KEV KEV TRGN EV TRCN MEV	5.0x	3 2 TOTAL 3 3 2 N.2N 2 2	DEN C: FR A: C: USA A: C: USA A: C: USA A: C: USA A: C: M: USA A: C: M: C: C: C: C: C: C: C: C: C: C	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUBLET AND ACCURATE RESONANCE PARAMET SECTIONS. NEW REQUEST. MUGHABGHAB HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F 821047F RCENT. ENT ON A VERY THIN WHETHOR THE 5.4 EV THE CORKESPODING ERS. SEE NEUTRON CROSS GURTH EDITION. 801031F RCENT. 801030F RCENT.
66 	766 767 768 768 769 770	1.00 10.0 51 UM 1 1.00 M 169 8.00 M 169 15.0	MV 62 62 EV MEV	1.00 5.00 10.0	KEV KEV TRCN EV TRCN MEV TRCN MEV	5.0x	3 2 TOTAL 3 3 N.2N 2 N.3N 2	DEN 0: FR 4: 0: USA A: 0: USA A: 0: USA A: 0: USA A: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0	C.F.HUEJERUP RIS WANTED FUR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION HUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DOUBLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FUR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS. MCELRCY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHER THE S.4 EV THE CORRESPONDING ERS. SEE NEUTRON CROSS OURTH EDITION. 801031F RCENT. 801030F RCENT.
69 65 65	766 767 768 768 769 770	1.00 10.0 SIUM 1 1.00 M 169 8.00 M 169 15.0 M 165	MV MV 62 EV MEV MEV	1.00 5.00 10.0 25.0	KEV KEV TRCN EV TRCN MEV TRGN MEV	5.0x	3 2 TOTAL 3 N.2N 2 N.3N 2	DEN 0: FR 4: 0: USA A: 0: USA A: 0: USA A: 0: M: USA A: 0: M: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0	C.F.HGEJERUP RIS WANTED FOR FISSIGN PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DOUBLET AND ACCURATE RESONANCE PARAMINE SECTIONS VOL. 1, PART B.F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS. MCELRGY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F RCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORKESPONDING ERS. SEE NEUTRON CROSS OURTH EDITION. 801031F RCENT. 801030F RCENT.
	766 767 768 768 769 770 771	1.00 10.0 510M 1 1.00 (M 169 8.00 (M 169 15.0 (U 165)	MV MV 62 EV EV MEV MEV	1.00 5.00 10.0 25.0	KEV KEV TRCN EV TRCN MEV TRGN MEV	5.0x 5.0x	3 2 TOTAL 3 3 N.2N 2 N.3N 2 N.4N 3	DEN 0: FR 4: G: USA A: G: USA A: 0: M: USA A: 0: M: USA	C.F.HUEJERUP RIS WANTED FOR FISSION PRODUCT C H.TELLIER SAC QUDTED ACCURACY AT 2 STANDAR CONSUMABLE POISON. SECTION MUGHABGHAB ENL ACCURACY RANGE 4. TO 10. PE INCIDENT ENERGY RESOLUTION: TOTAL CROSS SECTION MEASUREM DY-162 SAMPLE TO DETERMINE RESONANCE IS A DUDLET AND ACCURATE RESONANCE PARAMET SECTIONS VOL. 1. PART B. F NEW REQUEST. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS. MCELROY HED ACCURACY RANGE 10. TG 20. PE DOSIMETRY FOR FMIT FACILITY. SUBSTANTIAL MODIFICATIONS.	712051R ALCULATIONS. 732067R D DEVIATIONS. 821047F RCENT. 1.5 PERCENT. ENT ON A VERY THIN WHETHCR THE 5.4 EV THE CORRESPONDING ERS. SEE NEUTRON CROSS GURTH EDITION. 801031F RCENT. 801030F RCENT. 801251F

69 THUL I	UM 169		NEU	TRON		N.5N			===
<u>nciati</u>									
772	U	IP TO	50.0	MEV		3	USA	MCELROY HED 8010	29F
							A: G:	ACCURACY RANGE 10. TO 20. PERCENT. Dosimetry für Fmit Facility.	
72 HAFN1	 UM		NEU	==== Tron		CAPT	URE CRO		
******	******	*****	*********		**=******			***************************************	===
773	1.00	MV	1.00	EV	2. X	2	USA	DEI BET 6210 FEINER KAP	24K
							0:	TO RESOLVE DISCREPANCIES IN THERNAL CATA. Für Münte Carlo Calculations of Burn-up in Thernal Reactors.	
774	1.00	KEV	1.00	MEV		2	JAP	S•11JIMA NIG 8320	26F
							G: A: D: M:	GREATER THAN 10 PERCENT DISCREPANCY AMONG THE EXPERIMENTAL DATA. INCONSISTENCY BETWEEN THE CR SECTIONS OF HF AND THE SUM OF THE ISCTOPIC DATA 5 TG 10 PERCENT. CONTROL ROD MATERIAL IN LWR. NEW REQUEST.	:CSS
72 HAFNI	UM 176	*****	NEU	ZZZZZ TRCN		CAPT	URE CRO	SS SECTION	===
*******								***************************************	====
775	1.00	MV	5.00	KEV		2	USA	DEI BET 6210 FEINER KAP	26 R
							A: 0:	ACCURACY - THERMAL VALUE: 20 PERCENT, <1 EV: 40 PERCENT, - 10-100 EV: GAMMA(TDT), GAMMA(N), GAMMA(GAMMA) 10 PERCENT, - 100 EV-5 KEV: GAMMA(TDT), GAMMA(N), GAMMA(GAM 10 20 PERCENT, - AVERAGE P-WAVE GAMMA(GAMMA) TC 20 PERCENT, - S-WAVE STRENGTH FUNCTION TO 40 PERCENT. TD RESOLVE DISCREPANCIES IN RI. FDR MENTE CARLO BURN-UP CALCULATIONS.	⊢ ТС [Ма]
776	10.0	MV	5.00	ĸev	10.0%	1	FR	H.TELLIER SAC 7320	68R
							A: C:	QUUTED ACCURACY AT 2 STANDARD DEVIATIONS. REACTUR CALCULATIONS.	
777	1.00	KEV	1 - 00	MEV	10-07	2	140		205
	1.00	NC V	1.00	MC .	10.0%	2	94F Q:	NO EXPERIMENTAL DATA.	
							0: M:	CONTROL ROD MATERIAL. New Request.	
				===== TRGN					.===
5				=====					.===
778	1.00	MV	5.00	KEV		2	USA	DEI BET 6210 FEINER KAP)28F
							A: 0:	ACCURACY - <1 EV: 4 PERCENT. - 10-100 EV: GAMMA(TOT), GAMMA(N). GAMMA(GAMMA) 10 PERCENT. - 100 EV-5 KEV: GAMMA(TCT). GAMMA(N), GAMMA(GAM TU 20 PERCENT. - 5.85. 6.57. 8.87 EV: WIDTHS TC 5 PERCENT. - AVERAGE P-WAVE GAMMA(GAMMA) TC 20 PERCENT. - AVERAGE P-WAVE GAMMA(GAMMA) TC 20 PERCENT. TU RESOLVE DISCREPANCIES IN RI. FOR MONTE CARLO BURN-UP CALCULATIONS.	- TG (MA)
779	10.0	ΗV	5.00	KEV	5.0%	1	FR	H.TELLIER SAC 6923	302R
							0: A: 0:	RESONANCE INTEGRAL ALSO WANTED. ACCURACY I PERCENT AT THERMAL AND 5 PERCENT FOR RESONANCE INTEGRAL. QUDTED ACCURACIES AT 2 STANDARD DEVIATIONS. EVALUATION MAY SUFFICE IF IT EXPLAINS DISFERANCIES.	2
						•			
780	1.00	KEV	1.00	MEV	10.0%	۷	945 23 23	NO EXPERIMENTAL DATA. Contrul rod material.	1 9 R
							M: 	NEW REQUEST.	
72 HAFN	UM 178		NEU	THCN		CAPT	URE CRO	SS SECTION	
301			= ^^			2	116.4		
781	1.00	MV	5.00	KEV		2	USA	FEINER KAP	1:06
							A: C:	ACCURACY - <1 EV: 5 PERCENT. - 10-100 EV: GAMMA(TOT), GAMMA(N), GAMMA(GAMMA) 10 PERCENT. - 100 EV- 5 KEV: GAMMA(TOT), GAMMA(N). GAMMA(GAMMA) TO 20 PERCENT, - 7.78 EV: WIDTHS TO 3 PERCENT. - AVERAGE P-WAVE GAMMA(GAMMA) TG 20 PERCENT. - S-WAVE STRENGTH FUNCTION TO 20 PERCENT. TO RESULVE DISCREPANCIES IN RI. FGR MONTE CARLO BURN-UP CALCULATIENS.	ι τ ς
782	10.0	MV	5.00	KEV	5.0%	1	FR	H.TELLIER SAC 6923	3C4R
							Q: A: 0:	RESONANCE INTEGRAL ALSO WANTED. ACCURACY I PERCENT AT THERMAL AND 5 PERCENT FGR RESONANCE INTEGRAL. Qudted Accuracies at 2 standard deviations. Evaluation May Suffice IF IT Explains Discrepancies.	ર

72 HAFI	NIUM 175	 52::::	NEU	TRON		CAPTU	RE CRO	SS SECTION	****************	**********************
783	1.00	MV	5.00	KEV		2	USA	DEI Feiner	8ET Kap	621032H
							A: C:	ACCURACY - <1 E - 10-100 EV: G ⁴ 10 PERCENT, - 100 EV- 5 KE GAMMA(GAMMA) - 5.68 EV: WIDI - AVERAGE P-WAA - S-WAVE STREMA TO RESOLVE DISC FOR MONTE CARLO	EV: 5 PERCENT. MMA(TOT), GAMMA TO 20 PERCENT, THS TO 5 PERCENT THS TO 5 PERCENT THS FUNCTION TO STM FUNCTION TO CREPANCIES IN RI D BURN-UP CALCUL	A(N), GAMMA(GAMMA) TC GAMMA(N), TG 20 PERCENT, 26 PERCENT, ATIGNS,
784	10.0	MV	5.00	KEV	5.0%	1	FR	H.TELLIER	SAC	6923C5R
							Q: A: D:	RESUNANCE INTEC ACCURACY 1 PERC RESCNANCE IN QUITED ACCURACI EVALUATION MAY DISCREPANCIES	GRAL ALSO WANTED CENT AT THERMAL TEGRAL. IES AT 2 STANDAS SUFFICE IF IT 6 S.). AND 5 PERCENT FOR RD DEVIATIONS. EXPLAINS
72 HAFI	N LUM 180		NEU	===== TRÚN =====		CAPTU	JRE CRO	SS SECTION		
785	1.00	MV	5.00	KEV		2	USA	DEI Feiner	BET Kap	6710ECR
							A: 0:	ACCURACY ~ (1 E 10-100 EV: G/ 1G PERCENT, 1 GAMMA(GAMMA) GAMA(GAMMA) TG 20 PERCEN TG RESOLVE DISC FOR MONTE CARLO	EV: 4 PERCENT, AMMA(TGT), GAMMA 100 EV- 5 KEV: 0 TO 20 PERCENT, TO 20 PERCENT, TO 20 PERCENT, CREPANCIES IN R G BURN-UP CALCU	A(N). GANMA(GAMMA) TG Gamma(tct). Gamma(N). Average p-wave S-wave strength fn. L. Lations.
786	10.0	MV	5.00	ĸev	5.0%	1	FR	H.TELLIER	SAC	732085R
							A: C:	QUOTED ACCURACY REACTOR CALCUL	Y AT 2 STANDARD Ations.	DEVIATIONS.
73 TAN	TALUM 181		NEU	TRGN =====		CAPTU	RE CRG	SS SECTION		
787	1.00	E٧	1.00	KEV	10. X	2	USA	HEMMIG	DCE	691192R
							A : 0 :	DOUBLE ACCURACY FAST BREEDER CO	Y USEFUL. Ontrol and eurn-	-UP CALCULATIONS.
788	1.00	KEV	150.	KEV	5 . X	2	USA	HEMMIG	DOE	69115JR
							A : 0:	DOUBLE ACCURACY Fast breeder Co	Y USEFUL. Ontrol and burn-	-UP CALCULATIONS.
73 TAN	TALUM 181		 NEU 	== = = = = TRGN = = = = = =	*************	TOTAL	. PHÚTC	N PRÚDUCTIÓN CRU	DSS SECTION	
789	1.00	EV	16.0	MEV	15 . X	2	U SA	HEMMIG	DCE	7411118
							0: ========	GAMMA-RAYS BEL	Be 1 MEV IMPORTA	ANT.
73 TAN	TALUM 181		NEU	TRGN =====		ENER	GY DIFF	PHOTEN-PRODUCT	TIUN CROSS SECT	10N
790	2.50	εv	15.0	MEV	20 . X	2	USA	ENGHOLM	GA	861018F
								USE AS ADVANCE	D SHIELDING MATE	ERIAL.
73 TAN	TALUM 181		NEU	TRON		ENERC	GY-ANGL	E DIFF. NEUTRON-	-EMISSION CROSS	SECTION
791	5.00	MEV	15.0	MEV	20. X	2	USA	ENGHOLM	GA	801017F
							Q: []; M:	NEUTRON SPECTRU USE AS ADVANCES Substantial Mo	UM ALSO NEEDED. D Shielding Mati Difications.	ERIAL.
73 TAN	TALUM 181		======= NEU =========	TR GN		SPEC		NTITY (DESCRIPT)	IUN BELGW)	
792	2.50	£٧	15.0	MEV	20. X	2	USA	ENGHOLM	GA	801099F
							0 0	ACTIVATION CROS Fusion reactor	SS SECTION. SHUTDOWN DOSE I	RATES.
74 700		====	======================================	===== TP/IN				POSS SECTION		
======	====== <u>=</u> =	=====		22681		25555				
793	3.00	MEV	14.0	MEV	10.0%	۰3	FR	8.DUCHEMIN	SAC	732033F
								POTENTIAL CONS	TITUENT OF CUNT	AINMENT VESSEL.
74 TUN	GSTEN		NEU	TRON		N,2N				
794	L	IP TO	14.0	MEV	10.0%	3	FR	B.DUCHEMIN	SAC	732034F
							A: C:	QUDTED ACCURAC POTENTIAL CUNS	Y AT 2 STANDARD TITUENT OF CONT	DEVIATIONS. Ainment Vessel.

74 TUN	GSTEN	223322	22222222 NEU	===== TRCN		ENERG	Y-ANGL	E JIFF. NEUTRŪN-EI	MISSICN CRUSS SECTION	=======
		529888	28222222		**********		226233			
795	4.00	MEV	16.0	MEV	5. X	2	USA	BARTINE	ORL	66104CK
							0: A:	LŪW ENERGY NEUTRO SPECTRA AT A FEW Incident energy f Angular resolutio Delta e(nº) = 500	ONS SHOULD EE INCLUDED. ANGLES MAY SUFFICE. Resolution: 5. percent. GN, 10 degr. 0 Kev	
756	15.0	MEV	35.0	MEV		3	USA	DORAN	HED	801655F
							с:	FOR MATERIALS DAM	MAGE CALCULATIONS.	
		z=s===				======	==			=======
74 TUN	GSTEN 222222222			18LN 29222		N.P	=====			
797	u	ρτο	14.0	MEV	10.0%	з	FR	B.DUCHEMIN	SAC	732035F
							A: 0:	QUOTED ACCURACY A	AT 2 STANDARD DEVIATIONS. TUENT OF CONTAINMENT VESS	ĒL•
====== 74 TUN	======================================	=====	======== NFU	=≠c== TRŪN		TOTAL	PROTO	N PRODUCTION CROSS	S SECTION	
			========						******	*****
798	9.00	MEV	15.0	MEV	10. %	3	USA	DORAN	HED	801058F
							0:	MATERIALS DAMAGE	CALCULATIONS.	
799	15.0	NEV	30.0	MEV	20. X	3	USA	DORAN	HED	801312F
							0:	MATERIALS DAMAGE	CALCULATIONS.	
	=======================================		92 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	===== TRCN			=======			
======		25	=======					=======================================	-*	±\$=======
800	U	P TO	14.0	MEV	10.0%	3	FR	B.DUCHENIN	SAC	732037F
							:A :C	QUDTED ACCURACY A	AT 2 STANCARD DEVIATIONS. TUENT OF CONTAINMENT VESS	EL .
2000		==z===	======== NEU	=≠=== TR ON				PRODUCTION COOSS		
	==========		========	## ====			======			
801	9.00	MEV	30.0	MEV	20. X	3	USA	UGRAN	HED	801059F
							0: M:	MATERIALS DAMAGE SUBSTANTIAL MODI	CALCULATIONS AND DESIMET	RY.
======		=======								
77 IRI	DIUM 191	*=====	NEU	TRON		CAPTU	RE CRO	SS SECTION		*******
602	25.3	MV	10.0	MEV	10.0%	3	JAP	K .T SUCH [HASH] .	JAP	832021N
						•	a:	EVALUATED DATA R	EQUIRED.	00000114
							0: M:	FUR NON DESTRUCT. New Request.	IVE ASSAY OF ENGINES.	
72222				=====						
	11NOM 2222222222	z	========	=====			ETTT TA		ECTION 292322222222222222222222222222	
803	10.0	MV	10.0	ΕV	10. X	2	USA	E I SE NHAUE R	NBS	7811776
							G:	FOR SCATTERING CO	ORRECTIONS IN PT FISSION	DEPOSIT
								BACKINGS.		
79 GOL	D 197		NEU	TRON		CAPTU	RE CRU	SS SECTION		
804	10.0	KEV	1.00	NEV	2. %	2	USA	MUGHAEGHAB	BNL	721673F
805	500.	KEV	5.00	MEV	5.0%	2	FR	E .FURT	CAD	792021H
674746							6:	STANDARD CRESS S	ECTICK	
STATUS			LS DEVIE		INDC AND NO		SEE 10			STATUS
******							322 AP			
79 GOL	D 197		NEU	TRCN		N . 2N	======			
806	20.0	MEV	25.6	MEV	20. X	2	USA	MCELRLY		781010F
							U: M:	SUBSTANTIAL MUDI	FICATIONS.	
 79 GOL	 D 197	====	======= NEU	 TRON	**********	N.3N	*******		1\$13114512014511165116	==========
222222		=====		*****						********
807	20.0	MEV	40.0	NEV	20. X	1	USA	MCELRUY	HED	781011F
							0:	DUSINETRY FOR FM.	IT FACILITY.	
808	U.	P TO	40.0	MEV	5.0%	2	EUR	NEUTRON DOSIMETR	Y GROUP GEL	832054F
							c :	(N.3N) CRESS SEC	TIGN. ACCELERATOR-RASED NEUTOON	SCURCES
			=======				M:	FUSION. NE# REQUEST.		
							=			

79 GOLD	197	NÉUTRON	22222222 22222222	*===== N,4N *=====	======= ==============================			
809	25.0 MEV	40.6 MEV	20. X	з	USA L:	MCELRCY DOSIMETRY FOR ENI	HED T FACL LTY.	781012F
				*******			************************************	
75 GCLD	197	NEUTRON	2 _ 2 2 2 2 2 7 7	N.5N		***********		
810	30.0 MEV	40.0 MEV	20. %	3	USA	MCELRUY	HED	781013F
					с:	DOSIMETRY FOR FMI	T FACILITY.	
79 GGLD	197	NEUTR CN	*****	TCTAL	ALPHA	PRODUCTION CROSS	:#2000222#202222222222222 SECTION	
			*******	*******	*******			
£11	15.G MEV	30.0 MEV	10. %	2	USA	NCELRCY	HED	EC1065F
					N:	DUSINETRY. SUBSTANTIAL MEDIF	CATIONS.	
80 MERCU		NEUTRON	********	INELA	====== ST1C CF	IDSS SECTION		
			*******	*******			**=====================================	
812	500. KEV	2C.0 MEV	10.0%	3	AAL	K.SAKURAI	JAË	812030R
					а: С: М:	PRODUCTION CROSS THROUGH INELASTIC FOR NEUTREN DESIN SUBSTANTIAL MODIF	SECTION FOR 42.6 MIN ISCM Scattering. Hetry. Ications.	ÊR
82 LEAD		GAMMA		GAMMA	•N			
					_3483233			
613	UP TO	20.C MEV	30. %	2	USA	DRIEMEYER	MDD	621045F
					A: 0:	INCIDENT ENERGY F DETERMINATION OF NEEDED FOR ASSESS IN THE UPGRADE	RESOLUTION: 5. PERCENT. PHOTONEUTRON ACTIVATION 1 Sing potential activation . Phase of ebt-p operation.	N EBT-P. Prgelems
					m.	NET REQUEST.		
82 LEAD		NEUTRON		INELA	STIC CF	ROSS SECTION		
E14	3.0C MEV	15.0 MEV	15.0%	2	FR A:	B.DUCHEMIN QUDTED ACCURACY	SAC AT 2 STANGARD DEVIATIONS.	792C24F
					0:	NEUTRON MULTIPLIE	ĒR	
82 LEAD		NEUTRCN		CAPTU	RE GAMM	IA RAY SPECTRUM	***************************************	=======
					8==#==			
815	2.00 KEV	600. KEV	5. X	2	USA	FU	ORL	741186F
82 LEAD		NEUTRON		TOTAL	====== РНОТО	N PRODUCTION CROSS	S SECTION	=======

616	25.3 MV	16.0 MEV	10.0%	2	FR	B.DUCHEMIN	SAC	692315R
					a:	ENERGY RESOLUTION LESS THAN 1 MEV A GREATER THAN 1 ME	N OF 250 KEV FOR GAMMA RAY And 500 Kev for energies Ev A gnedgy desclution 500 ke	S
					0:	GUGTED ACCURACY A FOR SHIELDING CAL NEW EVALUATION TO DATA.	AT 2 STANCARD DEVIATIONS. -Culation. 5 be dune if new experimen	TAL
617	25.3 MV	15.0 MEV	15.0%	2	ССР	I.N.GGLOVIN	KUR	724057F
					c: 0:	GAMMA RAY SPECTRA Gamma Ray Heating	A REQUIRED. 5 AND SHIELDING CALCULATIG	NS.
£18	25.3 MV	15.0 MEV	15 . X	2	JAP	¥•SEKI	JAE	762134F
					Q: A:	GANNA RAY SPECTRA AN UPPER LIMIT OF 20 PER CENT USEFT	A ALSO REGUIRED. F THE CROSS SECTION OR ACC UL.	URACY
					٥:	AND 10 PER CENT O GAMMA ENERGY RESO SHIELDING DESIGN	UTHERWISE. DLUTION 1 MEV. AND GAMMA-RAY HEATING CAL	CULATIUN
819	1.00 KEV	15.0 MEV	10.0%	2	FR	M.SALVATORES	CAD	792022k
					0: M:	FUR FAST REACTOR SUBSTANTIAL MODI	CALCULATIONS. Fications.	
82 LEAD		NEUTRON		N.2N	******			

820	UP TO	15.0 MEV	15.0X	2	ССР		KUR	724058F
					0:	FUSSIBLE USE AS I	NEUTRUM MULITEICKO	
821	UP TO	15.0 MEV	15.0%	2	FR	B.DUCHEMIN	SAC	792023F
					A: G:	QUDTED ACCURACY Neutron Multipli	AT 2 STANDARD DEVIATIONS. Er	
822	6.76 MEV	15.0 MEV	10. X	2	USA	ENGHOLM	GA	801021F
					c:	SECONDARY NEUTRO	N SPECTRA REQUIRED.	
==========	*===================				M: ======	SUBSIANIIAL MODI(====================================	55222255555555555555555555555555555555	

82 ===	LEAD			NEU	TRON		ENER	GY-ANGL	E DIFF.2 NEU	TRON-PRODUCTION CROS	SS SECT.
	823	6.77	MEV	15.0	MEV	20.0%	ı	GER	H.BRGCKMANN	JUL	E12070F
								0:	FOR NEUTRON In Fusion.	MULTIPLICATION, AND	TRITIUM BREEDING
82	LEAD	******		NEU	TRCN		N.3N				
										<i></i>	
	224	14.2	MEV	15.0	MEV	20 • X	3	USA Q:	TOTAL CROSS	GA SECTION AND SECOND	BOIDILF
								G: M;	SPECTRUM. FOR FISSION- DESIGNS. SUBSTANTIAL	-SUPPRESSED HYBRID F MODIFICATIONS.	REACTOR BLANKET
=== 82	LEAD			 NEU	TRON		NEUT	RON EMI	SSION CROSS	SECTION	*======================================
							4_				
	825	500.	KEV	16.0	MEV	10.0%	2	FR o:	B.DUCHEMIN	SAC	692318R
								A: D:	ENERGY STEP ENERGY RESOL QUOTED ACCUP FOR SHIELDIN NEW EVALUATI DATA.	- 300 KEV(INCIDENT LUTION - 250 KEV(EM Racy at 2 Standard I NG CALCULATION. ION TO BE DONE IF NE	NEUTRONS). ITTED NEUTRGNS) DEVIATIONS. EN EXPERIMENTAL
82 2000	LEAD		 ur	NEU	TRON		ENER	GY-ANGL	E DIFF. NEUTA	RÜN-EMISSION CROSS S	56CTIÚN 1888-888-888-888-888-888-888-888-888-88
	826	2.00	MEV	16.0	MEV	5. X	3	USA	BARTINE	ORL	631005R
								Q:	ANGULAR DEPE	ENDENCE ONLY IF SIG	IF ICANTLY
								Α:	ANISUTROP ENERGY INTER INCIDENT ENE ANGULAR RESU	IC. RVALS - 500 KEV. Ergy resolution: 250 Jlution - 3 degr in) KEV. 10 DEGR INTERVALS.
	827	9.00	MEV	15.0	MEV	10. %	2	USA	BERK	DOE	781050F
								0:	FOR SHIELDIN NEXT GENER	NG, ACTIVATION AND I Ration d-t reactor (RANSPURT STUDIES OF Designs.
	£28	U	P TG	15.0	MEV	10.0%	2	JAP	A.TAKAHASHI	054	832044F
								0: 0: M:	ENERGY-ANGLE NEUTRON EMIS For Calculat Fusion alant Fusion blant New Request.	E DIFFERENTIAL CROSS SSION REQUIRED. TICN OF THE NEUTRON (ETS. (ETS.	S SECTIONS FOR TOTAL Multiplication in
82	LEAD	******		NEU	TRON		SPEC	IAL CUA	NTITY (DESCR	IPTION BELGW)	
	829	9.00	MEV	15.0	MEV	20 . X	2	USA	BERK	005	8010455
							_	Q:	ALL SIGNIFIC	CANT ACTIVATION REAG	TICN CRESS
								c:	DATA NELDED TRANSPORT	FOR SHIELDING. ACT	VATION AND NEUTRON
=== 82	LEAD 2			ALESSALS NEU	TRON			PHA		***********	
= = =									-=============		=======================================
	830	U	P TG	15.0	MEV	20.0%	2	JAP	H.IIDA	JAL	752051F
								0: C:	EXPERIMENTAL FOR FUSION F FOR CALCULAI NG EXPERIMEN	_ DATA REGUIRED Reactor shielding (/ TICN OF RESIDUAL ACT NTAL DATA EXCEPT FOR	ALCULATION. TVITY. R A FEW AT 14 MEV.
83 ===	BISMUT	H 209		NEU	TRGN		TOTAL	- PHUTO	N PRODUCTION	CROSS SECTION	***********************
	831	25.3	MV	15.0	MEV	15.0%	2	CCP	I.N.GOLUVIN	KUR	724059F
								0: C:	GAMMA RAY SE Gamma Ray He	PECTRA REQUIRED. EATING AND SHIELDING	CALCULATIONS.
 83	EISMUT	<u></u>	=====	 NEU	===== TR CN	***********				******************	
		226326				***********					
	832	U	P TO	15.0	MEV	15.0%	2	ССР	1.N.GCLOVIN	KUR	724060F
			_					0:	POSSIBLE USE	E AS NEUTRON MULTIPL	IER.
	833	U	P T O	15.0	NEV	10. X	2	USA	GREEN		821041F
								N:	ENERGY DIS SUPPRESSED NEW REQUEST.	STRIBUTION NEEDED. F HYBRID BLANKET DES	SECUNDARY RECIRCA OR FISSION FIGN.
5C	THCRIU	M 23C		NEU	TRCN		CAPTU	URE CRD	SS SECTION		
	834	25.3	MV	1.00	MEV	10- ¥	2	USA	BARTINE	081	7011645
= ==								0: 0:	RADIGACTIVE KEY REACTION	TARGET 8.0X(10**4) FOR PRODUCTION OF	7811564 YR U-232.

SO THCR	IUM 232	SPCNT ANEOU	========= S ==========================	ENERGY SPECTRUM OF FISSION NEUTRONS				
835	UP TO	14.0 MEV	10. X	2	USA	GREEN WEW	821048F	
					0: 0: M:	RADIDACTIVE TARGET 1.41X(10**10) YR ENERGY AND ANGULAR DISTRIBUTION UF FISSIGN NEUTRUNS NEEDED FOR FUSION HYBRID APPLIC NEW REQUEST.	ATIONS.	
90 THOR	10m 232	NEUTRON		TOTAL	CROSS	SECTION		
836	ECO. MV	6-00 EV	.5 %	2	USA		7610506	
				-	0:	NEEDED FOR THERMAL CROSS SECTION EVALUATION	N.	
837	100. MV	20.0 EV	•5 X	2	USA	DEI BET	781161F	
838	1.00 KEV	100. KEV	2. X	2	USA	PEELLE ORL	781197R	
					A: 0: M:	RESCLVED NEUTRÜN WIDTHS NEEDED TO 3-5 PERCE Correlated uncertainties. For resonance parameter evaluation, severat Samples Required. Subjestantial modifications.	<u>-</u>	
90 THCR	IUM 232	NEUTRON		ENERG	Y DIFF	RENTIAL INELASTIC CROSS SECTION		
		10.0 MEV	10.08	3	659	H.GEDWIN III	6023250	
=======							========	
SO THOR	IUM 232	NEUTRGN		CAPTU	RE CR0	SS SECTION		
84 C	1.0C MV	20.0 EV	2. X	1	USA	DEI BET	621034k	
					a: A: C:	THICK SAMPLE TRANSMISSION AND SELF-INCICAT EXPERIMENTS DESIRABLE. RESGNANCE PARAMETERS. TOTAL CRGSS SECTION A RESONANCE INTEGRAL ALSC NEEDED. NEED THERMAL VALUE TO 0.5 PERCENT. NEED ACCURACY OF 5 PERCENT IN RESONANCE PARAMETERS. THERMAL SHAPE IMPORTANT FOR THERMAL BREEDED CALCULATIGNS.	ION AND R	
£41	20.0 EV	5.00 KEV	5. X	1	USA	DEI BET	621035R	
					C: A:	THICK SAMPLE TRANSMISSION AND SELF-INCICAT EXPERIMENTS DESIRABLE. Resunance parameters, total cross section . Resonance Integral Alsú needed. Need Accuracy of 5 percent in Resunance parameters.	I GN AND	
842	1.00 KEV	1.00 MEV	3.0%	3	υκ C:	C.G.CAMPBELL WIN For fast reactors.	692329R	
843	4.00 KEV	10.0 MEV		1	GER	H.GERWIN JUL	692330R	
					A:	H-KUESTERS KFK ACCURACY 5 PERCENT TO 2 MEV AND 10 PERCENT	ABOVE.	
FAA	25.3 MW		2.0%	з	FR	H-TFULLER SAC	7320508	
244	2000 110			C	A:	QUUTED ACCURACY AT 2 STANDARD DEVIATIONS.		
845	25.3 MV	3.00 MEV	10.0%	3	FR	F.JUSSU CAD	762140R	
					A: 0: M:	QUOTED UNCERTAINTY AT 2 STANDARD DEVIATION FOR FAST REACTOR FUEL CYCLE CALCULATION. SUBSTANTIAL MODIFICATIONS.	S •	
STATUS-	UNDER CONTINUCU	IS REVIEW BY N	ANDC. SEE				STATUS	
90 THOR	IUM 232	NEUTRON		N • 2N				
846	UP TO	10.0 MEV	20.0%	3	GER	H.GERWIN JUL	692326R	
							3040445	
847	UP TO	15.0 MEV	15.0%	2	ССР G:	I.N.GDLOVIN KUR Püssible use as neutrun multiplier.	724061F	
8 4 9		15.0 450	5. *	2	1154	DEL BET	7610655	
640		ITAAN WEA		-	0:	FOR CALCULATION OF FUEL ACTIVITY IN TH-232 REACTORS.	CYCLE	
649	11.0 MEV	15.0 MEV	20. X	2	USA O:	BERK DOE FOR HYBRID SYSTEM DESIGN.	781161F	
850	14.2 MEV		15.0%	2	FR	B.DUCHEMIN SAC	792026F	
					A: 0:	UUGIED ACCURACY AT 2 STANDARD DEVIATIONS. NEUTRON MULTIPLIER		

90 THCRI	UM 232	NEUTRON		 N, 3N	*****	*************	***************************************	
*=======			#3528558			======================================		
851	UP TO	15.0 MEV	15.0%	2	ССР	I.N.GOLOVIN		724062F
					<u>.</u> .	PUSSIBLE USE AS	NEOIRON MOLTIPLIER.	
852	11.0 MEV	15.0 MEV	20 . X	2	USA	BERK	DOE M DESIGN	7811c2F
853	14.2 MEV		15.0%	2	FR A:	8.DUCHEMIN QUDTED ACCURACY	SAC	792027F
					C:	NEUTRON MULTIPLI	ER	
90 THORI	UN 232	NEUTRON		FISSI	CN CRO	SS SECTION		**=====
	**************	531112 <i>1</i> 31212222	=======		=====			
854	25.3 MV	10.0 MEV	5.0%	2	GER	H.GERWIN	JUL	692328R
						SPECINON SHOEND		
855	100. KEV	10.0 MEV	10.0*	3	FR A.	H.TELLIER	SAC	732051R
						GOUTED ACCORACT	at 2 Standard DEVIAILERS.	
85 6	1.50 MEV	7.20 MEV	5.0%	2	EUR	NEUTRON DOSIMETR	Y GROUP GEL	742135R
					0:	FOR NEUTRON DOSI METHODS.	METRY USING SPECTRUM UNFOL	DING
						GREATER THAN 10 INTEGRAL AND D	PERCENT DISCREPANCY BETWEE IFFERENTIAL MEASUREMENTS.	N
857	14.2 MEV		15.0%	2	FR	B.DUCHEMIN	SAC	792025F
					A: 0:	QUOTED ACCURACY Neutron Multipli	AT 2 STANDARD DEVIATIONS. Er	
6 58	UP TO	5.00 MEV	5.0%	3	UK	C.G.CAMPBELL	WIN	792136F
					с:	FOR FAST REACTOR	S.	
STATUS								
U	NDER CONTINUO	US REVIEW BY NE	ANDL. SE	E APPEN	DIX A.			314102
		*****************				======================		*******
90 THURI	UM 232	NEUTRON		E NERG	Y SPEC	TRUM OF DELAYED F	ISSION NEUTRONS	
855			2. X	I	USA	DEI	BET	7811E2R
					a :	NEED FAST GROUP	YIELDS AND SPECTRA.	
					6:	TO VERIFY EXISTI	NG EVALUATIONS.	
SO THORI	UM 232	NEUTRON		RESON	ANCE P	AR AMETERS		
860	UP TO	10.0 KEV	10.0%	1	GER	H.GERWIN	JUL	692323F
					0:	RADIATION MIDTH	NEEDED.	
861	UP TO	10.0 KEV	10.0%	1	GER	H.KUESTERS	KFK	792214R
91 FRGTA	CTINIUM 231	NEU TRON	********	CAPTU	RE CRO	SS SECTION		=========
£6 2	25.3 NV	10.0 MEV	10. X	2	USA	LEONARD	BNW	691219R
					Q: D:	RADIOACTIVE TARG Fur control of u	ET 3.28X(10**4) YR -232 PRODUCTION.	
863	1.00 MV	1.00 KEV		2	USA	DEI	8E T	7610666
					Q:	RADIOACTIVE TARG Also need resona Integral	ET 3.28X(10**4) YR NCE PARAMETERS AND RESONAN	CE
					A: 0:	ACCURACY RANGE FOR CALCULATION REACTORS.	5. TO 10. PERCENT. OF FUEL ACTIVITY IN TH-232	CYCLE
			========					
91 PROTA =======	CIINIUM 231	NEUTRCN		ENERG	Y SPEC	TRUM OF DELAYED F	15510N NEUTRONS ====================================	======
864			5. X	2	USA	DEI	BET	7811E3F
					0:	RADIOACTIVE TARG	ET 3.28X(10**4) YR YIELDS AND SPECTRA.	
						IU VERIFY EXISTI	NG EVALUATIONS.	
91 FRCTA	CTINIUM 233	NEUTRON		A85CR	PT16N	CRGSS SECTION		
865	25.3 MV	50C. EV	5.0%	1	GER	H.KUESTERS	KFK	6923339
	********			-		MAERKL	SRE	=======

91 FRCT	ACTINIUN	233	NEU	TRON		CAPTI	JRE CRUS	SS SECTION
866	1.00	MV	100.	EV	5. X	2	USA	DEL BET 761059R
							0:	RESONANCE PARAMETERS ALSO DESIRED. NEEDED FOR ANALYSIS OF TH-232 CYCLE THERMAL REACTORS.
867	500.	E۷	3.00	MEV	15.0%	2	FR	M.SALVATORES CAD 762142R
							0: M:	FOR FAST REACTOR CALCULATIONS. Substantial mudifications.
868	25.3	MV	1.00	EΥ	5.0%	2	FR	H.TELLIER SAC 812051R
							A: 0:	ACCURACY QUETED IS FOR A CONFIDENCE LIMIT OF SOPE FOR THORIUM FUEL CYCLE STUDIES.
91 PROT	ACTINIUN	233	NEU	===== TR UN		F1SS	ION CRUS	SS SECTION
		=====			***********	:		
869	560.	EV	3.00	MEV	15.0%	2	FR	M.SALVATORES CAD 762141R
							0: M:	FOR FAST REACTUR CALCULATIONS. SUBSTANTIAL MODIFICATIONS.
91 PRGT	ACTINIUM	233	NEU	TRGN		ABSO	RPTICN R	RESONANCE INTEGRAL
=====	******	=====	*******	****	# = = = = = = = = = = = = = = = = = = =	± = = = ;;	22299222	
870	0.50	ΕV			10.0%	1	GER	H-KUESTERS KFK 692334R NAERKL SRE
		====:	========== NFU	===== TRGN		CAPT		
871	1.00	мv	1.00	KEV		2	USA	DEI BET 761067R
							0:	RADIDACTIVE TARGET 72 YR Alsg Need Resonance Parameters and Reschance
							A: D:	ACCURACY RANGE 2. TO 5. PERCENT. FOR CALCULATION OF FUEL ACTIVITY IN TH-232 CYCLE REACTORS.
872	1.00	KEV	3.00	MEV	30.0%	з	FR	M.SALVATORES CAD 792028R
							0: M:	FOR FAST REACTOR CALCULATIONS. SUBSTANTIAL MODIFICATIONS.
		=====	2222222222	===== TR ON		=====: F155		SS SECTION
		=====	=======		**********	20255		
873	1.00	KE V	3.00	MEV	30.0%	3	FR	M-SALVATORES CAD 7920256
							0: M:	FOR FAST REACTOR CALCULATIONS. SUBSTANTIAL MODIFICATIONS.
		****	NEU				ceoss	SECTION
		====:		322#=				
874	1.00	NV	2.00	E۷	•5 %	2	USA	LEONARD BNW 7610826
							0: 0:	RADIUACTIVE TARGET 1.592X(10**5) YR Needed for thermal CROSS Section Evaluatiún.
٤75	60.0	Εv	100.	KEV	3. %	2	USA	STEWART LAS 7910C1R
							0: 2:	RADIOACTIVE TARGET 1.592X(10**5) YR Needed to Cover the Unresolved Range and Gverlap The Recent and Data which Begins at 42 kev.
S2 URAN	IUM 233	====:	NEU	TRCN		ENER	GY DIFFE	ERENTIAL INELASTIC CRUSS SECTION
E76	40.0	KEV	7.00	MEV		2	USA Q:	SMITH ANL 671086H RADIOACTIVE TARGET 1.592X(10++5) YR
							A:	ACCURACY RANGE 10. TO 20. PERCENT. ACCURACY OF 5-10 PERCENT ABOVE 0.5 MEV.
92 URAN	IUM 233	====	======================================	TRON		ENER	GY-ANGLE	E DIFFERENTIAL INELASTIC CRUSS SECTION
		====		=====		=====	******	
£77	U	PTO	5.00	MEV	20.0%	3	UK 0:	C.G.CAMPBELL WIN 69233SR For fast reactors.
			1232888888888					
======		== = = =	NC0	EFER		IIIIII	=======	
878	25.3	MV	1.00	MEV	20.0%	1	GER	H.GERWIN JUL 692350R
							0:	ACCURACY INSUFFICIENT.
879	1.00	MEV	10.0	MEV	20.0%	2	GER	H.GERWIN JUL 692352R
							0: 0:	ALPHA ALSO USEFUL. ACCURACY INSUFFICIENT.
880	U	р то	10.0	KEV	3.0%	з	FR	H.TELLIER SAC 732093R
	-						A: 0:	QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. Evaluation probably not sufficient.

S2 URANI	UM 233	NEUTRCN		CAPTI	JRE CROS	55 SECTION	(CENTINUED)
881	1.QC MV	0.50 EV	1. X	1	USA	DEI BET	7411126
					o: 0:	RADIOACTIVE TARGET 1.592X(10++5) VERIFICATION OF RECENT ORAL RESULT	R IS DESIRED.
882	0.50 EV	2.00 EV	2. %	1	USA	DEI BET	741114R
					0: 0:	RADIDACTIVE TARGET 1.592X(10**5) VERIFICATION OF RECENT GRNL RESULT	R IS DESIRED.
883	100. EV	200. KEV		2	USA	PEELLE ORL	7610816
					G: A:	RADIOACTIVE TARGET 1.592X(10**5) Y MOST IMPORTANT BELOW 30 KEV WHERE Data. Accuracy Range 5. To 10. Percent	THERE ARE NU
884	500. EV	3.00 MEV	10.0%	2	FR	M.SALVATURES CAD	762143R
					0: M:	FOR FAST REACTOR CALCULATIONS. Substantial Modifications.	
885	60.0 EV	500. KEV		2	USA	STEWART LAS	791062R
					Q: A: D:	RADIOACTIVE TARGET 1.592X(10**5) Y ACCURACY RANGE 5. TO 8. PERCENT NEEDED TO COVER THE UNRESGLVED RAY TO HIGHER ENERGIES. ND DATA AVAILABLE ABOVE 2 KEV EXC MEASUREMENTS OF DIVEN.	R Ge and to Extend Pt Alpha
886	1.00 MEV	20.0 MEV	10.0%	2	JAP	N.ASANO SAE	7920E3R
					٥:	EXPERIMENTAL DATA REQUIRED.	
887	25.3 MV	1.00 MEV	20.0%	1	GER	H.KUESTERS KFK	792217R
888	25.3 MV	1.00 EV	2.0%	2	FR	H.TELLIER SAC	812052R
					A: G:	THE QUOTED ACCURACY IS FOR A CONF. DF 50 PERCENT FOR THURIUN FUEL CYCLE STUDIES.	IDENCE LIMIT
S2 URAN	LUM 233	LEUTRON	:==:::::::::::::::::::::::::::::::::::	N . 2N			*======================================
889	UP TO	15.0 MEV	10. X	2	USA	HÊNMIG DOE	67 10 885
	0, 12			-	0: 0:	RADIOACTIVE TARGET 1.592X(10**5) Y FOR CONTAMINATION OF U-233 BY U-23	YR 32•
850	UP TO	15.0 MEV	10.0%	1	FR	C.PHILIS BRC	692341R
891	UP TO	15.0 MEV	10.0%	2	FR	F.JOSSO CAD	792030k
					A: 0: M:	QUOTED UNCERTAINTY AT 2 STANDARD FOR FAST REACTOR FUEL CYCLE CALCU SUBSTANTIAL MUDIFICATIONS.	DEVIATIONS. Lation.
892	UP TO	20.0 MEV	10.0%	2	JAP	N.ASANO SAE	792052R
					Q:	EXPERIMENTAL DATA WANTED.	
92 URAN	IUM 233	NEUTRGN		ENER	GY-ANGL	E DIFF. NEUTHÚN-EMISSIGN CROSS SEC	TICN TICN
893	1.00 MEV			3	USA	STEWART LAS	791004F
					0:	RADICACTIVE TARGET 1.592X(10+*5) ABSOLUTE CROSS SECTIONS REQUIRED. MEASURE AT SEVERAL ANGLES AND DET NEUTRONS.	YR Ect low Energy
					A:	ACCURACY RANGE 5. TO 10. PERCENT	•
92 URAN	LUM 233	NEUTRON		FISS	IGN CRO	SS SECTION	***************
894	1.00 KEV	10.0 MEV	1. %	2	LSA	HEMMIG DCE	691226R
					0: A:	1.5522X(10**5) YR Ratig to U-235 Fissiun Wanted. Incident Energy Resolution: 3. P Accuracy of 2-3 Percent Useful. Energy Calibration - 1 Percent.	ERCENT.
895	25.3 MV	50.0 EV	2.0%	2	GER	H.GERWIN JUL	6923428
896	50.C EV	10.0 MEV		2	GER	H.GERWIN JUL	692343R
					A: G:	ACCURACY REQUIRED TO BETTER THAN SPECTRUM INDEX.	10.0 PERCENT.
897	500. EV	3.00 MEV	10.0%	2	FR	M.SALVATURES CAD	692344F
					A:	THIS ACCURACY CONCERNS THE FISSIL U-235. ACCURACY OF 2 PERCENT NEEDED EETW	N RATIO L-233 EEN 10 KEV AND
					0: M:	FOR FAST REACTOR CALCULATIONS. SUBSTANTIAL MODIFICATIONS.	
898	UP TO	10.C KEV	3.0%	3	FR	H.TELLIER SAC	732052R
					A:	WUDIED ACCURACT AT 2 STANDARD DEV	1411683.

92 URANI	UM 233	=====	NEUI	TRON =====		FISSI	ON CR0.	SS SECTION	()) 	ONT [NUED]
899	1.00	MV	20.0	MEV		1	USA	DEI	BET	7811546
			2000			•	Q:	RADIGACTIVE TARG	ET 1.592X(10++5) YR	1011046
							A:	ACCURACY WANTED	- 1 PERCENT BELGW 100 EV, 5 PERCENT ABOVE.	
							C:	FOR THERMAL REAC	TOR ANALYSIS.	
900	ó0.0	Eν	100.	KEV		2	USA	STEMART	LAS	791003R
							Q:	RADIGACTIVE TARG	ET 1.592X(10##5) YR Ative to u-235 not desire	C DUE T
							Α:	LARGE CROSS SE ACCURACY RANGE	CTION FLUCTUATIONS. 5. TO 8. PERCENT.	
							0:	NEEDED TO COVER THE RATIO MEAS	THE UNRESOLVED RANGE AND UREMENTS OF CARLSON.	OVERLAP
STATUS										STATUS
U	NDER CC	NTINU	CUS REVIE	W 87	NEANDC. SEE	APPEN	NCIX A.			
92 LRANI	UM 233	======	NEU	TRGN		CAPTU	JRE TO	FISSION RATIO (A	LPHA) 1911-1923-1911-1928-1915 1911-1925-1915-1928-1915-1915-1915-1915-1915-1915-1915-191	
601		F 14				~		0.5.1	o 	(0) 0765
901	0.50	ĘV	10.0	KEV	J. X	2	USA	DEI RADIOACTIVE TARC	851 57 1 6628(10++5) VO	C21039R
							.	CAPTURE CROSS SE	CTION EQUALLY USEFUL. ENTS NEEDED TO RESOLVE	
							Α:	DISCREPANCIES. WANT ETA TO - 0.	25 PERCENT BELON 3 EV (1	PERCENT
								USEFUL BELUW 1 KEV (5 PERCENT	EV), 1 PERCENT FROM 30 E USEFUL).	V TO 1
							с:	WANT ETA TO 2 PE WANT VERIFICATIO	RCENT FROM 1 - 36 KEV. N of Recent Ornl and Bett	IS BORK.
902	10.0	KEV	20.0	MEV		2	USA	DEI	BET	621040R
							Q:	RADIOACTIVE TARG	ET 1.592X(10**5) YR	
								CAPTURE CROSS SE INTEGRAL EXPERIM	CTION EQUALLY USEFUL. Ents needed to resolve	
							Α:	ACCURACY RANGE	5. TO 10. PERCENT. 25 PERCENT BELOW 3 EV ()	PERCENT
								USEFUL BELOW 1 KEV (5 PERCENT	EV), 1 PERCENT FRGM 30 E USEFUL).	V TO 1
							o:	WANT ETA TO 2 PE WANT VERIFICATIO	RCENT FROM 1 - 30 KEV. In of recent ornl and bett	IS WORK.
603	5 00		0 60	E 1				051	4 5 T	6210410
305	2.00	~	0.50	L •		•	034	RADIDACTIVE TARG	ET 1.592X(10++5) YP	0210414
								CAPTURE CROSS SE	CTION EQUALLY USEFUL.	
							A:	DISCREPANCIES. ACCURACY RANGE	2. TO 8. PERCENT.	
								WANT ETA TO - 0. USEFUL BELOW 1	25 PERCENT BELOW 3 EV (1 EV), 1 PERCENT FROM 30 E	PERCENT V TG 1
							0 :	WANT ETA TO 2 PE	USEFULJ. RCENT FRUM 1 - 30 KEV. IN DE RECENT CRN: AND HETT	IS MORK .
							0.		W OF RECENT ORNE AND BETT	IS BURNE
904	1.00	KEV	100.	KEV	5.0%	3	UK	C.G.CAMPBELL	WIN	69234cR
							Q:	FOR FAST REACTOR	S•	
905	1.00	KEV	3.00	MEV		2	USA	SMITH	ANL	821050R
							a:	RADIGACTIVE TARG	ET 1.592X(10**5) YR	
							A:	CAPTURE CROSS SE ACCURACY RANGE 1	CTION EQUALLY USEFUL. 0. TO 20. PERCENT.	
							N:	WANT ETA TO 2 PE New request.	RCENT FROM 1 - 30 KEV.	
	UM 233		NEU	TRON		NEUT	RUNS EM	ITTED PER NEUTRUN	ABSORPTICN (ETA)	
2222222		22\$77	* ********	*****	=============	=====			*************************************	
506	10.0	MV	0.20	ΕV	0.5%	3	UK	J.FELL	WIN	692345R
							Q: A:	VALUE RELATIVE T ACCURACY IS FOR	O 25.3 NV ETA WANTED. Average values in 0.02 ev	STEPS.
							0:	FUR THERMAL REAC	IURS	
507	1.00	MV	1.00	ΕV	•4 X	1	USA	DEI	BET	741113R
							Q:	RADIOACTIVE TARG	ET 1.592X(10**5) YR 10 Shape Needed.	
CTATUC.				_		_		TO VERIFY MANGAN	ESE BATH RESULTS.	STATUS
	HERMAL	VALUE	UNDER CO		UUS REVIEN	BY IN	DC AND	NEANDC. SEE APPEN	IDIX A	314103
		==#==								
92 URANI	UM 233		NEU EEEEEEEE	TRUN =====		NEUT	RÜNS EN =======	ITTED PER FISSION	(NU BAR)	
508	1.00	MV	30.0	Ē٧	•25 X	1	USA	DEI	BET	691443R
							۵:	RADIOACTIVE TARG	ET 1.592X(10++5) YR	
								NEASUREMENT RELA	TIVE TO U-235 AND PU-239	
							۵:	NEEDED TO RESOLV	LIUNE MAT BE IMPURTANT. (E DISCREPANCIES IN THERMA) REFERING REFLICTION	NL .
								PARAMETERS AND	DREEDING PRELICIIUN.	
505	30.0	Ēν	1.00	KEV	1. X	1	USA	DEI	BET	691444R
							Q:	RADIDACTIVE TARG	ET 1.592X(10**5) YR NTIVE TO U-235 AND PU-239	
							-	PREFERRED.	TURE MAY BE IMPORTANT.	
							0:	PARAMETERS AND	E DISCREPANCIËS IN THERMA D BREECING PREDICTION.	ν L

92 URAN1	UM 233		NEU ========	TRON		NEUT	RONS EN	ITTED PER FIS	SION (NU BAR)	(CCNTINUED)
910	1.00	KEV	10.0	KEV	2. X	1	USA	DEI	8E7	691445R
							٥:	RADIOACTIVE	TARGET 1.592X(10* Relative to U-235	*5) YR AND PU-239
								PREFERRED	TRUCTURE MAY BE 1	MPORTANT.
							0:	PARAMETERS	SOLVE DISCREPANCI	ES IN THERMAL DICTION.
\$11	30.0	KEV	10.0	MEV	1.0%	2	GER	H.GERWIN	JUL	692486R
STATUS										STATU5
1	HERMAL	VALUE	UNDER CO	NT I NU	OUS REVIEW	8¥ IN	DC AND I	NEANDC. SÉÉ /	APPENDIX A	
92 URANI	UM 233		NEU	TRCN		DELA	YED NEU	TRONS EMITTED	PER FISSICN	
\$ 12	25.3	MV			5. X	1	USA	DEI	BET	741116R
							0:	RADIOACTIVE	TARGET 1.592X(10*	*5) YR
STATUS							u: 			STATUS
L	INDER CO	NTINU	DUS REVIE	w ev .	INDC AND NE	ANDC .	SEE AP	PENDIX A.		
22222222		=====		===== TRCN		ENER	GY SPEC	TRUM ÚF FISSI	LESSASSESSESSESSESSESSESSESSESSESSESSESSE	
22222222	=========	=====		=====			======			
\$13	25.3	MV			1. X	1	USA	DEI	8E T	781185F
							a:	RADIUACTIVE NEED SHAPE (TARGET 1.592X(10+ DF NEUTRUN ENERGY	≠5) YR Distrieution from
							A:	100 KEV TO RELATIVE PEA	D 15 MEV. Ak to I percent.	ATTCAR
							0-	NEEDED FOR C	RITICALITY CALCUL	AIICN3.
§ 14	100.	KEV			2.0%	3	UK	C.G.CAMPBELL	WIN	792123R
							4.	10 PERCENT A	ACCURACY WANTED ON AND ON NUMBER BEL	NUMBER OF NEUTRONS CH 0.25 MEV.
							0:	FOR FAST REA	ACTORS.	
92 URANI	UN 233	=====	NEU	TRON		F155	LON PRO	DUCT MASS VIE	LD SPECTRUM	
						_				
915	25.3	MV			1.0%	د	CAN	NIELD OF XE-	LRC	7118018
							ŏ:	FOR CALCULAT	TION OF FISSION PR	GOUCT ABSORPTION.
\$16	25.3	MV			1. X	i	USA	DEI FEINER	BET	781151R
							۵:	RADIOACTIVE	TARGET 1.592X(10*	*5) YR
								TC-99+RH-1	INTEREST ARE Y-09 103,RH-105,XE-135, -137,1 A-135,PR-141	,5R-90,NL-95, CS-135, .PN-147.
							0:	ND-147, SM- DATA NEEDED	149.5N-151.5M-152 TO IMPRUVE ACCURA	AND EU-153. CY CF PREDICTED
STATUS								F155IGN PF	RODUCT POISONS.	
JIA105	INDER CO	NTINU	CUS REVIE	W EY	INDC. SEE A	PPEND	IX A.			514105
			============== NFU			 	NANCE P	ARAMETERS		**==f&============
		=====		=====		=====				
917	25.3	MV	100.	ΕV	10. X	3	USA	SMITH HENNIG	ANL	6711\$5R
							a:	RADIOACTIVE	TARGET 1.592X(10*	*5) YR
							0.	MULTILEVEL / IN EV RANG	PARAMETERS, STATIS	TICAL DISTRIBUTIONS
				_			0.	TUR THERMAL	DREEDER CACCOLATI	CN3.
51 8	100.	EV	5.00	KEV		3	USA	SMITH Hemmig	ANL DCE	67120CR
							G:	RADICACTIVE MULTILEVEL #	TARGET 1.592X(10* PARAMETERS. STATIS	<pre>#5) YR TICAL DISTRIBUTIONS</pre>
							<u>A:</u>	IN EV RANG	SE . NGE 20. TO 30. PER	CENT .
		======							BREEDER CALCULATI	LNS•
92 URANI	UM 234	=====	NEU	TRON	*********	CAPT	URE CRU	SS SECTION	****************	
919	1.00	MV	2.00	Eν	3. X	2	USA	SMITH	ANL	691400R
							υ:	TO EVALUATE	ISOTOPE BUILDUP I	N THERMAL REACTORS.
920	2.00	EV	10.0	KEV	6 . X	2	USA	SNITH	ANL	691401R
520	2000					-	0:	TO EVALUATE	ISOTOPE BUILDUP I	N THERMAL REACTLRS.
C 21	10.0	KEV	1 - 00	MEV	10- *	2	IICA	-	<u>A</u> NI	21 1 K 0 05
721	70+0	NEV	1.00	19 E V	10. Å	£	03M 11	TO EVALUATE	ISOTOPE BUILDUP T	CS1402R N THERMAL REACTORS-
		MEN	10.0	MEN	<u> 20</u>	2	1.64	5 M I TH		
722	1.00	HEV	10.0	ne V	200 4	د	03A 01	TO EVALUATE	ISOTOPE BUILDUP T	N THERMAL REACTORS-
						~				
923	1.00	EV	10.0	MEV	15.0X	2	GER	H.GERWIN	JUL	692356R

92 ===	URANIU	M 234		NEU	TRCN =====		CAPTU	RE CRO	SS SECTION	(C)	CNTINUED)
	924	U	P TO	10.0	KEV	5.0%	з	FR	H.TELLIER	SAC	732054F
								A:	QUOTED ACCURACY	AT 2 STANCARD DEVIATIONS.	
	925	1.00	KEV	3.00	MEV	30.0%	з	FR	M.SALVATORES	CAD	792031R
								۵:	EVALUATION SUFFIC		
					·				FOR FAST REACTOR	CALCULATIONS.	
92	UR AN IU	N 234		NEU	TRON		N,2N				
	926	U	P TO	15.0	MEV	10.0%	1	FR	J. SALVY	ERC	682050R
=== 92	===== URANIU			ISTERTE	===== TRON		====== N.3N	======			
===	******		a====:		=====				**************		
	S27	U	P TO	15.0	MEV	15.0%	1	FR	J.SALVY	BRC	682051R
===			======		=====			=======	1222225 51222 222255		*********
		M 234 ======			7700 =		+ 1551	-======	55 SECTION ====================================		========
	5 28	4.00	MEV	10.0	MEV	15.0*	2	GER	HAGERWIN	.114	6923536
							-	c :	SPECTRUM INDEX.		
					_						
	929	1.00	KEV	3.00	MEV	30.0%	3	FR	M.SALVATORES	CAD	792032R
								C: M:	FOR FAST REACTOR SUBSTANTIAL MODI	CALCULATIONS. Fications.	
===	======				-===	=======					==========
92	======	======			=====		======	======			
	\$30					5. X	1	USA	DEI	BET	7811678
								Q:	NEED FAST GROUP	YIELDS AND SPECTRA.	
								c:	NG MEASUREMENTS FOR NON-DESTRUCT	AVAILABLE. 1Ve assay of U-233-Th-232	FUEL
===	=====	======								************************	*********
92 ===	UR AN I U	M 235	======	NEU =======	TRON =====		TGTAL	CR055	SECTION		
	631	1.00	MV	1-00	FV	0.5 %	1	LISA	HEMMIG	405	8210046
					-		•	Q:	RADIOACTIVE TARG	ET 7.038X(1C++8) YR	
								G:	NEEDED TO DETERM THIS REQUEST WAS	INE THE THERMAL SHAPE ACC REVIEWED BY CSEWG AND RE	GRATELY.
								м:	AS DESERVING S	PECIAL EMPHASIS.	
								=======		***************************************	
2==	=======	======		NEU	=====	*********	=======	======	55 SECTION 55 SECTION		
	932					10.0%	3	UK	J.FELL	WIN	692360R
								a:	THERMAL AVERAGE	INCIDENT ENERGY.	
								0:	FOR LONG TERM IM SECTION.	PROVEMENT OF THE ABSORPTI	GN CRUSS
	63 3		× 5 V	20.0	MEN	10.08		60	A	804	7400475
	122	1.00	KEV	20.0	MEV	10.02	1	F N	EOU COLLICAL ASS		7420C7K
								M:	SUBSTANTIAL NODI	FICATIONS.	
=== 92	URANIL	M 235		NEU	TRON		DIFFE	RENTIA	L ELASTIC CRUSS S	ECTION	
===				*******			*****			********************	
	\$34	1.00	MEV	5.00	MEV	20. X	2	LSA	SMITH	ANL	691237F
									HEAMIG	DGE DESCLAITTENT E MEM	
								ĉ:	NEEDED FOR ANALY	ZING FAST CRITICAL EXPERI	MENTS.
	935	1.00	KEV	20.0	MEV	10.0%	1	FR	A.MICHAUDON	BRC	742068R
								c:	FOR CRITICAL ASS	EMBLIES.	
								м:	SUBSTANTIAL MODI	FICATIONS.	
92	URANIU	M 235	;=====	NEU	TRON		INELA	STIC C	ROSS SECTION		
					-4755						
	\$36	Ĺ	р то	20.0	MEV	10.0%	2	FR	A.NICHAUDEN	BRC	742070ƙ
								0: M;	FOR CRITICAL ASS SUBSTANTIAL MODI	EMBLIES. FICATIONS.	
											
	937	800.	KEV	5.00	NEV		2	CCP	L.N.USACHEV	FEI	754024f
								A:	FROM 0.8 - 1.4 M FROM 1.4 - 2.5 M	EV ACCURACY 15 PERCENT. EV ACCURACY 17 PERCENT.	
								0:	NEED FOR FAST RE	ACTOR CALCULATION .	
===			======	********	=====		======			SEC INTRODUCTION.	============

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92 URAN	IUN 235	NEUTRON		ENER	Y DIFF	ERENTIAL INELASTI	C CROSS SECTION	
93 8	UP TO	15.0 MEV		2	CCP	N.N.NIKOLAEV	FEI	714006R
					o: o:	CROSS SECTION FO THRESHOLDS OF PU-240 OR NP-2 EXCITATION CROSS REQUESTED WITH TEMPERATURES UF AS WELL AS DIR CUNTRIBUTIONS SEE GENERAL COMM	R INELASTIC REMOVAL BE U-236 (7 PERCENT ACCUR 37 (10 PERCENT ACCURAC SECTION FOR LOW LYING 15 PERCENT ACCURACY. THE INELASTIC SCATTERI ECT AND PRE-EGUILIBRIU IN THE CONTINUUM ARE G ENTS IN THE INTRODUCTI	LOB FISSION ACY] AND CF Y) WANTED. LEVELS NG SPECTRA M MECHANISM F INTEREST. ON.
939	50.0 KEV	6.00 MEV	10. X	2	USA	SMITH HEMNIG	ANL	721676R
					Q: A:	ABSQLUTE SPECTRA SUFFICE. LOB ENERGY (<300 INCIDENT ENERGY DELTA E(N*) = 10	AT 36 DEGR AND 75 DEG KEV) NEUTRONS MUST BE RESOLUTION: 10. PERCEN PERCENT.	R MAY Included. T.
92 URAN	IUM 235	NEUTRCN		ËNER	GY - ANGL	DIFFERENTIAL IN	ELASTIC CRÚSS SECTIÚN	
G40		20-0 MEV	20.03	2 2	FR		=	7420716
,40	OF ID	2000 MEV	20002	-		FOR CRITICAL ASS	EMBLIES.	1420116
					M: :=======	SUBSTANTIAL MUDI		
92 URAN	IUM 235	NEUTRON		CAPTU	JRE CRU	SS SECTION	************************	
541	1.00 MEV	10.0 MEV		з	JAP	H.MATSUNDBU	SAE	682055R
					Q: A: G:	ALPHA ALSO WANTE REQUIRED ACCURAC FOR FAST REACTOR NUCLEAR DATA EVA NO EXPERIMENTAL	D. Y - 5 TG 10 PERCENT. S. Luation. Data above 2.6 Mev.	
9 42	10.0 KEV	10.0 MEV		2	GER	H.GERWIN	JUL	692378R
					A: 0:	ACCURACY TO OBTA ANALYSIS OF CRIT	IN 1 PERCENT IN ALPHA. ICAL EXPERIMENTS.	
943	1.00 KEV	10.0 MEV		1	FR	A.MICHAJDON	BRC	742078R
					A: 0: M:	ACCURACY 5 PERCE ABOVE. For critical ass Substantial Mudi	NT UP TÙ 3 MEV, 20 PER Emblies. Fications.	CENT
94 4	5.00 KEV	10.C MEV		2	CCP A:	L.N.USACHEV FROM 5.0 - 100 K FROM 0.1 - 0.8 M FROM 0.8 - 4.5 M ABOVE 4.5 MEV RE	FEI EV ACCURACY 3.7 PËRCEN EV ACCURACY 10 PERCEN EV ACCURACY 50 PERCEN GUIREMENTS 2 TIMES DEA	754007R I. T. Ker.
					0:	NEED FOR FAST RE	ACTOR CALCULATIONS. SEE INTRODUCTION.	
945	1.00 MV	1.00 EV	0.5 %	1	03A 0: C:	RADIGACTIVE TARG NEEDED TO DETERM THIS REQUEST WAS AS DESERVING S	ET 7.038X(10448) YR Ine the thermal shape Reviewed by csewg and Pecial emphasis.	ACCURATELY.
					M:	NEW REQUEST.		
92 URAN	IUM 235	NEUTRON		TOTAL	. PHGTO	N PRODUCTION CROS	S SECTION	*******
546	1.0C KEV	20.0 MEV	10.0%	1	FR	A.NICHAUDON	BRC	742065R
					0: M:	FOR SHIELDING. SUBSTANTIAL MODI	FICATIONS.	
S2 URAN		NEUTRON					**********************	=========================
947	UP TO	20.0 NEV	10.0%	1	FR	A.MICHAUDON	BRC	742072F
					О: М:	FOR CRITICAL ASS SUBSTANTIAL MODI	ENBLIES. Fications.	
92 URAN	IUN 235	NEUTRGN	*==========	ENER	GY DIFF	ERENTIAL NEUTRON-	EMISSIGN CROSS SECTION	
548	100. KEV	14.0 MEV		1	USA	HEMMIG	DCE	821028R
					0: A: 0: M:	RADIOACTIVE TARG SPECTRUM OF EMIT SEVERAL ENERGI ACCURACY RANGE 1 THIS REQUEST WAS AS DESERVING S NEW REQUEST.	ET 7.038X(10**8) YR TED NEUTRGNS NEEDED AT ES. 0. TO 15. PERCENT. REVIEWED BY CSEWG AND PECIAL EMPHASIS.	RECUMMENDED
92 URAN	IUM 235	NEUTRON		F1551	UN CRO	S SECTION		
							•_~_===================================	
<u>949</u>	IU.O KEV	∠u.o NEV	1	1	USA Q:	PUENITZ RADIOACTIVE TARG Excitation funct Several Energi	ANL ET 7.038X(10**8) YR Ion With Absolute cali Es.	691245R Braticn at

92 ===	URANIUM	235	======	NEU	TRGN ==##==	=============	FISS	CN CRO	SS SECTION) ====================================	CONTINUED)
	\$50	100.	Ł٧	10.0	NEV		1	GER	H.GERWIN	JUL	692366R
								A:	ACCURACY 5 PER 2 PERCENT FO	RCENT FOR 100 EV - 10 KEV, DR 10 KEV - 1 MEV	
								с:	AND 5 PERCEN Spectrum Index Standard Cross	NT FÜR 1-10 MEV. (. 5 SECTION.	
	\$51	1.00	MEV	5.00	MEV	1.5%	2	UK	C.G.CAMPBELL	WIN	692368R
								A: 0:	ACCURACY FOR A E AND 2E. Standard	VERAGE VALUE OF THE EFRCR	EET WEEN
	952	5.00	KEV	7.00	MEV	2.0%	2	ССР	N.N.NIKOLAEV	FEI	7140075
								Q:	BELGW 20 KEV N BY FLAT RESP NETHOD WITH	EASUREMENTS OF TRANSMISSIO PONSE DETECTOR AND BY SELF FISSION DETECTOR WANTED FO	N CURVES Detection R
									SELFSHIELDIN THESE CURVES N THE PRIMARY AVERAGE CS IN TIMES NU-BAR REDUCING THE TRUN PRODUCT OF THE CF-25	IG EVALUATION. MUST BE MEASURED WITH ATTEN BEAM DOWN TO 1. PERCENT. FISSION NEUTRON SPECTRUM O 2 of CF-252 15 of Great Int 5 dependence of the Accurac fion Calculations upon the 32 NU-BAR STANDARD (Recuire	UATIONS OF F CF-252 EREST FLR Y OF NEU- Accuracy D Accuracy
								A:	1 PERCENT). ACLURACY DETER AS STANDARD FOR OTHER IS IF MEASUREMENT	RMINED BY USE OF THIS CROSS IN FISSION AND CAPTURE MEA SUTOPES. Is absolute and PU-239 an	SECTION SUREMENTS
									FISSION CROS U-235 FISSIC REQUIRED. BEST ACCURACY	SS SECTIONS ARE MEASURED RE DN. THEN 2.0 PERCENT ACCURA OF 1.5 PERCENT DESIRAELE	LATIVE TU CY IS IN 1.2 TG
								0:	2.5 MEV REGI SECTION NORM SEE GENERAL CO REQUEST CONSID	ION BECAUSE OF U-238 FISSIG MALIZATION. JMMENTS IN THE INTRODUCTION SERED FULFILLED, WHEN AT LE	A CRUSS
									NEASUREMENTS REQUESTED AC	5 WITH DIFFERENT METHODS AG CCURACY.	REE WITHIN
	\$53	U	ρ το	20.0	MEV		1	FR	A.MICHAUDON	BRC	742073R
								A: 0: M:	ACCURACY 3 PER FOR CRITICAL A SUBSTANTIAL MO	RCENT TO 1 KEV, 2 PERCENT A ASSEMBLIES. JDIFICATIONS.	ECVE.
	954	5.00	KEV	10.0	MEV		2	CCP	L.N.USACHEV	FEI	754008R
								A: U:	FROM 5.0 - 100 FROM 0.1 - 0.8 FROM 0.8 - 4.5 ABOVE 4.5 MEV NEED FOR FAST STANDARO CS AE FUR MORE DETAI) KEV ACCURACY 1.2 PERCENT. 3 MEV ACCURACY 1.1 PERCENT. 5 MEV ACCURACY 1.4 PERCENT. REQUIREMENTS 2 TIMES WEAKE REACTUR CALCULATIUNS. 30VE 100 KEV. LL SEE INTRODUCTICN.	R.
	\$55	1.00	MEV	5.00	MEV	1.0%	1	GER	H.KUESTERS	KFK	79218ER
								0:	AN EVALUATION 100 EV TO 5 ME	IS REQUIRED FOR THE ENERGY	RANGE
	956	14+0	MEV	40.0	MEV		1	USA	MCELRUY	HED	801185F
								0: A: G:	RADIGACTIVE TA Accuracy range For track reco	ARGET 7.038×(10**8) YR E 10. TO 20. PERCENT. DRDERS FGK FMIT DCSIMETRY.	
	957	7.50	EV	30.0	KEV	1. X	1	USA	CARLSON	NBS	801294R
								0: 0:	RADIOACTIVE TA TO RESOLVE DIS MEASUREMENTS	ARGET 7.038X(10**8) YR Screpancy in recent cross s 5.	ECTION
	958	1.00	ΕV	1.00	KEV	1.C X	1	USA	HEMNIG	DUE	821002R
								0: C: M:	RADIUACTIVE TA RESOLVED AND U NEEDED YIELD INTEGRALS CO AND TO RESOL MEASUREMENTS THIS REJUEST AS DESERVING NEW REQUEST.	ARGET 7.038X(10**8) YR INRESULVEL RESUNANCE PARAME INREFISSION AND CAPTURE RE INSISTENT WITH INTEGRAL MEA VE DISCREPANCIES IN RECENT S OVER THE RANGE 0.1-1.0 KE WAS REVIEWED BY CSEWG AND R S SPECIAL EMPHASIS.	TERS SCNANCE SUREMENTS FISSION V. ECOMMENDED
	9 59	1.00	KEV	14.0	MEV	1.C X	1	USA	HEMMIG	DOE	821003R
								u:	RADIGACTIVE TA RATIO TO H(N.F OTHER STANDA	ARGET 7.038X(10**8) YR 9) and 10-8 (N,Alpha) and P Ards.	OSSIBLY
								0: N:	THIS REQUEST W AS DESERVING NEW REQUEST.	VAS REVIEWED BY CSENG AND R 5 SPECIAL EMPHASIS.	ECOMMENDED
	\$60	1.00	MV	1.00	EV	0.5 X	1	USA	HEMMIG	DOE	8210C5R
								Q: C: M:	RADIDACTIVE TA NEEDED TO DETE THIS REQUEST W AS DESERVING NEW REQUEST.	ARGET 7.038X(1C**8) YR Ermine The Thermal Shape ac Mas Reviewed by Csebg and R 5 Special Emphasis.	CURATELY. Ecummended
STA	tus										STATUS
	UND	ER CC	NTINUC	S REVIE	N 67 1	NDC AND N	ANDC.	SEE AP	PENDIX A.		

92 URANI	UN 235	NEUTRGN		CAPT	URE TO	FISSION RATIO	===#==================================	
961	100. EV	1.00 MEV	5.0%	2	UK	C.G.CAMPBELL	WIN	692373F
					A: C:	ACCURACY FOR E AND 26. For fast react	AVERAGE VALUE OF TH Tors.	E ERRLA BETWEEN
962	100. EV	800. KEV	7.0x	1	ССР	M.N.NIKOLAEV	FE1	71400aR
					0: A: 0:	FOR EVALUATION AND FISSIGN MEASUREMENTS BESPONSE DE WITH CAPTUR ERATURE RAN IN REGIJN 1-1 (ABGUI 5 PE IN THE TRANSM LEAST 1/100 SEE GENERAL C ALSC NEEDED FA TEST OF MA AT LEAST THRE WITHIN REGU	N OF THE DIFFERENCE -RESONANCE SELF SHI OF TRANSMISSION CUF TECTOR AND BY SELF- E AND FISSIGN DETEC GE 70-2500 DEGREES 00 KEV BETTER ACCUF RCENTJ. ISSION MEASUREMENTS #ANTED. OMMENTS IN THE INTF CR CGNPARISON WITH SUREMENT METHODS. E DIFFERENT RESULTS ESTED ACCURACY.	IN THE CAPTURE- EDING. VES WITH FLAT- INDICATION METHOD TORS IN THE TEMP- K ARE WANTED. RACY DESIRABLE S ATTENUATION OF AT RODUCTION. ALPHA PU-235 FOR 5 MUST CGINCIDE
\$63	1.00 MV	1.00 EV	1. X	1	USA	DEI	BET	7216776
					c: 0:	CAPTURE CRUSS EXPERIMENTAL	SECTION EQUALLY US UNCERTAINTIES NEED	SEFUL. VERIFICATION.
STATUS	NDER CONTINUE							STATUS
			FREESESS	=====				
92 URANI	UM 235	NEUTRON		NEUT	RGNS EM	ITTED PER NEUT	RUN ABSORPTICN (E1 ====================================	[A] ====================================
564	25.3 MV	50.0 KEV		2	USA	SMITH Hennig	ANL DOE	6711CCR
					A:	ACCURACY 0.5 ELSEWHERE.	PERCENT AT THERMAL	2 PERCENT
\$65	10.0 MV	0.40 EV	0.5%	1	uк	J.FELL	WIN	69237CR
					0: A: 0:	VALUE RELATIV ACCURACY IS F UP TO 0.2 E FOR TEMPERATU	E TO 25,3 MV ETA W/ OR AVERAGE VALUES V, AND IN 50 MV STE RE COEFFICIENT WCR)	ANTED. In 20 MV Steps Eps Abgve. (.
\$66	1.00 MV	1.00 EV	•4 X	1	USA	DEI	8E T	741115R
					۵:	SHAPE ESPECIA USE TECHNIQUE	LLY IMPORTANT AT LO Other than mangane	LW ENERGY. Se bath.
5 67	10.0 MV	0.40 EV	0.5%	2	GER	H.KUESTERS	KFK	7922188
STATUS						VALUE RELATIV	E 10 25.3 MV ETA W	STATUS
1	HERMAL VALUE	UNDER CONTINUGU	S REVIEW	ey In	DC AND	NEANOC. SEE AP	PENDIX A	
S2 URANI	UM 235	NEUTRON	========= ============================	NEUT	RCNS EM	ITTED PER FISS	ION (NU BAR)	
968	25.3 MV	3.00 MEV	1 • X	1	USA	SMITH Hemmig	ANL DGE	691253R
					A: C:	BETTER THAN . To cross check	5 PERCENT REGUIRED K with Other Isotof	AT THERMAL. Pes.
565	25.3 NV	2.50 MEV	0.5%	2	CCP	M.N.NIKCLAEV	FEI	714005R
					c: A: 0:	RATIG TO CF-2 Absolute Meas: Neutrons wi Cent as weli for Lubwerin Standard. Energy Depend Lethargy re See General C	52 NU REGUIRED. UREMENTS OF U-235 M TH ACCURACY NOT BCR L AS ETA MEASUREMEN G THE DEPENDENCE CM ENCE OF NU IS WANT Solution in the reg Omments in the inte	WU-BAK FOR THERMAL ISE THAN 0.5 FER- ITS WOULD EE USEFUL The CF-252 ID WITH C.7 Sign Beluw 2.5 Mev. Oguction.
\$7 0	UP TO	20.0 MEV		1	FR	A.MICHAUDLN	BRC	742075R
					A: G: M:	ACCURACY 2 PE FOR CRITICAL SUBSTANTIAL M	RCÉNT TO 1 KÉV. 1 F ASSEMBLIES. ODIFICATIONS.	PERCENT ABCVÈ.
\$71	5.00 KEV	10.0 MEV		2	ССР	L.N.USACHEV	FEI	754010R
					A: G:	FROM 5.0 - 10 FROM 0.1 - 0. FROM 0.8 - 4. ABOVE 4.5 MEV NEED FGR FAST FOR MORE DETA	0 KEV ACCURACY 0.5 8 MEV ACCURACY 0.5 5 MEV ACCURACY 1.2 Requirements 2 til Reactor Calculatio 1L SEE Introduction	PERCENT. PERCENT. PERCENT. MES WEAKER. NS.
\$72	1.00 MV	1.CO EV	•2 X	1	USA	DEI	BET	781185R
					Q:	MEASUREMENTS CF-252 WANT	RELATIVE TC U-233. ED.	PU-239 AND
STATUS								STATUS
	NDER CUNTINUC	US REVIEW EY IN	DC. SEE A	PPEND =====	IX A.	*******		

92 URANI		NEUTRON		DELA	YEU NEU1	IRONS EMITTED PER	F1SS1GN	=================
\$73			3. X	1	USA	DEI	6ET	741120R
					a: 5:	FOR THE ENTIRE E TO RESOLVE UNCER	NERGY RANGE. TAINTIES IN AVAILABLE DA	TA.
97 4	25.J MV	10.0 MEV	5. X	2	JAP	T.MURATA	NIG	762046N
					o: o:	THE REQUESTED QU AND GROUP YIELDS CAN BE USED TO F NEUTRONS FOR THE ACCURACY OF 5 PE INCIDENT ENERGY	ANTITIES ARE THE GROUP H (NORMALIZED TO 1 FISSIO) IT THE DECAY CURVE OF DE TIME RANGE 0.1-300 SEC R CENT. STEP LESS THAN 2 MEY.	ALF LIVES N) WHICH LAYED WITHIN AN
STATUS						ACTIVE ASSAY OF	MIXED FRESH AND IRRADIAT	STATUS
U	NDER CONTINU	OUS REVIEW BY IN	DC AND NEA	NDC .	SEE APP	PENDIX A.		014100
92 URANI	======================================	EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE		ENER	GY SPECT	FRUM OF FISSION N	STATESTATESTATESTATESTATES EUTRONS	*======
975	25.3 NV	3.00 MEV	5. X	2	USA	SMITH	ANL	691256R
					0.	HEMMIG	DOE EISSION SPECTRUM.	
				-			FISSION SPECTRON.	
976	100. KEV		2.0%	2	UK	V.BARNES	UKW	692376R
					A: C;	INCIDENT ENERGY, ACCURACY FOR AVE ACCURACY 10 PERC ABUVE 5 NEV AN LOW RESOLUTION A FOR FAST REACTOR FOR REACTION RAT	ABOUT 100 KEV. RAGE E ⁴ . Ient on number of neutron D Bellh -25 Mev. Dequate fur incident ene IS. E ANALYSIS.	S Rgy.
\$77	25.3 MV		1 • X	1	USA	DEI	BcT	72108CR
					Q: A: U:	NEED SHAPE OF NE 100 KEV TU 15 Relative peak to Needed for criti	UTRON ENERGY DISTRIBUTIC MEV.) 1 PERCENT. CALITY CALCULATIONS.	N FROM
978	UP TO	20.0 MEV	5.0%	1	FR	A.MICHAUDON	BRC	742077R
					С: М:	FUR CRITICAL ASS SUBSTANTIAL MODI	EMBLIES. Fications.	
STATUS								STATUS
U	NDER CONTINU	CUS REVIEN BY IN	DC. SEE AF	PEND	IX A.			
92 URANI	UM 235		*****	ENER	GY SPEC	TRUM OF DELAYED F	ISSION NEUTRONS	
\$79	25.3 MV	5.00 MEV	5. X	2	USA	HEMMIG	DCE	691260F
					c: 0:	YIELD, HALF-LIFE FOR ANALYSIS OF EXISTING DATA	AND ENERGY NEEDED. FAST CRITICALS AND TO CH	ECK
52 URANI		EUTRCN	*********	SPEC	TRUM CF	PRUMPT GAMMA RAY	S EMITTED IN FISSION	
	***********		*******		*******			
580	25.3 MV	14.0 MEV	2.0 %	3	ССР	S.S.KOVALENKU	RI	7340011
					0: A: C:	YIELD AND SPECTR 10.0 KEV GAMMA R FOR ASSAY OF U I GAMMAS.	RA WANTED FOR 5 TL 15 MEV Resolution Wanted. In fuel elements from fro	GAMMAS.
52 UDANI		SERECTER STREET	********		TATESSE	NA SPECTRUM FROM	EISSION PRODUCTS	
	*=======	************	5 44 1112121		2032232			
581	25.3 MV		15. X	3	USA	WAL TON	LAS	701029N
					0: A: U:	SPECTRA 0.25-5 M 1 MSEC-12 HR. ASSOCIATE GAMMAS GE(LI) RESOLUTIO FOR NON-DÉSTRUCT	AEV ANG TIME-DEPENDENT YI 5 WITH FISSIGN PRODUCTS. 5N - 2.5 KEV AT 1.2 MEV. FIVE ASSAYS OF U-235.	ELO
92 URANI	VM 235	NEUTRCN		FISS	ICN PRO	DUCT MASS YIELD S	SPECTRUM	
				2				
982	25.3 MV		1.0%	2	ССР	S.A.SKVORTSUV G.A.MILLER	KUR KUR	704022N
					0: 0:	FUR ASSAY OF U I THE FISSION PR	AND RU-106 ARE REGUIRED. In Spent fuel elements by Roduct gamma Rays.	·
\$83	25.3 MV		1.0%	3	CAN	W.H.WALKER	CRC	7118C2R
					0: 0:	YIELD OF XE-135 Calculation of F	WANTED. Ission product poisons.	
984	25.3 MV		1 • X	1	USA	DEI Feiner	ӨЕТ Кар	781152R
					a: 0:	NUCLIDES GF INTE CS-137,ND-147, DATA NEEDED TO I FISSION PROPUG	EREST ARE RH-105,XE-135,C ,SM-145 AND EU-153. Impruve Accuracy of Predi TT Poisoning.	-S-135 ICTED

92 URANIUN 235	NEUTRON	FISSICN	PRODUCT MASS YIELD SPECTRUM	(CONTINUED)
STATUS				STATUS
UNDER CONTINUOU	S REVIEW BY INDC.	• SEE APPENDIX	A .	
92 URANIUM 235	NEUTRON	RESONAN	CE PARAMETERS	
585 25.3 MV	200. ÉV 10	0•x 1 U	SA SMITH ANL Hemmig doe	691262R
			Q: MULTILEVEL FIT WHERE FEASIBLE. G: FOR EXTRAPOLATION TO UNRESOLVED RE	SONANCE REGION.
\$86 25.3 MV	20C. EV 10	0 .x 2 U	SA DEL BET	691263F
			C: MULTILEVEL FIT WHERE FEASIBLE. D: VERIFICATION OF EXISTING DATA USEF	UL •
587 1.0C EV	200. EV :	3.0X 2 F	R H.TELLIER SAC	702025R
			A: QUOTED ACCURACY AT 2 STANDARD DEVI U: FOR RESONANCE SELF SHIELDING.	ATICNS.
STATUS				STATUS
UNDER CONTINUEL	S REVIEW EY INDC	AND NEANDC. SE	E APPENDIX A.	
52 URANIUM 230	NEUTRCN	ENERGY	DIFFERENTIAL INELASTIC CROSS SECTION	
	5 00 MEV 1/			7140125
988 02 10	5.00 MEV 10	U.UX 2 C	CP MANANIKULAEV FEI Q: CRUSS SECTION FUR INFLASTIC REMOVA	A BELOW EISSION
			THRESHOLDS OF U-236 AND U-238 WA THIN SPHERE TRANSMISSION MEASUREME SOURCE AND FISSION THRESHOLD DET USEFUL.	NTEC. NTS WITH CF-252 ECTGRS WOULD EE
	- 			
S2 LRANIUM 256	NEUTRÚN	CAPTURE	CRUSS SECTION	
589 1.00 KEV	10.0 MEV	1 F	R J.SALVY BRC	6820606
			A: ACCURALY 16 PERCENT TO 3 MEV, 20 F G: FOR RESUNANCE SELF SHIELDING. M: SUBSTANTIAL MODIFICATIONS.	PERCENT ABGVE
590 1.00 EV	10.0 MEV 20	0.0% 2 G	ER H.GÉRWIN JUL	692381R
551 1.CC KEV	3.00 MEV 30	0.0% 3 F	R M.SALVATORES CAD	7120646
			0: RATIU TU U-235 FISSION UR U-238 CA G: Für Fast Reactor Calculatiuns. M: Suðstantial Nüdifications.	PTURE NEECEC.
992 500. EV	1.40 MEV	7.0x 2 C	CP M.N.NIKULAËV FEI	714015R
			G: RATIO WANTED RELATIVE TO U-235 FIS U: SEE GENERAL COMMENTS IN THE INTROD	SILN. DUCTION.
STATUS				STATUS
UNDER CONTINUGU	S REVIEW BY INDC.	• SEE APPENDIX	A.	
92 URANIUM 236	NEUTRON	FISSICN	CROSS SECTION	
553 4.CO MEV	10.0 MEV	5.0 x 2 G	ER H.GERWIN JUL	6923ECK
664 1.00 KEV	3.00 MEV 30	0.0% 3 F	R MASALVATORES (A)	7120626
334 I 000 KCV	3.00 MEY 3		G: WANTED RELATIVE TO U-235 FISSION (D: FOR FAST REACTOR CALCULATIONS.	RGSS SECTION.
			M: SUBSTANTIAL MODIFICATIONS.	
\$\$5 100. KEV	5.CG MEV	5.0 x 2 C	CP M.N.NIKULAEV FEI	714613R
			0: RATID WANTED RELATIVE TO U-235. AVERAGE CS IN FISSIUN NEUTRON SPEC TIMES NU-BAR OF CF-252 WCULD BE (REGUIRED ACCURACY 1 PERCENT). G: SEE GENERAL COMMENTS IN THE INTROD	TRUM ÜF CF-252 Very Useful Suction.
S2 URANIUM 236	NEUTRON	NEUTRON	S EMITTED PER FISSION (NU PAR)	
SSE UP TU	5.00 MEV	1.0x 2 C		7140148
			D: SEE GENERAL COMMENTS IN THE INTROD	OUCTION.
92 URANIUM 236	NEUTRUN	ENERGY	SPECTRUM OF DELAYED FISSIGN NEUTRONS	
		E		
751		J. 4 I U	DEL EEL	781128k
			NEED FAST GRUUP YIELDS AND SPECTRA G: NO MEASUREMENTS AVAILABLE. FOR NON-DESTRUCTIVE ASSAY OF U-23:	-TH-232 FLEL

92 LRANI	UM 236		NEU	TRON		RESO	NANCE PA	RAMETERS		
998	10.0	Eν	5.00	KEV		2	ССР	M.N.NIKOLAEV	FEI	714011R
							۵: ۸: دن	NEUTRON AND C OF SELFSHIE OBSERVATION O RESONANCES DESIRED. SEE GENERAL C STATISTICAL A	APTURE WIDTHS WANTE LDING IN RESCLVED F IF AT LEAST 50 PERCE IN THE ENERGY INTE COMMENTS IN THE INTE INALYSIS LE MEASURE	D FOR EVALUATION Resonance Region. Ent of P-Nave RVAL to 1 Kev IS Roduction.
								RESONANCE P AVERAGE S AND BE DERIVED.	ARAMETERS WANTED. P WAVE RESONANCE P	PARAMETERS SHOULD
200 110 AN 1		====	======== NEU	=====						
202000000			========	=====		=====	*******			
\$\$9	1.00	KEV	3.00	MEV	50.0%	з	FR	M.SALVATORES		792034R
							м:	SUBSTANTIAL M	NOR CALCULATIONS.	
======================================		=== ==	======================================	== = = = = TRGN		===== F (SS	ILN CROS	S SECTION		
1000	1.00	KEV	3.00	MEV	50.0%	З	FR	M.SALVATORES		792035F
							м:	SUBSTANTIAL M	NUDIFICATIONS.	
222 URAN 1	======= UM 238	***==	======= NEU	===== TR.:N		===== ELAS	# ======== T I C C R U S	S SECTION		**************
		=====		=====				***********		*************
1001	1.30	KEV	20.0	MEV	5.0%	2	FR	C.PHILIS	BRC	742081R
							0: M:	FOR CRITICAL SUBSTANTIAL M	ASSEMBLIES. NODIFICATIONS.	
22 URANI			======= NEU	===== TRON		DIFF	ERENTIAL	ELASTIC CRUS	SS SECTION	
22224222		== = = = =						**********		
1002	1.00	KEV	300.	KEV	10. X	1	USA	HEMMIG	DCE	6914C7k
1003	300.	KEV	2.00	MEV	5. %	1	USA	SMITH Hemmig	ANL DGE	6914Cér
1004	300.	KEV	10.0	MEV	10. X	1	USA	SMITH	ANL	691468R
1005	1.00	KEV	20.0	MEV	5.0%	2	FR	C.PHILIS	HRC	7420E2R
							C: M:	FOR CRITICAL Substantial M	ASSEMBLIES. MGD1FICATIONS.	
92 URANI			======================================		*********	INEL	ASTIC CA	ROSS SECTION	****************	
1006	UP	то	15.0	MEV	5.0%	1	FR	M.SALVATORES	CAD	692387R
							Q: D: M:	ALTERNATE QUA Für Fast Read Suðstantial M	ANTITY - NONELASTIC CTUR CALCULATIONS. MODIFICATIONS.	CRGSS SECTION.
1007	1.20	MEV	2.00	MEV	10.0%	2	GER	F.WELLER	KFK	692393F
							c:	LEVEL EXCITAT	FIGN CROSS SECTIONS VELS WANTED.	FCR THE 45 AND
1008	UP	10	20.0	MEV	5.0%	2	FR	C.PHILIS	8R C	742CE3R
							C: M:	FOR CRITICAL Substantial M	ASSEMBLIES. ADDIFICATIONS.	
1009	100.	KEV	10.0	MEV		2	605	L.N.USACHEV	FEI	754G21R
							A: G:	FROM 0.1 - 0. FROM 0.8 - 1. FROM 1.4 - 2. FROM 2.5 - 5. FROM 5.0 - 6. FROM 6.5 - 10 NEED FUR FAST FOR MORE DETA	A MEY ACCURACY 3.4 A MEY ACCURACY 2.7 B MEY ACCURACY 3.0 O MEY ACCURACY 10 S MEY ACCURACY 7.0 D MEY ACCURACY 10 T REACTOR CALCULATI ALL SEE INTRODUCTIC	PERCENT. PERCENT. PERCENT. PERCENT. PERCENT. PERCENT. GN.
1010	UP	то	10.0	MEV		1	USA	HEMMIG	DOE	821025R
							Q: A:	RADIOACTIVE 1 TCTAL INELAST ACCURACY RANG ACCURACY SHOL DETERMINE E TRANSFER	TARGET 4.468X(10** TIC CROSS SECTION N GE 5. TO 7. PERCE JLO BE SUFFICIENT T BROAD GROUP (E.G. 2 ATOLY E.L.MENTE TO 7	S) YR EEDED. NT. G G GRGUP)
							С: м:	THIS REQUEST AS DESERVIN NEW REQUEST.	WAS REVIEWED BY CS NG SPECIAL EMPHASIS	-IU FERCENI. Ewg and Recommended •
STATUS										STATUS
u ========	NDER CCN		US REVIE	e ey	INDC AND NE	ANDC	SEE AP	PENDIX A.		

S2 URANI	UM 238	NEUTRON		ENER	GY DIFFE	RENTIAL INELASTI	C CROSS SECTION	
		2=====================================						
1011	50.6 KEV	10.0 MEV	5. X	1	USA	SMITH Hemmig	ANL DGE	691270F
					Q: A:	EMISSION CROSS S (N,2N) MIGHT B INCIDENT ENERGY	ECTIONS INSTEAD E USEFUL. Resolution: 5.	OF INELASTIC AND Percent.
1012	UP TG	15.0 MEV	5.0%	1	FR	M.SALVATORES	CAD	652351R
					G: A: D: M:	SEPARATION OF LE Accuracy on Nucl For fast reactor Substantial Modi	VELS UP TO 2 ME EAR TEMPERATURE CALCULATIONS. FICATIONS.	V REGUIREC. Abové 2 Mév.
1613	50.0 KEV	15.0 MEV		1	CCP	M .N .NIKOLAEV	FEI	714018R
					Q:	DECISION ABOUT T 1.0 TG 2.5 MEV TEMPERATURE FOR HIGHER ENERGIE	OTAL INELASTIC WANTED. INELASTIC NEUTR	CRESS SECTION AT GNS WANTED AT THE
						SPECTRA AND CROS SCATTERING PRO MEV REGION AS UTIONS.	S SECTION FOR D Cesses to be in Well as direct	IRECT INELASTIC VESTIGATED IN THE NECHANISM CONTRIE-
					A:	CRUSS SECTION FO THRESHOLD OF U CRUSS SECTION FO THRESHOLD OF P	R INELASTIC REM 1-238 WANTED TO 18 INELASTIC REM 19-240 or NP-237	GVAL BELON FISSION 1.5 - 2.0 PERCENT. UVAL BELON FISSION WANTED TO 3 - 5
						PERCENT. EXCITATION CS FO MEV SHOULD BE NEUTRON SPECTRA	R FIRST LEVEL A MEASURED WITH 5 TO BE MEASURED	BOVE THRESHOLD TU 2 Percent accuracy. WITH 5 Percent
					0:	ACCURACY AT 2. SEE GENERAL COMM PRECISION MEASUR PARAMETERS IN	515 MEV. ENTS IN THE INT ENENTS OF MENTI SHELL TRANSMISS	REDUCTION. GNED INTEGRAL ION EXPERIMENTS
						FISSION THRESH NEUTRON SPECTR	UTRON SOURCE AN IOLD DETECTURS A IGMETER SEEMS VE	D U-23E AND NP-237 S WELL AS BY Ry Useful.
STATUS								STATUS
U	NDER CONTINUC	US REVIEW BY 11	NDC AND NE	ANDC.	SEE API	PENDIX A.		
92 URANI	UM 238	NEUTRON		ENER	G Y-ANGL	DIFFERENTIAL IN	ELASTIC CROSS S	ECTICN
1014	500. KEV	5.00 MEV	5.0X	1	UK	C.G.CAMPBELL	WIN	692392R
		_			د:	FUR FAST REACTOR	·S •	
1015	UP TO	20.0 MEV	5.0%	2	FR	C.PHILIS	BRC	742084R
					м:	SUBSTANTIAL MODE	FICATIONS.	
1016	500. KEV	5.00 MEV	5.0%	1	GER	H.KUESTERS	KFK	792219R
======= 92 URANI		 NEUTRGN			ELASTIC	CRUSS SECTION		

1 C 1 7	10.0 KEV	15.0 MEV		2	CCP	M.N.NIKULAEV	FEI	7140178
					A: 0:	DIRECT MEASUREME DESIRABLE WITH FOR EVALUATION O SECTION FOR FA	NTS BY SHELL TR 3-5 PERCENT AC IF INELASTIC SCA IST REACTORS.	ANSMISSION Curacy. Ttering Cruss
92 URANI	UM 238	NEUTRON		CAP T	URE CRO	SS SECTION		
	500 SV						005	6014160
1018	500. EV	1.00 KEV	6. X	1	USA C:	FOR FAST REACTOR	CALCULATIONS.	691419R
1010		300 KEV	1. Y	,		CM1 TU	A.N.	6014300
1019	1.00 KEV	300. KEV	1	1	03A G:	FOR FAST REACTOR	CALCULATIONS.	691420K
1020	1.00 KEV	300. KEV	· 2 • X	1	USA	HENMIG	DCE	6914225
1020			20 10	•	0:	FOR FAST REACTOR	CALCULATIONS.	•••••
1021	300. KEV	500. KEV	1.5 X	1	USA	SMITH	ANL	691423R
					0:	FOR FAST REACTOR	CALCULATIONS.	
1022	300. KEV	500. KEV	3. X	1	USA	HEMMIG	DOE	691425F
					с:	FOR FASI REACTOR	CALCULATIONS.	
1023	500. KEV	10.0 MEV	2.5 X	1	USA	SMITH	ANL	691426F
					0:	FOR FAST REACTOR	CALCULATIONS.	
1024	500. KEV	10-0 MEV	5. X	1	USA	HEMMIG	DOE	69142ER
					0:	FOR FAST REACTOR	CALCULATIONS.	
1025	10.0 KEV	300. KEV	1.5 X	1	USA	SMITH Hemmig	ANL Doe	691435R
					c: 0:	PRIMARY RATIO SH RATIOS TO RECU RATIO DATA DISCR	IGULD BE TO U-23 Ignized standard Repant with Absc	5 FISSICN, CTHER 5 DESIRABLE. LUTE MEASUREMENTS.

92 URAN I	UM 236	======	NEU	FRON TRON		CAPTU	RE CRU	SS SECTION		(CONTINUED)
1026	300.	KEV	10.0	MEV	2. *	1	USA Q:	SMITH Primary Ratio : Ratios to reg	ANL Should be to U-235 Cugnized standards	691436R Fissicn, Cther Desirable.
							0:	RATIU DATA DISC	CREPANT WITH ABSCL	UTE MEASUREMENTS.
1027	300.	KEV	10.0	MEV	7 . X	1	USA Q:	HENNIG PRIMARY RATIO	DOE SHOULD BE TO U-235	691437R FISSION, OTHER
							0:	RATIG DATA DIS	CREPANT WITH ABSOL	UTE MEASUREMENTS.
1028	5.00	MV	6.00	εv		1	UK A: 0:	J.FELL ACCURACY REQUIN FOR THERMAL REA	WIN RED .03 EARNS. Actors.	6924C1F
1029	566.	Ē٧	800.	KEV		1	GER	H.GERWIN	JUL	6924CJR
							A: 0:	ACCURACY 2 PER 3 PERCENT ELS FAST REACTOR C	CENT 10 TC 400 KEV Sewhere. Alculations.	· •
1030	10.0	KËV	2.00	MEV	3.0%	1	UK	C.G.CAMPBELL	WIN	6924C5R
							A: C:	ACCURACY FOR A E AND 2E. MEASUREMENTS R EVALUATION REQ FOR FAST REACTO	VERAGE VALUE OF TH Equired 10.0kev to Vired over whole r DRS.	IE ERROR EETBEEN 5 80.0kev Mange
1031	500.	Εv	1.40	MEV	3.0%	1	CCP	M.N.NIKOLAEV	FEI	7140228
							Q: A: G:	RATIO TO U-235 ABSOLUTE MEASU AND LI-6(N.A. USEFUL, AND NP-237 FISSI TRANSMISSIUN MI DETECTOR AND CAPTURE GAMM. RANGE 70-250 UATION OF SE SPHERICAL TRAN MENTS SEEM T FOR DETERMIN CROSS-SECTIO BETWEEN 1 AND SELFSHIELDIN AL. CONSULT WITH 2 PERCE LETHARGY INT TEMPERATURE DI MUST BE KNOW SEE GENERAL CO. FIRST PRIGRITY INTERPRET TH FACTORS FROM	FISSION CS IS WAN REMENTS GR RATIOS LPHA) CROSS SECTIO AT HIGHER ENERGIES ON CS. EASUREMENTS WITH F EASUREMENTS WITH F EASUREMENTS WITH F SAUGHT IN SELF-INDIC A-RAY DETECTOR IN O DEGREES K ARE DE LF-SHIELDING AND O EGGES KARE DE SMISSION TIME-OF-F O BE A USEFUL INCE SMISSION TIME-OF-F O BE A USEFUL INCE ING THE RELIABLIT N DATA. 100 KEV INFCRMATIC G FACTORS (SEE EDC ANTS BUREAU, NEW T ACCURACY AND AN EFVALS DESIRED. FFERENCES UF SELFS N WITH 7 PERCENT A MMENTS IN THE INTH BECAUSE IT IS OIF E DOPPLER-EFFECT A MACRUSCOPIC DATA	TED. TO E-10(N.ALPHA) INS WULD ALSC BE THE RATID TO THE LAT-RESPUNSE ATION METHOD WITH THE TEMPERATURE SIRED FUR EVAL- CEPTLER EFFECTS. LIGHT MEASURE- PENDENT METHOD Y GF CAPTURE SN ON RESUNANCE CRK.1964) FERAGEC GVER G.2 SHIELDING FACTORS CCURACY. DDUCTION. FICULT TO ND SELF-SHIELDING GNLY.
1032	1.00	KEV	10.0	MEV		1	FR	C.PHILIS	BRC	742087R
							A: U: M:	ACCURACY 5 PER For critical A Substantial Mon	CENT TO 3 MEV, 20 SSEMBLIES. DIFICATIONS.	PERCENT AUGVE.
1033	5.00	KEV	10.0	MEV		2	ССР А: 0:	L.N.USACHEV FRUM 5.0 - 100 FRUM 0.1 - 0.8 FRUM 0.8 - 4.5 ABOVE 4.5 MEV NEED FOR FAST FOR MURE DETAI	FEI KEV ACCURACY 2.1 MEV ACCURACY 2.7 MEV ACCURACY 2.3 REQUIREMENTS 2 TI REACTOR CALCULATIC L SEE INTROLUCTION	7540C5R PERCENT. PERCENT. PERCENT. HES WEAKER. INS.
1034	100.	MV	6.00	εv	•5 X	1	USA	LEONARD	BNW	761085F
							0:	FOR THERMAL CR	OSS SECTION EVALUA	AT IGN.
1035	10.0	MV	1.00	EV	2.0%	2	FR	H.TELLIER	SAC	792036R
							A: 0:	QUOTED ACCURAC TO CHECK CAREF IS 1/V DEPENDE	Y AT 2 STANDARD DE ULLY IF THẢ CAPTUR NT OR NUT	EVIATIONS. Réchoss section
1036	10.0	KEV	80.0	KEV	3.0x	2	GER	H.KUESTERS	KFK	792220R
1037	30.0	KEV	1.00	MEV		1	USA Q: A: G: M:	HEMMIG RADIDACTIVE TA ACCURACY RANGE THIS REQUEST MAS DESERVING NEW REQUEST.	DDE RGET 4.408X(10*** 2. TO 3. PERCE AS REVIEWED BY CS SPECIAL EMPHASIS	8210258 D) YR NT. Ewg and recommended
STATUS-										STATUS
	UNDER CO		US REVIE	W 8Y	INDC AND NE	ANDC .	SEE AF	PENDIX A.		
92 URAN	1UM 238		NEU	TRCN		TOTA	PHOTU	N PRODUCTION CR	OSS SECTION	
1038	25.0	MV	5.00	MEV	20.0%	3	UK	C.G.CAMPBELL	WIN	712066R
							0: A: C:	GAMMA SPECTRUM LOW RESOLUTION PHOTON SPECT Evaluation Reg For Study of A	EWANTED. ADEQUATE FCR INC RUM. DUIREMENT. ACTIVATIGN AND HEA	IDENT ENERGY AND T RELEASE IN CORE.
1039	ι	IP TO	10.0	MEV	10.0%	1	FR	M.SALVATORES	CAD	832014R
.							Q: 0 M:	GAMMA SPECTRUM Fasi Reactor C New Request.	REQUIRED.	

92 URAN I	UM 238	NÉUTRON		ENERG	Y-ANGL	E DIFF.	PHOTON-PRODUCTION CROSS SECTION	***********
1040	1.00 MV	15.0 MEV	10. X	2	USA	HEMMIG	DùE	721075H
					Q: A: G:	FOR ALL GAMMA-E FOR SHI	GAMMA ENERGIES. Nergy Intervals - 500 kev. Elding and Gamma Heating Calcula	TIUNS.
\$2 URANI	UM 238	NEUTRCN		N,2N			***************************************	
1 C 4 1	UP TO	20.0 MEV		2	ССР	N.N.NIK	ÚLAEV FEI	714019F
					Q: A: C:	SECONDA ACCURAC Energy With Letha For fas	RY ENERGY DISTRIBUTION REGUIRED. Y 5 TO 10 PERCENT WANTED. SPECTRA OF SECONDARY NEUTRONS DE 5 PERCENT ACCURACY AND 0.2 RESOL RGY. T REACTORS.	SIRAELE Ution in
1042	UP TO	15.0 MEV	15.0%	2	ССР С:	I.N.GOL Possibl	OVIN KUR E USE AS NEUTRON MULTIPLIER.	724063F
1043			25.0%	2	ССР	L .N.USA	CHEV FEI	794007R
					o: 0:	AVERAGE REQUE FOR FAS SEE GEN	CROSS SECTION IN A FAST-REACTER STED. T-REACTOR BURN-UP CALCULATION. ERAL COMMENTS.	SPECTRUM
1644	14.0 MEV	20.0 MEV	10. X	2	USA	SMITH	ANL	8010016
					Α:	ENÉRGY	RESOLUTION 10 PERCENT.	
92 URANI	UN 236	NEUTRON		====== N,3N ======		=======================================		
1045	UP IO	15.0 MEV	15.0%	2	ССР	INGUL		724064F
1000	0. 10		1000	-	с. с:	POSSIBL	E USE AS NEUTRON MULTIPLIER.	
1046	14.0 MEV	20.0 MEV	10. X	2	USA	SMITH	ANL	8010C2R
					A:	ENERGY	RESOLUTION 10 PERCENT.	
1047	11.0 MEV	14.0 MEV	20 . X	2	USA	BERK	Duć	80105CF
					c:	FOR HYB	RID SYSTEM DESIGN.	
92 URANI	UM 238			F 155	ION CRO	SS SECTI	======================================	*************
1048			2.0%	2	UK	C.G.CAM J.FELL	PBÉLL WIN WIN	7120c7R
					c: 0:	FISSIGN Evaluat For Fas	SPECTRUM AVERAGE WANTED. ION REQUIREMENT. T and thermal reacturs.	
1 6 4 5	800. KEV	15.0 MEV		1	ССР	M.N.NIK	OLAEV FEI	714620R
					G: A: 0:	RATIO T ABSQLUT TO TH AVERAGE TIMES REDUC NEUTR ACCUR (REQUEST AND A 1.3 A ABSQLUT SEE GEN AT LEAS ACCUR FIRST P FISSI USE OI THRES	G U-235 FISSIGN CS IS WANTED. E MEASUREMENTS AND MEASUREMENT O E NP-237 FISSIGN CS MOLLO EE VER CS IN FISSION-NEUTRON SPECTRUM NU-BAR OF CF-252 IS CF GREAT IN ING THE DEPENDENCE OF THE ACCURA CN PRODUCTION CALCULATICNS UFON ACY UF THE CF-252 NU-BAR SIANDAR IRED ACCURACY I PERCENT). ED ACCURACY I PERCENT ED ACCURACY S PERCENT EELOW GOVE 6.5 MEV. E VALUES WITH 2 TO 3 PERCENT ACC ERAL COMMENTS IN THE INTRODUCTION T THRE DIFFERENT MEASUREMENTS WA ACIES WANTED. ACIES HIGH ACCURACY OF ON CS IS IMPORTANT IN CONNECTION F THIS CS AS A CUNVENIENT STANDA	CF THE RATIC RY LSEFUL: UF CF-252 VTEREST FCR CCY OF THE RD L.3 MEV. SEEN URACY. NTH THESE THE U-238 WITH THE RU FGR
1050	UP TO	20.0 MEV	3.0%	1	FR	C.PHILI	S BRC	742086F
					C: M:	FGR CRI SUBSTAN	TICAL ASSEMBLIES. TIAL MODIFICATIONS.	
1051	800. KEV	10.0 MEV		2	ССР	L.N.USA		7540196
					A: 0:	FROM 0. NEED FO For Mur	8 - 10. MEV ACCURACY 1.8 PERCENT R FAST REACTOR CALCULATIONS. E DETAIL SEE INTRODUCTION.	•
1 6 5 2	500. EV	1.30 MEV	4. X	2	USA	SMITH	ANL	801296F
					Q: A:	RATIO T INCIDEN INTERME ENERGY	O U-235(N.F) WANTED. T ENERGY RESOLUTION: 3. PERCENT DIATE ACCURACY USEFUL. CALIBRATION - 1 PERCENT.	ſ•
1053	1.30 MEV	5.00 MEV	2. X	2	USA	SMITH	ANL	201297R
					Q: A:	RATIO T Interme Energy	D U-235(N.F) WANTED. Diate accuracy useful. Calibration - 1 percent.	

NEUTRCN FISSIGN CROSS SECTION (C	ONTINUED)
EV 14.0 MEV 3. X 2 USA SMITH ANI	F0125F0
Q: RATIO TO U-235(N.F) WANTED.	
A: INTERNEDIATE ACCURACY USEFUL. Energy Calibration - 1 percent.	
EV 20.0 MEV 3. X 2 USA SMITH ANL	801299R
Q: RATIO TO U-235(N.F.) BANTED. A: Intermediate accuracy useful. Energy caleration - 1 percent.	
TO 20.0 NEV 2.00% 1 BAN M.M.KASIM BAN	833002F
C: FUR NEUTREN DÜSIMETRY M: New Request.	
	STATUS
INUOUS REVIEW BY INDE AND NEANDE. SEE APPENDIX A.	
NEUTRON NEUTRONS ENITTED PER FISSION (NU BAR)	
TO 10.0 MEV 1. % 1 USA HEMMIG DEE	691275R
G: TO VERIFY MEASUREMENT OF SOLEILAC.	
TO 5.00 MEV 0.7% 2 CCP M.N.NIKOLAEV FEI	714021K
Q: RATIO TO CF-252 NU WANTED. A: Energy dependence must be known with C.7 Accuracy and About 10 percent energy Resolution. O: See general comments in the intruduction.	PERCENT
TO 20.0 MEV 1.0% 1 FR C.PHILIS BRC	742088R
G: FUR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MUDIFICATIONS.	
EV 10.0 MEV 2 CCP L.N.USACHEV FEI	754020F
A: FROM 0+8 - 10. MEV ACCURACY 1.0 PERCENT. O: Nééd for fast reactor calculations. For more detail see intriduction.	
	STATUS
INUCUS REVIEW BY INDC. SEE APPENDIX A.	
NEUTRCN DELAYED NEUTRUNS EMITTED PER FISSION	*********
	7010351
G: CALCULATION OF NODERATING ASSENDLIES FOR	U ASSAY.
DATA NEEDED FOR EXTRAPOLATION TO 15 MEV.	
IV 10.0 MEV 5. X 2 JAP T.MURATA NIG	762047N
G: THE REQUESTED QUANTITIES ARE THE GRCUP HA AND GROUP YIELDS (NURMALIZED TO 1 FIŠSIUM Can be used to fit the decay curve of del Neutrons for the time range 0.1-300 sec w Accuracy of 5.Per cent. O: Incident energy step less than 2 Mev. Active Assay of Mixed Fresh and Irradiate	D FUEL
TO 5.00 NEV I USA HEMMIG DGE	821014R
G: RADIDACTIVE TARGET 4.468X(10**\$) YR A: ACCURACY RANGE 3. TO 5. PERCENT.	
THIS MUST BE AN ABSOLUTE MEASUREMENT. C: THIS REQUEST WAS REVIEWED BY CSEWG AND RE WAS DESERVING SPECIAL EMPHASIS. New Deciest	COMMENDED
m. NLW REGULSI.	STATUS
INUOUS REVIEW BY INDC AND NEANDC. SEE APPENDIX A.	
NEUTRCN ENERGY SPECTRUM OF FISSION NEUTRONS	

NEV 2.0% 3 UK C.G.CAMPBELL WIN	692400F
A: INCIDENT ENERGY, ABOUT 2 MEV. Accuracy for Average e'. Accuracy 10 percent on number of neutrons	
ABGVE 5.0 MEV AND BELGW 0.25 MEV. Luw resolution adequate for incident ener G: Evaluation requirement. Fur fast reactors.	GY .
TO 20.0 NEV 5.0% 1 FR C.PHILIS BRC	742085R
G: FOR CRITICAL ASSEMBLIES. M: Substantial Modifications.	
TO 10.0 MEV 1 USA HEMMIG DGE	821031R
Q: RADIDACTIVE TARGET 4.468X(10++5) YR	DUNCE
TO THAT OF CF-252 WITH A ACCURACY OF A TO THAT OF CF-252 WITH AN ACCURACY OF A 1-1.5 PERCENT. AN ABSOLUTE MEASUREMENT SHAPE UF THE SPECTRUM MAY BE NECESSARY O: THIS REQUEST WAS REVIEWED BY CSENG AND RE	CAVG) TO OF THE CLMMENDED

92 URA		238 =====	.========	NEU NEU	TRON			ENER	GY 5 ====	PEC1	TRUM OF FISSI	ON NEUTRONS		(CCNTINUED)
STATUS	5													STATUS
	UNDE	R CG	TINUCUS	REVIE	W EY	INDC.	SEE	APPEND	IX A	•				
				====== NEU	=====	******		RESO		ss≠: F P/				
======					== = = = = =	*====	====		====	====			=2=3===2=3=8=4	**********
1 067	7	UF	» то	5.00	KEV			1	cc	ρ	MONONIKOLAEV	FEI		714016R
										۵:	OBSERVATION	OF VERY WEAK	P-WAVE RESON	ANCES IS
											RESOLUTION O	F SO PERCENT	CF P-WAVE RE	SONANCES
												ING DISTRIBUT	ION AND ALL	S-WAVE
										0:	CAREFUL IDEN	TIFICATION OF	S AND P #AVI	RESUNANCES
											FUNCTION.	ECTED NITH PR	RELENCE SEL	SHIELCING
											EVALUATION	IN UNRESOLVE	D RESONANCE	REGION.
											BETWEEN TH	E 1/2 (+) AND	1/2 (-) LEV	EL DENSITIES.
											DEPENDENCE A SCIENTIF	IC AS WELL AS	SITY IS OF 1 FROM A PRAC	NTEREST FROM Tical Point
											OF VIEW.			
1068	36	.00	EV	10.0	KEV	3	•0 x	1	υĸ		C.G.CAMPBELL	. WIN		732113R
										A:	ACCURACY IS	FCR THE AVERA	GE ERRCR EET	EEN E AND
										0:	BROAD RESCLU	TION MEASUREM	ENTS COULD S	LFFICE.
											TO GIVE SHIE	LDED CRUSS SE	CTIENS TE 3 (5 PERCENT F	FERCENT. Sr
										м:	TEMPERATUR	ES BETHEEN 30 MODIFICATIONS	C AND 2000 D	EGREES K.
								_			115 Mar 7 C	0.05		
1 00 9	y 1	•00	KEV	30.0	KEV			1	US	A	REMAIG	DUE	¥/10++C1 ¥0	8210138
										<u>د</u> .	RESONANCE PA	ARAMETERS AND	CAPTURE CRUS	S SECTION.
										0.	DESIRABLE	NEED RESULVE	C AND UNRESCI	LVED CTIONS TO
											3.0 PERCEN	ACCURACY FO	R VARIOUS SE	LF-SHIELDING
											THIS REQUEST	WAS REVIEWED	BY CSEWG AN Phasis.	C RECLAMENDED
										N:	NEW REQUEST.	•		
STATUS			TINUCUS	05v16	 w gy	INDC								STATUS
22233	=====	=====	=======				=====:	========	====				*================	
93 NEF	PTUNIU	M 230) 	NEU ======	TRCN =====		z= == :	CAPT	URE	CRU!	SS SECTION		***********	
1070		• 0 0	KEV	1-00	MEV	50	-0 X	з	FR		M . SAL VATORES	S CAD		7920386
	•••							0		٥:	FOR FAST REA	ACTOR CALCULAT	LONS.	. ,2000.
										M:	SUBSTANTIAL	MODIFICATIONS	•	
93 NEP	TUNIU	M 230	5	NEU	TRUN	*====	*****	FISS	==== I GN	CRG	SS SECTION		222222222222	
42200-														
107	1 1	•00	KEV	1.00	MEV	50	• 0%	3	FR		M.SALVATGRES	6 CAD		792037R
										0: M:	FUR FAST REA SUBSTANTIAL	CTUR CALCULAT MUDIFICATIONS	IONS.	
******		=====				=====	====:	=========		= ===			***********	
23 NEF	=====	M 23		5PL =====3	=====	=====		4698		525:				*==========
1072	2						5 X	2	US	A	GILLIAM	NBS		761123R
										Q :	RADIDACTIVE	TARGET 2.14X(10++6) YR	
											FUR MASS DET	TERMINATION UF	FISSICNABLE	DEPUSITS.
93 NEF	TUNIU	M 23	, , , , , , , , , , , , , , , , , , , ,	NEU	TRON		=====	CAPT	URÉ	CRO	SS SECTION		************	
								-		-				
1073	3 5	00.	EV	5.00	MEV	15	.0%	2	cc	P	L.N.USACHEV	FEI		7940C6R
										0:	REQUESTED. FUR FAST-REA SEE GENERAL	CTOR BURN-UP	CALCULATION.	LR SPECIRUM
1074	•	U.	το	15-0	MEV	10	.0x	2	ËU	R	NEUTRON DOSI	METRY GROUP		GEL 812015R
• • •								_		c :	TO BE INCLUD	DED IN IRDE FI	LE	
										0:	FUR NEUTRON METHODS .	DOSIMETRY USI	NG SPECTRUM	JNFOLD ING
							====		====	z 2 2 1				
93 NE#		****	, 	==== <i>=</i>				7,2N		= = = :		************		
1079	5	U	• T Q	15.0	MEV	10	. x	2	us	A	SHARP	SRL		671112R
										0:	RADIOACTIVE	TARGET 2.14X(10**6) YR	
										u :	IU EVALUATE	CUNTAMINATION	UF PV-238 8	r 4 0-236 .
1076	5	U	= TQ	15.0	MEV	15	•0 X	1	FR		F.JGSSQ	CAD		762147F
										A: 0: M:	QUOTED ACCUR FUR FAST REA SUBSTANTIAL	RACY AT 2 STAN NCTOR FUEL CYC MUDIFICATIONS	DARD DEVIATIO LE CALCULATIO	ONS. ONS.

93 NEPTU	INIUM 237	NEUTRCN		N.2N	=====			(CGNTINUED)
1677			15.0%	2	ССР	L.N.USACHEV	FEI	7940C8K
					Q:	AVERAGE CROSS	SECTION IN A FAST	-REACTOR SPECTRUM
					0:	REQUESTED. For FAST-REACT SEE GENERAL CO	TOR BURN-UP CALCUL DMMENTS.	ATION.
1078	UP TO	15.C MEV	10.0%	1	BLG	CH.DE RAEDT.	MOL	812069N
					G :	U-235 FISSION CRUSS SECTION	SPECTRUM AVERAGE FOR NP-237(N+2N)M	REGUESTED NP-236 (22 HR
					с:	ISOMER) ALSO TO EVALUATE BU OF PU-236.	REQUESTED. UILD-UP OF TL-208	THE DECAY PRODUCT
STATUS								STATUS
U	NDER CONTINUOU	IS REVIEW BY I	NDC AND N	EANDC.	SEE AP	PENDIX A.		
93 NEPTU	INIUM 237	NEUTRON		SPECI	AL QUA	NTITY (DESCRIPT	TIGN BELCW)	
=========				\$23 222				
1075	7.00 MEV	12.0 MEV	25.0%	2	UK	V.BARNES C.G.CAMPBELL	UKW WIN	8120505
					c: 0:	PRODUCTION OF FOR ESTIMATION SAMPLES.	PU-236 N OF PU-236 IN IRF	RADIATEC FUEL AND
	NIUM 237	NEUTRON	*******	FISSI	 GN CRO	SS SECTION		
1080	50.0 KEV	7.00 MEV	2• X	1	USA	GILLIAM	NBS	781178R
					0: 0:	FOR MATERIALS	ARGET 2.14X(10**6) DOSIMETRY.) AE
1081	8.00 MEV	15.C MEV	5.0%	1	EUR	NEUTRON DOSING	ETRY GROUP	GEL 812017R
					c:	FOR SURVEILLAN	NCE OF DAMAGE IN A	PRESSURE VESSELS
					M:	SEE ALSU REQUE SUBSTANTIAL NO	EST AT LOWER ENER ODIFICATIONS.	SIES 812016
1082	UP TO	20.0 MEV	1.00%	1	BAN	M.M.KASIM	BAN	8330C1R
					G: M:	FOR NEUTRON DO New Request.	GSINETRY	
STATUS								STATUS
Ĺ	NDER CONTINUEL	IS REVIEW BY N	EANDC. SE	E APPEN	DIX A.			
93 NEPTU	NIUM 238	NEU TRON	*********	CAPTU	*******	SS SECTION		
1083	1-0C KEV	2.00 MEV	50.0*	2	FO	E - 10550	CAD	7620406
1005				-	A:	QUGTED UNCERT	AINTY AT 2 STANDA	RD DEVIATIONS.
					0: M:	FOR FAST REACT	TOR FUEL CYCLE CAN ODIFICATIONS•	LCULATIEN.
93 NEPTU	NIUM 238	NEUTRON	********	F1551	GN CRÚ	SS SECTION		

1084	1.00 KEV	2.00 MEV	50.0%	2	FR	F.JOSSO	CAD	792041F
					A: 0: M:	GUDTED UNCERTA FOR FAST REAC SUBSTANTIAL M	AINTY AT 2 STANDA TOR FUEL CYCLE CA ODIFICATIONS	RD GEVIATIONS. Loulation.
\$3 NEPTU	LNIUM 239 I====================================			======		55 SECTION		
1085	1.00 KEV	2.00 MEV	50.0%	2	FR	M. SAL VA TORE S	CAD	762148F
					0:	FOR FAST REAC	TOR CALCULATIONS.	
					M.	SUBSTANTIAL M	GDIFICATIONS.	
1086	25.3 MV	1.00 MEV	30.0%	2	UK	C.G.CAMPBELL	WIN	79213ER
					0:	FOR FAST REAC	TORS. QUIREMENT.	
	LNIUM 239	NEUTRON		N • 2N				
========	========================	12522233222222	-****====					-334844452244452222
1 C87	UP TO	15.0 MEV	50 •0 X	2	FR	F.J0550	CAD	7920426
					A: 0: M:	QUOTED UNCERT For fast reac Substantial M	AINTY AT 2 STANDA TOR FUEL CYCLE CA ODIFICATIONS.	RD DEVIATIONS. LCULATION.
93 NEPTU	JNIUM 239	NEUTRON		F1551	CN CRC	SS SECTION		
								*
1088	1.00 KEV	2.00 MEV	50.0%	2	FR	M.SALVATORES	CAD	762149H
					0: M:	FUR FAST REAC Substantial M	TOR CALCULATIONS. ODIFICATIONS.	
1689	25.3 NV	10.0 MEV	30.0X	2	UK	C.G.CANPBELL	WIN	792137R
			• • •		0:	FOR FAST REAC	TORS.	
========						EVALUATION RE	QUIREMENT.	
93 NEPTU	NIUM 240	NEUTRGN	= = = = = = = = = = = = = = = = = = =	CAPTU	RE CRU	SS SECTION		
---------------------	--	---	---------------------------------------	-------	--------------------	--	--	----------------
1090	1.00 KEV	2.00 NEV	50.0X	з	FR	M.SALVATORES	CAD	792043F
					0: M:	FOR FAST REACTOR SUBSTANTIAL MODI	CALCULATIONS. FICATIONS.	
93 NEPTU	NIUM 240	NEUTRON		FISSI	ON CRO	S SECTION		
1091	1.00 KEV	2.00 MEV	50.0*	7	E D	MCALVATORES	CAD	2626446
1091	1.00 KEV	2.00 HEV	30.04	3	л. С.	FOR FAST REACTOR	CALCULATIONS.	7920448
a = = = = = = = = =					M: =======	SUBSTANTIAL MCDI	F ICATIONS.	
94 PLUTO	NIUM 236	NEUTRON	*******	CAPTU	RE CRUS	SS SECTION		
1092	1.00 KEV	2.00 MEV	20.0%	1	FR	F.JUSSO	CAD	792253R
					A :	QUOTED UNCERTAIN	TY AT 2 STANDARD DEVIATION	s.
94 FLUTC	NIUM 236 ====================================	NEUTRON	********	FISSI	UN CRO:	SS SECTION		
1093	1.00 KEV	2.00 MEV	10.0%	1	FR	F.JOSSO	CAD	792045R
					A: 0: M:	QUOTED UNCERTAIN For fast reactor Substantial modif	TY AT 2 STANDARD DEVIATION Fuel cycle calculation. Fications.	5.
94 PLUTC	NIUM 237	NEUTRON		CAPTU	RE CRU	SS SECTION		
1094	1.00 KEV	2.00 MEV	50.0%	3	FR Di	M. SALVATORES		792046R
					M:	SUBSTANTIAL MODI	FICATIONS.	
94 PLUTO	NIUM 237	NEUTRUN	*********	FISSI	CN CRU:	SS SECTION		
1005	1-00 KEV	2.00 MEV	50-0*	7	ÉD	M.SALVATORES		7690470
1092		2100 121	50.04	5	0:	FOR FAST REACTOR	CALCULATIGNS.	7920478
					M:	SUBSTANTIAL MODI	FICATIONS.	
S4 PLUTO	NIUM 238			GAMMA	RAY Y	IELD		
1096			1. X	1	JAP	T.SUZUKI	JAE	762009N
					a :	YIELD PER DISINT	EGRATION OF 43.45,99.7,152	.7 KEV
					с:	(FOLLOWING ALP) THOUGH PRESENT S THE REQUIREMENT ASSAY OF PU-ISOT	HA DECAY EVENT) TATUS OF ACCURACY SEEMED T CUNFIRMATION IS REQUIRED. UPES BY GAMMA-RAY SPECTRUS	U MEET COPY
54 PLUTC	NIUM 238	GAMMA		TOTAL	NEUTRO	DN YIELD	****************************	
1097	UP TO	10.0 MEV	10.0%	2	CCP 	V.K.MARKOV	GAC	71404EN
		GAMMA ==================================		F1551		55 SECTION		
1058	UP TO	10.0 MEV	10.0%	2	ССР	V.K.MARKOV	GAC	714044N
					0:	FOR PHOTONUCLEAR	ASSAY OF PU.	
94 PLUTC	N1UM 238	======================================	*********	FISSI	0N PROI	DUCT MASS YIELD S	======================================	
1000		10-0 MEV	10-0*	2	CCP	V.K.MARKOV	GAC	714045
1033		10.0 M20	10.04	2	0:	PHOTONUCLEAR ASS	AY OF PU.	1140451
		****************			*******	SS SECTION		

1100	1.00 KEV	10.0 MEV	20.0%	2	FR	J.SALVY	BRC	742053R
					м: ===	SUBSTANTIAL MGDI	FICATIONS.	
S4 PLUTC	NIUM 238	NEU TR (N		N,2N	======			
1161	1. P T Á	20.6 MEV	10-0*	1	FR	J.SALVY	HRC	6821620
	0, 40	LUTU MLY		•	м:	SUBSTANTIAL MODI	FICATIONS.	ULULUL
1102	υρ ΙΟ	15.0 MFV	15.0%	1	FR	F.JOSSD	CAD	7920485
				-	A:	QUDTED UNCERTAIN	TY AT 2 STANDARD DEVIATION	5.
========					0: M: ======	FUR FAST REACTOR Substantial Múdia	FUEL CYCLE CALCULATION. FICATIONS. ====================================	========

94 PLUTO	NIUM 23	====== 8 ======	NEU	TRUN		F155	SIGN CRO	SECTION		
1103	1.00	KEV	3.00	MEV	15.0%	1	FR	F.JCSSC	CAD	732055R
							Q: A: G: M:	VALUE RELATIVE GUOTED UNCERTAI FOR FAST REACTO SUBSTANTIAL MOD	TO U-235 FISSION NTY AT 2 STANDAR R FUEL CYCLE CAL IFICATIONS.	CROSS SECTION. D DEVIATIONS. CULATION.
94 PLUTO	NIUN 23	 6	NEU	===== TR CN	= == *= = = = = = = = = = = = = = = = =	NEUT	RCNS EM	ITTED PER FISSIO	N (NU BAR)	
				=====	=============	=====	******		****************	
1104	500.	Eν	15.0	MEV	4.00%	2	FR	F.JOSSO	CAD	7320976
							A: 0: N:	QUOTED UNCERTAI FOR FAST REACTO SUBSTANTIAL MOD	NTY AT 2 STANDAR R FUEL CYCLE CAL IFICATIONS •) CEVIATIONS. Culation.
94 PLUTO	NIUM 23	 9 		== == = 		GAMM	A RAY Y	ELD		
1105					1. *	1	JAP Q:	T.SUZUKI	JAE ITÉGRATION DE 45.	762010N 2.104.2 AND 642.3
							0:	KEV GANMA RAYS (FOLLOWING AL THOUGH PRESENT THE REQUIREMENT ASSAY OF PU-ISO	REQUIRED. PHA DECAY EVENT) STATUS OF ACCURA CONFIRMATION IS TOPES BY GAMMA-R	CY SEEMED TO MEET Required. Ay Spectroscopy
94 PLUTO	NIUN 23	== = = = = = 9 = = = = = = = =	NEU	===== TRUN ======		TÜT4	CROSS	SECTION		
1106	0.50	MV	5.00	EV	, r					74 10990
1100			3.00		1	•	03A Q:	RADIOACTIVE TAR	GET 2.41X(10**4)	701000k
							0: M:	NEEDED FOR THER Substantial Mod	MAL CROSS SECTION IFICATIONS.	N EVALUATION.
1107	1.00	KEV	200.	KEV	2. %	1	JAP	M.KAWAI		7622106
								FISSION REACTOR	CALCOLATIENS.	
1108	1.00	NV	1.00	E∨	0.5 X	1	USA	HEMMIG	DOE	8210C7R
							й. 0: м:	NEEDED TO DETER THIS REGUEST WA AS DESERVING NEW REQUEST.	MINE THE THERMAL S REVIEWED BY CS SPECIAL EMPHASIS	J TR Shape Accurately. Ewg and Recommended •
1109	1.00	ĒV	500.	KEV	3.0 X	1	USA	HEMMIG	DOE	821015R
							0: A: 0: M:	RADIGACTIVE TAR WITH ENERGY RES SELONDARY STR THIS REQUEST WA AS DESERVING NEW REQUEST.	GET 2.41X(10**4 GLUTION SUFFICIE UCTURE UP TO 10 S REVIEWED BY CS. SPECIAL EMPHASIS) YR NT TC SHOW Kev. Ewg ang Recommended •
94 PLUTO	NIUM 23	= = = = = = = = 9	NEU	===== TR (JN	<i></i>	ELAS	TIC CRU	SS SECTION		******************

1110					10.0%	3	UK	J.FELL	WIN	č92416R
							6: C:	FOR LCNG TERM I SECTION.	MPROVEMENT OF TH	E ABSURPTIUN CROSS
1111	1.00	KEV	20.0	MEV	5.0%	1	FR	C.PHILIS	BRC	742054R
							0: M:	FOR CRITICAL AS	SEMBLIES. IFICATIONS.	
94 PLUTO	NIUM 23	====== 9	NEU	TRCN		DIFF	ERENTIA	LLASTIC CROSS	SECTION	*****************
8222222	=======	=====			===========================				***************	
1112	1.00	MEV	3.00	MEV	10. %	2	USA	SMITH Hemmig	ANL DÜË	6913036
							Q: A:	RADIGACTIVE TAR Incident energy	GET 2.41X(10**4) Resolution: 500	YR Kev.
1113	1.00	KEV	20.0	MEV	5.0%	1	FR	C.PHILIS	ERC	742055R
							C: M:	FOR CRITICAL AS	SEMBLIES. IFICATIONS.	
	NIUM 23	 9	NEU	TRGN	********	===== I NEL	ASTIC C	ROSS SECTION		
1114	U	р тс	20.0	MEV	10.0%	2	FR	C.PHILIS	BRC	742US7R
							01 M:	FOR CRITICAL AS SUBSTANTIAL MOD	SEMBLIES. DIFICATIONS.	
1115	800.	KEV	5.00	MEV		2	ССР	L.N.USACHEV	FEI	754023R
							A: Q:	FROM 0.8 - 1.4 FROM 1.4 - 2.5 FROM 2.5 - 5.0 NEED FOR FAST R FOR MORE DETAIL	MËV ACCURACY 15 Mëv Accuracy 17 Mëv Accuracy 30 Jëactor Calculati , seë introductië	PERCENT. PERCENT. PERCENT. UN. N.

94 PLUTO	CNIUM 239	NEUTRON	1 =====================================	NELASTIC	CROSS SECTI	CN ====================================	(CGNTINUED)
1116	50.0 KEV	10.0 MEV		1 US/	HEMNIG	DOE	821030R
					Q: RADIDACTI TOTAL INE A: ACCURACY	VE TARGET 2.41X(10++ LASTIC CRCSS SECTION RANGE 10. TO 15. PERC	4) YR NEEDED. IENT.
					BRGAD G MATRIX	ELEMENTS TO 10-20 PER	TRANSFER
					D: THIS REQU AS DESE M: NEW REQUE	IEST WAS REVIEWED BY C RVING SPECIAL EMPHASI ST.	ISEWG AND RECOMMENDED IS•
94 PLUT	NIUM 239	NEUTRON	222222222222 E	NERGY D	IFFERENTIAL I	NELASTIC CHOSS SECTIO	
							3140030
1117	00 10	15.0 MEV		2 (()	A: CROSS SEC	ALV FEI TION FOR INELASTIC RE	TI4023H MUVAL BELOW FISSION
					THRESHO DESIRED Excitatio Require U: See gener	NLDS OF U-238 AND OF P WITH 10 PERCENT ACCU IN CROSS SECTION FOR L D WITH 15 PERCENT ACC AL COMMENTS IN THE IN	PU-240 GR NP-237 JRACY. Juw Lying Levels Juracy. Jrgductign.
1118	7.00 KEV	10.0 MEV	20. X	1 US	A HEMMIG	DCE	7210646
					0: RADIDACTI M: SUBSTANTI	VE TARGET 2.41X(10**4 AL MODIFICATIONS.)) YR
34 PLUTO		neu TRGN		NERGY-A	SEESSEESSEE NGLE DIFFEREN	TIAL INELASTIC CRUSS	
525092 5 4		=======================================		*******			=======================================
1119	UP TO	20.0 MEV	20.0%	2 FR	J.SALVY	BRC	742058F
					M: SUBSTANTI	AL MODIFICATIONS.	
94 FLUTO	IN IUM 239	NEUTRON	=========== C ===============	APTURE (RUSS SECTION	:==&==================================	***************************************
1120	1.00 KEV	1.00 MEV	10.0%	2 GEF	8 B.GOEL	KFK	7120E2R
					Q: ALPHA ALS A: PREFER 5 Q: FOR BURNU	O USEFUL. PERCENT ACCURACY UP T IP CALCULATIONS.	18 160 KEV.
1121	1.00 KEV	16.0 MEV		1 FR	J.SALVY	BRC	7421046
					A: ACCURACY O: FOR CRITI M: SUBSTANTI	5 PERCENT TO 3 MEV. 2 CAL ASSEMBLIES. AL MODIFICATIONS.	20 PERCENT AECVE.
1122	5.00 KEV	10.0 MEV		2 CCF	L.N.USACH	IEV FEI	7540126
					A: FROM 5.0 FROM 0.1 FROM 0.8 ABOVE 4.5 G: NEED FOR FOR MORE	- 100 KEV ACCURACY 3. - 0.8 MEV ACCURACY 10 - 4.5 MEV ACCURACY 50 MEV REQUIREMENTS 2 FAST REACTOR CALCULAT DETAIL SEE INTRODUCTI	7 PERCENT.) PERCENT.) PERCENT. IIMES WEAKER. IGN.
1123	1.00 MV	1.00 EV	0.5 X	1 US/	HEMMIG	DOE	6210C9F
					G: RADIDACTI G: NEEDED TO THIS REQU AS DESE M: NEW REQUE	VE TARGET 2.41X(10** DETERMINE THE THERMA JEST WAS REVIEWED BY C RVING SPECIAL EMPHASI ST.	4) YR Al Shape Alcurately. Sewg and Recommended IS.
STATUS							STATUS
	JNDER CONTINUCU	S REVIEW BY II	NDC• SEE APP	ENDIX A	, 		
94 PLUTO	IN IUM 239	NEUTRON	T ========================	GTAL PHO	TON PRODUCTA	UN CROSS SECTION	
1124	120. KEV		20.0%	2 UK	C+G+CAMP8	SELL WIN	69241EF
					Q: GAMMA SPE A: INCIDENT	CTRUM WANTED. ENERGY, ABOUT 120 KEV	•
					LUW RESUL PHOTON C: FOR STUDY	SPECTRUM. 'UF ACTIVATION AND HE	ACIDENT ENERGY AND
1125	1.00 KEV	20.0 MEV	10.0%	1 FR	J.SALVY	BRC	7420966
					C: FOR SHIEL M: SUBSTANTI	DING. AL MODIFICATIONS.	
1126	25.3 MV	15.0 MEV	5-0*	1 FR	B. DUCHENT		7620466
				• • •	Q: GAMMA SPE	CTRA REQUIRED	
					A: ENERGT RE THAN 1 ME 1 MEV QUGTED AC 0: FOR SHIEL	SULUTION OF 250 KEV F V AND 500 KEV FOR ENE CURACY AT 2 STANCARD DING CALCULATIONS - F	DR GAMMA RAYS LESS RGIES GREATER THAN DEVIATIONS. VALUATION MAY BE
					SUFFICIEN	IT C	
1127	UP TO	10.0 MEV	10.0%	1 FR	H.SALVATO	IRES CAD	£32015F
					G: GAMMA SPE G: FAST REAC M: NEW REQUE	TGR CALCULATIONS. ST.	

	NIUM 23G			=====			***********************	
				=====		******************		
1128		20.0 MEV	10.01	1	ER	C.PHILLS	BRC	682067R
	00			•	 M.	SUBSTANTIAL MODIE	LCATIONS.	
						SODGI ANTIAL HODI		
1129	6.00 MEV	10.0 MEV	10. %	2	USA	HEMMIG	DOE	6913C6R
					a: 0:	RADIOACTIVE TARGE TG PREDICT BUILDU	T 2.41x(10**4) YF JP OF PU-238.	
1130	UP TO	15.0 MEV	15.0%	2	FR	F.JOSSO	CAD	762152R
					A: 0: M:	QUOTED UNCERTAINT FOR FAST REACTOR SUBSTANTIAL MODIE	TY AT 2 STANDARD DEVIATION FUEL CYCLE CALCULATION.	·S •
94 PLUTC		NEUTRON					**************************	
		*************			*******		.geollozzatg400000121222	
1131	UP TO	20.0 MEV	20.0%	1	FR	J.SALVY	BRC	682068k
S4 PLUTC	NIUM 239	NEUTRCN		ENERG	Y U1FFL	RENTIAL NEUTRUN-E	MISSION CROSS SECTION	
1172	100 KEV	14 0 MEV					005	8210576
1132	100. REV	14.0 MEV		1	USA	DADIGACTIVE TARG		C21U2/H
					u: A:	SPECTRUM OF EMITT SEVERAL ENERGIE ACCURACY RANGE 10	EL 2.41X(10##4) TH IED NEUTRONS NEEDED AT ES.). TO 15. PERCENT.	
					о: м:	THIS REQUEST WAS AS DESERVING SP NEW REQUEST.	REVIEWED BY CSEWG AND REC PECIAL EMPHASIS.	CMMENDED
	NIUM 230			F SC 1				********
				=====	=======			
1133	1.00 EV	3.00 MEV	2. X	1	USA	SMITH	ANL	651467R
					••	HEMMIG		
					A:	VERIFICATION OF C ACCURACY USEFUL NEED RELATED ACCU	URRENT ACCURACY OR INTERN JRACY FOR 5-16 PERCENT ENG	EDIATE Rgy
					6:	BINS. FOR FAST REACTOR	CALCULATIONS.	
1134	3.00 MEV	10.0 MEV	3. X	1	USA	SMITH	ANL	691471R
					(; A;	RADIGACTIVE TARGE VERIFICATION OF C	DUE ET 2.41X(10**4) YR Turrent Accuracy ûr intern	4EDIATE
					c:	ACCURACY USEFUL NEED RELATED ACCU BINS. FUR FAST REACTOR	JRACY FOR 5-10 PERCENT END Calculations.	ERGY
			1 6 2	-				6024265
1155	1.00 KEV	13.0 MEV	1.54	3		CATIO TO NEORE	WIN	092420R
					A: 0:	ACCURACY FUR AVER E AND 2E. FOR FAST REACTOR	AGE VALUE OF THE ERRCR BE	TWEEN
					м:	SUBSTANTIAL MODIF	FICATIONS.	
1136	1.00 KEV	4.C0 MEV		1	ССР	M.N.NIKLLAEV	FEI	714024R
					Q:	RATIO TO U-235 F. MEASUREMENT ANI (N.ALPHA), LI- OTHER STANDARD BELCW 30 KEV MEAS BELCW 30 KEV MEAS	ISSION CS IS WANTED BUT AND D MEASUREMENT OF RATIGS TO 6(N,ALPHA) CRCSS SECTICNS S WOULD BE VERY USEFUL. SUREMENTS OF TRANSMISSION SE DETECTOR AND BY SELE ON	SCLUTE D 8-10 AND CURVES
						METHOD WITH FIS SELFSHIELDING I THESE CUPYES MUST	SEION DETECTOR WANTED FOR EVALUATION. The MEASURED with Attenuu	ATIONS OF
					A:	THE PRIMARY BE	AM DOWN TG 1 PERCENT. D TC BETTER THAN 2.0 PER	CENT.
						REGION 20 KEV	N OF 1.5 PERCENT DESIRED TO 1 MEV.	1N - D
					o	SUFFICIENT FOR	SUCH MEASURE MENTS.	-0
					0.	REQUEST CONSIDERE	ED FULFILLED, WHEN AT LEAS	ST THREE
						REQUESTED ACCU	RACY. ECAUSE IT IS DIFFICULT TO	
						INTERPRET THE MACROSCOPIC DA	SELF-SHIELDING FACTORS FR TA DNLY.	M
1137	25.3 NV	1.00 KEV	1. X	2	USA	CŪWAN	GEB	7210E5R
					a: G:	RADIDACTIVE TARG IMPROVED PRECISI DIRECT MEASUREMEN U AND PU HALF LI AFFECT THESE M	ET 2.41X(1C**4) YR ON NEEDED FOR THERMAL REAN NTS DISAGREE. VES SHOULD BE CUNFIRMED A: EASUREMENTS.	CTORS. S THEY
1138	10.0 KEV	14.0 MEV	2. X	1	USA	HEMMIG	DOE	721086k
					٥:	RADIGACTIVE TARG	ET 2.41X(10**4) YR .F) REQUIRED.	
					A:	INCIDENT ENERGY I AVG. OVER 10-20	RESOLUTION: 3. PERCENT. PERCENT ENERGY INTERVALS	
1139	10.0 KEV	1.00 MEV	2. X	2	USA	COWAN	GEB	741125R
					G:	RADIUACTIVE TARG	ET 2.41X(10##4) YR .F) WANTED.	

94 PLUTG	NIUM 239	NE	UTRGN		F155	IGN CRO	SS SECTION		(CGNTINUED)
1140	UP T	c 20 .0	MEV		1	FR A: 0: M:	C.PHILIS ACCURACY 5 PERC FOR CRITICAL AS SUBSTANTIAL MOD	URC Cent to 1 Kev, 2 Percent Ssemblies. Difications.	742055R A8CVE•
1141	5.00 KE	v 10.0	MEV		2	ССР А: U:	L.N.USACHEV FROM 5.0 - 100 FROM 0.1 - 0.8 FROM 0.8 - 4.5 ABOVE 4.5 MEV F NEEU FUR FAST F FOR MORE DETAIL	FEI KEV ACCURACY 1.2 PERCEN MEV ACCURACY 1.3 PERCEN MEV ACCURACY 2.6 PERCEN REQUIREMENTS 2 TIMES WEA REACTUR CALCULATICNS. SEE INTREDUCTION.	7540096 NT. NT. NT. NKER.
1142	1.00 EV	20.0	KEV	3. X	ı	USA	DONCALS	WEW	761038R
						0:	NEEDED FOR FAST	REACTOR CALCULATIONS.	
1143	20.C KE	v 3.00	MEV	5. X	1	USA Q:	DONCALS RADIGACTIVE_TAP	WEW RGET 2.41X(10++4) YR	7610408
						a:	NEEDED FOR FAST	T REACTOR CALCULATIONS.	
1144	100. KE	V 20.0	MEV	2 . X	2	USA Q:	COWAN RADICACTIVE TAF Absolute measuf	GEB RGET 2.41X(10**4) YR REMENT CESIRED.	761089R
1145	1.00 KE	v 1.00	MEV	3. X	1	JAP	MaKAWAI	NIG	762211R
						0: M:	FISSION REACTOR CORE DESIGN AND LARGE DISCREPAN 50 KEV TO 1.0 M SUBSTANTIAL MOD	R CALCULATIONS. D ANALYSIS. NGIES BETWEEN EXPERIMENT MEV. DIFICATIONS.	IAL DATA FROM
1146	1.0C KE	v 100.	KEV	2.0x	1	GER	H.KUESTERS	KFK	792221R
1147	1.00 MV	1.00	ΕV	0.5 X	1	USA	HEMMIG	DOE	8210¢8R
						0: J: M:	RADIOACTIVE TAN NEEDED TO DETER THIS REQUEST WA AS DESERVING NEW REQUEST.	RGET 2.41X(10##4) YR MMINE THE THERMAL SHAPE AS REVIEWED BY CSEWG AND SPECIAL EMPHASIS.	ACCURATELY. Recummended
1148	1.00 EV	1.50	MEV	1.0 %	1	USA	HEMMIG	DOE	821016R
						G: C: M:	RADIGACTIVE TAN THIS REQUEST WA AS DESERVING NEW REQUEST.	RGET 2.41X(10**4) YR AS REVIEWED BY CSEWG AND SPECIAL EMPHASIS.	RECUMMENDED
STATUS									STATUS
U	NDER CONTI	NUQUS REVI	EW 87	INDC AND N	EANDC.	SEE AP	PENDIX A.		
94 PLUTC	NIUM 239	NE	UTRON		CAPT	URE TO	FISSION RATIO	(ALPHA)	
1149	1.00 KE	v 50.0	KEV	4. X	1	USA	SMITH Hemmig	ANL DGE	6913156
						Q:	RADIGACTIVE TAN CAPTURE CROSS S	RGET 2.41X(10**4) YR Sectiun Equally Useful.	
1150	600 . Kë	v 10.0	MEV	10. X	1	USA	SMITH HEMMIG	ANL DOE	6913176
						0:	RADIDACTIVE TAP CAPTURE CRUSS	RGET 2.41X(10**4) YR Section Equally Useful.	
1151	100. EV	800.	KEV	7.0%	1	ССР	M.N.NIKOLAEV	FEI	714025R
						G: A: 0:	FOR EVALUATION FISSION-RESO MEASUREMENTS CI RESPUNSE DETI ITH CAPTURE BEAM ATTENUATIO IN REGION 1 TC DESIRABLE. LETHARGY RESOLU 0.1 TO 30 KE AT LEAST THREGE WITHIN REQUES SEE GENERAL CO FIRST PRIORITY INTERPRET THI MACROSCOPIC D	OF DIFFERENCES IN CAPTO NANCE SELF SHIELDING. F TRANSHISSION CURVES W AND FISSICN DETECTORS J ON DOWN TO 1 PERCENT WAN 100 KEV. 4 TU 5 PERCENT UTION GF 0.2 SUFFICIENT V. DIFFERENT REQUESTS MUST STED ACCURACY. MENTS IN THE INTRODUCT JECAUSE IT IS DIFFICULT E SELF-SHIELDING FACTORS DATA ONLY.	URE AND ITH FLAT- ATION METHOD ARE WANTED. NTED. T ACCURACY FCR REGION T CGINCIDE IUN. T TC 5 FRUM
1152	1.00 ME	v 20.0	MEV	10.0%	2	JAP	M.SASAK I	MAP	812032R
						0:	INSUFFICIENT E FOR CALCULATION REQUESTED	XPERIMENTAL DATA N OF FBR BREEDING RATIG	, EVALUATION
1153	UP T	0 600.	ĸev	6.Û X	ì	USA	HEMMIG	DOE	8210176
						C: 0: M:	RADIUACTIVE TAN THIS REQUEST WA AS DESERVING NEW REQUEST.	RGET 2.41X(10**4) YR AS REVIEWED BY CSEWG ANG SPECIAL EMPHASIS.	D RECOMMENDED
STATUS									STATUS
	NDER CUNTI	NUCUS REVI	E 1 8 Y	INDC. SEE	APPEND	IX A.			

94 PLUTC	NIUM 239	NE(JTRON		NEUT	RONS EN	TTED PER NEUT	TRON ABSORPTION	(ETA) ••••••
1154	10.0 MV	0.50	ΕV	0.75%	ı	UK	J.FELL	WIN	642006R
						0: A: 0:	VALUE RELATIN ACCURACY IS F FOR TEMPERATU	VE TO 25.3 MV ETA FOR AVERAGE VALUE JRE COEFFICIENT W	WANTED. S IN 20 MV STEPS. Crk.
STATUS									STATUS
U	NDER CONTI	NUGUS REVI	EW EY	INDC. SEE	APPEND	IX A.			
94 FLUIC	NIUN 239	NE	UTRON		NEUT	RCNS EM	ITTED PER FIS	SIGN (NU BAR)	***********
1155	25.3 MV	3.00	MEV	.3 %	1	USA	SMITH HEMMIG	ANL DGE	6±1050R
						0: A: 0:	RADIDACTIVE 1 ACCURACY OF (FOR FAST REAC	TARGET 2.41X(10** 0.5 PERCENT USEFU CTOR CALCULATIONS	4) YR L• •
1156	UP T	0 15.0	MEV	0.5 X	1	JAP	N.KAWAI	NIG	702037R
						A: 0:	ACCURACY REQU POSSIBLE. FOR FAST REAC CALCULATIONS	JIRED TO BETTER T CTOR AND HYBRID F •	HAN G.2 FERCENT IF USIGN REACTCR
1157	25.3 MV	2.50	MEV	0.5%	2	CCP	M.N.NIKOLAEV	FEI	714026R
						Q: A: U:	RATIC TO CF- ABSOLUTE MEAS THERMAL NEU PERCENT WOU DEPENDENCE CF-252 NU-1 ENERGY DEPENI PERCENT ACC ENERGY MEY- SEE GENERAL O	252 NU REGUIRED. SUREMENTS OF NU-E JIRONS WITH ACCUR JLD EE VERY USEFU OF PU-239 NU-BAR BAR STANDARU. Dence GF NU IS WA Curacy. JTIGN DF 10. PERC COMMENTS IN THE I	AR AND ETA FOR ACY OF AT LEAST 0.5 I FOR LOWERING THE RESULTS FROM THE NTED WITH 0.7 ENT REGUIRED BELOW NTRODUCTION.
1158	UP 1	0 20.0	MEV		1	FR	C.PHILIS	BRC	7421C1R
						A: 0: M:	ACCURACY 2 PE FOR CRITICAL SUBSTANTIAL P	ERCENT TO I KEV. ASSEMBLIES. MODIFICATIONS.	1 PERCENT ABOVE.
1159	5.00 KE	V 10-0	MEV		2	ССР	L •N •USACHEV	FEI	754011R
						A: 0:	FROM 5.0 - 10 FROM 0.1 - 0 FROM 0.8 - 4 ABOVE 4.5 ME NEED FOR FAS FOR MORE DET	00 KEV ACCURACY C •8 MEV ACCURACY C •5 MEV ACCURACY I V REQUIREMENTS 2 T REACTOR CALCULA AIL SEE INTRODUCT	•5 PERCENT• •5 PERCENT• •2 PERCENT• TIMES WEAKER• TICNS• IUN•
1160	25.3 MV	1.00	KEV	1. 2	1	USA	DONCALS	w E, W	7610416
						Q: C:	RADIGACTIVE ESSENTIAL FUI	TARGET 2.41X(10** R ACCURATE FAST R	4) YR Eactur Calculations.
1161	1.00 KÉ	V 3.00	ĸev	•5 X	1	USA	DENCALS	wêw	761126F
						0: G:	RADICACTIVE ESSENTIAL FO	TARGET 2.41X(10*4 R ACCURATE FAST F	4) YR Reactor Calculations.
1162	3.0C KE	V 10.0	MEV	1. X	1	USA	DUNCALS	WÊW	761127R
						0: 0:	RADIOACTIVE ESSENTIAL FO	TARGET 2.41X(10** R ACCURATE FAST R	(4) YR Reactor Calculations.
1163	1.00 M	1.00	ΕV	•2 X	1	USA	DEI	BET	78115CR
						Q:	2.41X(10**4) Measurements	YR Relative to u-23	33 AND U-235 WANTE
1164	25.3 M	500.	KEV	0.3 X	1	USA	HEMMIG	DOE	8210186
						G: []: M:	RADIGACTIVE THIS REQUEST AS DESERVI NEW REQUEST.	TARGET 2.41X(104 WAS REVIEWED BY NG SPECIAL EMPHAS	**4) YR Csewg and Recommended Sis•
STATUS									STATUS
I	HERMAL VAL	UE UNDER C	ONTIN	UOUS REVIEW	BA II	NDC AND	NEANDC. SEE A	PPENDIX A.	
54 PLUTO	NIUM 239	NE	UTRĹN		DEL/	AYED NEU	TRONS EMITTED	PER FISSION	
1165	25.3 M	5.00	MEV	5 . X	2	USA	SMITH	ANL	. 761050R
						۵:	RADIOACTIVE	TARGET 2.41X(10**	4) YR
1166	25.3 M	v 10.0	MEV	5. X	2	JAP	TOMURATA	NIG	762048N
						a: 0:	THE REQUESTE AND GRUUP YI CAN BE USED NEUTRONS FOR ACCURACY GF INCIDENT ENE ACTIVE ASSAY	D QUANTITIES ARE ELDS (NORMALIZED TO FIT THE DECAY THE TIME RANGE (5 PER CENT. RGY STEP LESS TH OF MIXED FRESH (THE GRCUF HALF LIVES TU 1 FISSION) WHICH Curve LF Delayed 0.1-300 Sec Within An AN 2 MEV. AND IRRADIATED FUEL
STATUS									STATUS
	NDER CONT	INUCUS REVI	EW BY	INDC AND N		SEE AF	PENDIX A.		

94 FLUTO	NIUM 239	NEUTRON		ENERGY	SPEC1	RUM ÚF FISSION NE	LUTRONS	
1167	100. KEV		2.0%	1 U	јк	C.G.CAMPBELL	WIN	692433R
					A: D:	INCIDENT ENERGY, ACCURACY 2 PERCEN 10 PERCENT UN THE AND BELOW 25 M LOW RESOLUTION A FOR FAST REACTOR FOR REACTION RATE	ABOUT 100 KEV. NT AVERAGE E°. E NUMBER OF NEUTRONS AECVE MEV. DEGUATE FCR INCIDENT ENERG S. ANALYSIS.	. 5 MEV
1168	UP TO	20.0 MEV	5.0%	1 F	R	C.PHILIS	BRC	7421C3R
					M:	SUBSTANTIAL MODIF	ICATIONS.	
1169	25.3 MV	20 .0 Mev	10. X	2 U	usa Q:	COWAN Radigactive targe	GE6 Et 2.41x(10**4) yr	761051R
1170	25.3 MV		1 • X	2 U	ISA	DEI	BET	781186R
					0: A: G:	RAUIOACTIVE TARGE NEED SHAPE OF NEU 100 KEV TO 15 P Relative Peak to Needed For Critic	ET 2.41X(10**4) YR JTRON ENERGY DISTRIBUTION MEV. 1 PERCENT. CALITY CALCULATIONS.	FRCM
1171	100. KEV		2.0%	1 G	SER	H.KUESTERS	KFK	792222R
					A:	INCIDENT ENERGY, 2 PERCENT ACCURA 10 PERCENT ACCURA NEUTRONS ABOVE 5	ABOUT 100 KEV. CY ON MEAN FISS. SPECTRUM ACY WANTED ON THE NUMBER C MEV AND EELGW .25 MEV.	ENERGY. F
1172	10.0 KEV	10.0 MEV		1 U	JSA	HEMMIG	DOE	821032F
					с:	RADICACTIVE TARGE PROMPT FISSION NE TO THAT UP CF- 1-1.5 PERCENT. SHAPE UP THE SE THIS REQUEST WAS AS DESERVING SE	ET 2.41x(10*44) YR Eutron Spectrum with Refer 252 with an Accuracy of e(An Absolute Measurement o Pectrum May be necessary. Reviewed by csewg and reo Pecial Emphasis.	RENCE AVG) TO SF THE CLMMENDED
ST & TUS					м:	NEW REQUEST.		
	UNDER CONTINUCU	S REVIEW EY IN	DC. SEE AP	PENDIX	A.			
94 PLUTO	IUM 239	NEUTRON		====== Energy	SPEC	TRUN OF DELAYED F	ISSION NEUTRUNS	*******
	26 3 MV	E 00 MEV		2 1		CMITH	ANI	4612125
1173	2003 MV	5.00 MEV		2 0		HENMIG	DCE	UAI215M
					a: c:	RADIGACTIVE TARG HALF-LIFE AND EN FOR ANALYSIS OF A CALCULATIONS.	EI 2.41X(10##4) YR Ergy Spectrum Needed. Fast Criticals and fast re	ACTOR
94 PLUTO	IIIII 239	NEUTR CN		SPECTRU	JM CF	PRUNPT GAMMA RAY	S EMITTEC IN FISSION	
1174	25.3 MV	14.0 MEV	2.0 %	3 0	CP	S.S.KOVALENKO	RI	7340C2N
		•			Q: A: Q:	YIELD AND SPECTR 10.0 KEV GAMMA RI FOR ASSAY OF PU GAMMAS.	A WANTED FUR S TO 15 MEV C ESGLUTION WANTED. In Fuel elements from prom	SAMMAS.
94 PLUT(20022222222222222222222222222222222222	NEUTRON		DELAYED) GAMI	MA SPECTRUM FROM	FISSION PRUDUCTS	
1175	25.3 NV		15. *	3 U	154			7010435
					a:	RADIDACTIVE TARG SPECTRA 0.25-5 M 1 MSEC-12 HR.	ET 2.41X(10++4) YR Ev and TIME-Gepencent yiel	D FOR
					A: C:	ASSOCIATE GAMMA' POSSIBLE. GE(LI) RESOLUTIO FCR NCN-DESTRUCT	S WITH FISSICN FREDUCTS, 1 N - 2.5 KEV AT 1.2 MEV. IVE ASSAYS CF PU-239.	lf
94 PLUT	CNIUM 235	NEUTRON		FISSIC	N PRO	DUCT MASS VIELD S	1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/	
1176	25.3 MV		3. X	2 L	JSA	DEI	₿ET	6711258
					a: o:	RADIOACTIVE TARG CUMULATIVE AND D OF 15-MIN ISGM YIELDS OF ND-147 FOR CALCULATION	ET 2.41X(10**4) YR IRECT YIELD OF XE-13L (ING ER). Anu SM-149 WANTED. Of FISSION PRODUCT POISCNS	LLUSIVE
1177	25.3 MV		ч. х	2 1	JSA	DEI	BET	67112¢R
					0: 0:	RADIDACTIVE TARG YIELD OF CS-137 FOR BURN-UP INDI	ET 2.41X(10**4) YR Wantec. Cator standard.	
1178	25.3 NV		1.0%	1 0	ССР	S.A.SKVORTSOV O.A.MILLER	KUR KUR	70402CN
					0: 0:	YIELDS OF CS-133 FOR ASSAY OF PU THE FISSION PR	AND CS-137 WANTED. In Spent fuel elements by Dduct gamma rays.	

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94 PLUTO	NIUM 239 =========	NEUTRON		F I S S I	CN PRO	DUCT MASS YIELD S	SPECTRUM (CC	ONTINUED)
1179	25.3 MV		1.0%	2	ССР	S.A.SKVORTSOV O.A.MILLER	KUR KUR	704023N
					a: c:	YIELDS OF 2R-95 ARE REQUIRED. FOR ASSAY OF PU THE FISSION PR	, RU-106, EA-140 AND CE-144 IN SPENT FUEL ELEMENTS BY RODUCT GAMMA RAYS.	3
1180	25.3 NV		1.0%	3	CAN	W.H.WALKER	CRC	7118C3R
					0: 0:	YIELD OF XE-135 FOR CALCULATION	WANTED. OF FISSION PRODUCT ABSORP	TION.
1181	25.3 MV	15.0 MEV	5. X	2	USA	COWAN	GEB	741126R
					0:	RADIGACTIVE TARC ALL FISSION PROD	GET 2.41X(10**4) YR Ducts.	
STATUS								STATUS
U ========	NDER CONTINUCI	JS REVIEW BY IN	DC. SEE A	PPENDI	X A.			
94 PLUTC	NIUM 24C			G A M M A	RAY Y	IELD		
1182			1 • X	1	da l	T.SUZUK I	JAE	762011N
					o: 0:	YIELD PER DISINT KEV GAMMA RAYS F (FCLLCWING ALF THOUGH PRESENT THE REQUIREMENT ASSAY OF PU-ISOT	FEGRATION OF 45.2,104.2 AN Required. Ha decay event) Status of accuracy seemed Confirmation is required. Fopes by gamma-ray spectro:	C 642.3 Tù MEET SCOPY
94 PLUTC	NIUM 240	NEUTRON		TOTAL	CRUSS	SECTION		
1183	5.00 KEV	20.0 MEV	1. *	2	USA	WESTON	0RL	801264R
					۵:	RADIOACTIVE TARG	GET 6.57X(1G*#3) YR Ation to limit mudel calcu	LATIONS.
1184	5.00 KEV	10.0 MEV		1	USA	HEMMIG	DCE	821035R
					G: A:	RADIDACTIVE TARG ONLY CNE CUMPREN RESULT EXISTS TO ESTABLISH S 1-2 PERCENT. THIS REQUEST WAS	SET 6.57X(10**3) YR Hensive and Reascnably Rel Früm 0.04 - 1.0 Mev. Data Snergy Averaged Value TO S Reviewed by CSENG and Re	IABLE NEEDEC
					M:	AS DESERVING S NEW REQUEST.	SPECIAL EMPHASIS.	
94 PLUTC	SEE 22222222222 NIUM 240			====== INELA ======	STIC C	RÚSS SECTIÓN		
1185		10-0 MEY		,	USA	HENNIG	DOF	8210365
				L	Q: A: 0: M:	RADIOACTIVE TARC TOTAL INELASTIC DETERMINE BRO. TRANSFER MATR ACCURACY RANGE THIS REQUEST AS DESERVING NEW REQUEST.	GLT 6.57X(10**3) YR CROSS SECTION NEEDED TO AD GROUP (E.G. 29 GROUP) IX ELEMENTS TO 30 PERCENT. 20. TO 25. PERCENT. 5 REVIEWED BY CSEWG AND RE SPECIAL EMPHASIS.	CCMMENDED
94 PLUTO	NIUM 240	NEUTRGN		ENERG	Y DIFF	ERENTIAL INELAST	IC CROSS SECTION	*********
1186		5-00 MEV	10-0*	2	CCP	MANANIKOLAEV	FFI	7140255
				L	A:	CROSS SECTION FO THRESHOLDS OF WITH 10 PERCED EXCITATION CS FO	DR INELASTIC REMOVAL BELEW U-238 AND PU-240 GR NP-23 NT ACCURACY. DR LOW-LYING LEVELS REGUIR	FISSICN 7 WANTED ED WITH
					c:	ACCURACY OF 1 See general com	5 PERCENT. MENTS IN THE INTRODUCTION.	
94 PLUTO	NIUM 240	NEUTRGN		ENERG	Y-ANGL	E DIFFERENTIAL I	NELASTIC CRUSS SECTION	*********
1187	υρ το	4.00 MEV	40.0%	2	Uκ	C.G.CAMPBELL	WIN	652443R
				_	0:	FOR FAST REACTO	RS.	
	NIUM 240	**************************************		CAPTU	====== IRE CRU	SS SECTION		*******
		***************	********	114222	======			
1188	500. EV	15C. KEV	5 . X	1	USA Q:	SMITH RADIOACTIVE TAR	ANL GET 6.57X(10#*3) YR	691389R
					A: 0:	FOR FAST REACTO	PERCENT WOULD BE USEFUL. R CALCULATIONS.	
1189	150. KEV	1.00 MEV	10. X	1	USA	HEMMIG		691350R
					Q: A: C:	ACCURACY GF 15 FOR FAST REACTO	DERCENT USEFUL. R CALCULATIONS.	
1190	500. EV	1.00 MEV	5.00%	2	FR	M.SALVATORES	CAD	692451R
					Q: 0: M:	ABSOLUTE VALUES RELATIVE VALU TO U-238 CAPT FOR FAST REACTO SUBSTANTIAL MOD	USEFUL BUT FEGUEST CONCER ES VERSUS ENERGY OR RELATI URE OR U-235 FISSICN. R CALCULATIONS. IFICATIONS.	NS MAINLY VE VALUES

1151 5.00 MEV 1.00 MEV 1.00 NE 2.00 AIT INSTA RESULTION RESOLUTION RESOLUTIO	94 PLUTO	NIUM 240	NEUTRCN		CAPT	URE CROS	S SECTION	(CON	TINUED)
A1 1 NOVA RESOLUTION NECKED. 1182 500. EV 1.46 MEV 7.68 2 CCP MANIAGAEY FII 7.4033 1183 5.00 MEV 10.0 MEV 2 CCP MANAGAES LOWARD TABLE AUT ATLES IS TO CAMABE AUT ATLES IN COMPANY IS THE AUTOCOMPANY IS TO CAMABE AUT ATLES IN COMPANY IS TO CAMABE AUTO ATLES IN COMPANY IS TO CAMABE AUTOMATION. 1195 25.3 MV 100. EV 3.0 X C-ACAMABEL AUTOMATION AUTOMATIONA	1191	5.60 KEV	1.00 MEV	10.0x	2	GER	B.GCEL	KFK	692453R
1152 560. EV 1.40 MEV 7.03 2 CCP MANUA RU FEI 1.4012 1153 5.00 MEV 10.0 MEV 2 CCP LAUGACHEV FEI 75000 1153 5.00 MEV 10.0 MEV 2 CCP LAUGACHEV FEI 75000 1153 5.00 MEV 10.0 MEV 2 CCP LAUGACHEV FEI 75000 1154 500.0 EV 5.00 MEV 4.00 2 CCP LAUGACHEV FEI 75000 1155 500.0 EV 5.00 MEV 4.00 2 CCP LAUGACHEV FEI 75000 1156 500.0 EV 3.00 ALV ALVA 2 CCP LAUGACHEV FEI 75000 1156 120.0 EV 3.00 ALV ALVA COP ALVANDOUTION COP ALVANDOUTION 1156 120.0 REV 20.00 3 UX COP COP COP COP CO						A:	1 NSZM RESOLUTIO	DN NEEDED.	
0: FALLE TO U-235 FIRSTON GS MARIES UNFALLED TO U-335 FIRSTON GS MARIES	1192	500. EV	1.40 MEV	7.0%	2	ССР	M.N.NIKOLAEV	FEI	714032R
1153 5.00 KEY 10.0 KEY 2 CCP L.N.USACHEY FEI 750000 1153 5.00 KEY 10.0 KEY 2 CCP L.N.USACHEY FEI 750000 1154 500. EV 5.00 MEY 4.00 Z 2 CCP L.N.USACHEY FEI 750000 1154 500. EV 5.00 MEY 4.00 Z 2 CCP L.N.USACHEY FEI 750000 1155 25.3 MY 100. EV 3.0 X 1 USA MANTO ACCUMACY FEI 750000 1155 25.3 MY 100. EV 3.0 X 1 USA MANTO ACCUMACY FEI 750000 1156 120. KEY 20.02 3 UKA 10.02 MEY ACCUMACY FEI 750000 FEI 750000 1157 120.0 KEY 10.0 KEY 3.0 X C.G.CAMPEL 1 M 604440 1156 120.0 KEY 10.0 X 3.0 X C.G.CAMPEL 1 M 700000 MEY 7000000000000000000000000000000000000						a: 0:	RATIG TO U-235 F B-10, LI-6, HE VERY USEFUL. SEE GENERAL COMM	ISSION CS WANTED BUT FATICE -3 and other standards woll Ments in the introduction	5 TC .D 8E
4: FF00 3:0 - 100 KY ACCHARY TO PERCENT. 1154 500. EV 5.00 MEV 4.00 2 CCP L.M.UNGOUTERTS J. TANKES EXEMPT. 1154 500. EV 5.00 MEV 4.00 2 CCP L.M.USACHEV FEI 70401 1154 500. EV 5.00 MEV 4.00 2 CCP L.M.USACHEV FEI 70401 0: AVERAGE CODDS SECTION IN A FAST-REATOR SECTION. 5.2 FEI 70401 6.2 70401 1195 25.3 MV 100. EV 3.0 S 1 USA MEMMIG DDE 81001 1195 25.3 MV 100. EV 3.0 S 1 USA MEMMIG DDE 81002 1196 120. KEV 20.01 3 UK C.G.CAMPPELL VIN 622442 1197 25.3 MV 15.0 MEV 10.02 3 JK C.G.CAMPPELL VIN 622442 1197 25.3 MV 15.0 MEV 10.03 3 JFR AUDUREDT 704021 704021 1197 25.3 MV 15.0 MEV 10.03 3 JFR	1193	5.00 KEV	10.0 MEV		2	CCP	L.N.USACHEV	FEI	7540C6R
1154 500. EV 5.00 MEV 4.03. 2 CCP L.N.USACHEV FEI 74061 1155 500. EV 5.00 MEV 4.03. 2 CCP L.N.USACHEV FEI 74061 1159 25.3 MV 100. EV 3.0 X 1 USA MARINE 00E 821020 1159 25.3 MV 100. EV 3.0 X 1 USA MARINE 00E 821020 1150 25.3 MV 100. EV 3.0 X 1 USA MARINE 60E 821020 1150 120. KEV 20.00 X 1 USA MARINE 82002114 MIN 622442 1150 120. KEV 20.00 X 3 UK C.G.GAMAA SPECTRUM EVATED 10.00 X 6.0 GAMAA SPECTRUM EVATED 10.00 X 7.0 GAMAA SPECTRUM EVATED <td></td> <td></td> <td></td> <td></td> <td></td> <td>A: 0:</td> <td>FROM 5.0 - 10C H FROM 0.1 - 0.8 H FROM 0.8 - 4.5 H ABOVE 4.5 MEV KE NEED FOR FAST RE FOR MORE DETAIL</td> <td>XEV ACCURACY 7.C PERCENT. MEV ACCURACY 14 PERCENT. MEV ACCURACY 46 PERCENT. GOUREMENTS 2 TIMES BEAKER. EACTOR CALCULATIONS. SEE INTREDUCTION.</td> <td></td>						A: 0:	FROM 5.0 - 10C H FROM 0.1 - 0.8 H FROM 0.8 - 4.5 H ABOVE 4.5 MEV KE NEED FOR FAST RE FOR MORE DETAIL	XEV ACCURACY 7.C PERCENT. MEV ACCURACY 14 PERCENT. MEV ACCURACY 46 PERCENT. GOUREMENTS 2 TIMES BEAKER. EACTOR CALCULATIONS. SEE INTREDUCTION.	
0: AVERAGE CROSS SECTION IN A FAST-REALTER SPECTRUM 0: FOO FST-REALTER SUMMENTS: 1195 22.3 MV 100. EV 3.0 X 1 USA HEMILIA 000 021010 1195 22.3 MV 100. EV 3.0 X 1 USA HEMILIA 000 021010 1195 22.3 MV 100. EV 3.0 X 1 USA HEMILIA 000 021010 34 ALUTONIUM 240 NEUTRON TOTAL PROTON PRODUCTION CROSS SECTION MILE REACTION CONTROL CEMPARTS 1196 120. KEV 20.00 3 UK C.G.G.CAMPBELL WIN CONTROL CEMPARTS 1197 25.3 MV 15.9 MEV 10.00 3 FR double CHINANED ALUTONIUM 240 750050 1197 25.3 MV 15.9 MEV 10.02 3 FR double CHINANED ALUTONIDA AD REAT RELABE IN CORE 1197 25.3 MV 15.9 MEV 10.02 3 FR double CHINANED ALUTONIDA ALUTONIDA 1197 25.3 MV 15.9 MEV 10.02 3 FR double CHINANED ALUTONIDA ALUTONIDA ALUTONIDA ALUTONIDA ALUTONIDA ALUTONIDA	1194	500. EV	5.00 MEV	4.0%	2	ССР	L.N.USACHEV	FEI	7540C1R
1195 25.3 MV 100. EV 3.0 X 1 USA MEMMIG DOE 621044 2: MPROJECT PERCISION RECORT 6.57X110**3) YR 2: MPROJECT PERCISION RECORT 6.57X110**3) YR 0: THIS FOULD YR FRECORT 1. F						a: 0:	AVERAGE CROSS SE REQUESTED. For fast-reactor See general comm	ECTION IN A FAST-REACTCR SPE R BURN-UP CALCULATION. MENTS.	CTRUM
 ADJOACTIVE LAGGI CETTATIONED VERSENCE ADDRECKING ADDRECK ADDRECKING SECTION SECTI	1195	25.3 MV	100. EV	3.C X	1	USA	HEMMIG	DOÉ	821026R
SALUTONIUM 240 NOURON TOTAL PROTON PROJECTION CASES SECTION 1196 120. KEV 20.03 UK C.G.CAMPBELL #IN 692442 1196 120. KEV 20.03 UK C.G.CAMPBELL #IN 692442 1197 25.3 HV 15.0 NEV 10.03 7 7 10.00 ADG UNATED C.TOW WATED C.TOW WATED C.TOW TO ADG UNAT RELASE IN CORE. 1197 25.3 HV 15.0 NEV 10.03 7 7 0.00 C.TOW TOW ADD CONCELL FLOW WATED C.TOW WATED C.TOW TOW TOW ADD REAT RELASE IN CORE. 1197 25.3 HV 15.0 NEV 10.03 7 7 0.00 C.E.FOR WATED C.TOW WATED C.TOW WATED C.TOW TOW TOW ADD CONCELLS C.TOW WATED C.TOW WATED C.TOW TOW TOW TOW C.TOW C.TOW C.TOW TOW TOW C.TOW C.TOW C.TOW C.TOW C.TOW C.TOW C.TOW C.TOW TOW C.TOW C						Q: A: D: M:	RADIOACTIVE TARC IMPROVED PRECISI THIS REQUEST WAS AS DESERVING S NEW REQUEST.	SET 6.57X(10**3) YR Ion Needed for Thermal Feaci S Revièwed by CSE®G and Reco Special Emphasis.	IORS. Immended
1196 120. KEV 20.03 3 UK C.G.CAMPOBLL VIN 692442 1197 25.3 HV 15.0 HEV 10.03 3 FR 6000KHT FCR TRUE 10.010K 720 KEV 1197 25.3 HV 15.0 HEV 10.03 3 FR 6000KHT SAC 752050 1197 25.3 HV 15.0 HEV 10.03 3 FR 6000KHT SAC 752050 1197 25.3 HV 15.0 HEV 10.03 3 FR 6000KHT FCR SHILL 71000KKEV 720050 FCR SHILLOWARY AT 25TROADO BEVAILLOST. 1197 25.3 HV 15.0 HEV 10.03 3 FR 6000KHT FCR SHILLOWARY AT 25TROADO BEVAILLOST. 1197 25.3 HV FCR SHILLOWARY AT 25TROADO BEVAILLOST. 1198 100. KEV SCOUNTRY AT 25TROADO BEVAILLOST. FCR SHILLOWARY AT 25TROADO BEVAILLOST. FCR SHILLOST. FCR SHILLOST. FCR SHIL	94 PLUTO	IUM 240	NEUTRON		TOTA	L PHOTON	PRODUCTION CRUS	SS SECTION	
1100 LULX 1 CLUXX				20.0*	7		C C CANDRELL	ier T.N.	6024425
 A: INCIDENT ENERGY, MOUTI 20, KEV. DIRICHOMOLOTIC FORMATION AND HEAT RELEASE IN CORE. 1197 25.3 NV 15.0 MEV 10.03 3 FR G.DUCHEMIN SAC 752050 C: FOR STULY UF ACTIVATION AND HEAT RELEASE IN CORE. ALL DIRICHOMOLOGY OF CONTROL O	1190	120. KEV		20.04	3	0K Q:	GAMMA SPECTRUM	NANTED.	C92442H
1197 25.3 NV 15.0 NEV 10.0X 3 FR 0.0UCHEMIN SAC 752050 20 GAMMA SPECTAR REQUIED COMMA SPECTAR REQUIED COMMA SPECTAR REQUIED CAMMA RATS LESS 1197 25.3 NV LS.0 NEV LS.0 NEV COMMA SPECTAR REQUIED CAMMA RECUIRED 24 EMERGINE CALCULATION SOO KEV FOR ENERGIES ORGATER THAN INEX AND SOO KEV FOR CALCULATIONS - EVALUATION AND SO SUPERING OR CALCULATIONS - EVALUATION AND SO SUPERING OR AND AND SOO KEV FOR FARMA RATS LESS SUPFICIENT 1158 100. KEV 5.0X 2 CCP N.N.NIKULAEV FEI 714020 1159 100. KEV 5.0X 2 CCP N.N.NIKULAEV FEI 714020 1159 500. KEV 10.0 MEV 2.X 2 USA NESTON CS STATION CRUSS STATION 1200 500. KEV 10.0 MEV 2.X 2 USA NEATON CALCULATION STATION CALCULATIONS 721060 1201 1.00 KEV 100. KEV 5.X 3 USA MEMATIG DOE 721065 1201 <td></td> <td></td> <td></td> <td></td> <td></td> <td>A: C:</td> <td>INCIDENT ENERGY LOW RESOLUTION A PHOTON SPECTRU FOR STUDY OF ACT</td> <td>, ABOUT 120 KEV. Adequate for incident energy JM. Fivation and heat release in</td> <td>AND N CURE.</td>						A: C:	INCIDENT ENERGY LOW RESOLUTION A PHOTON SPECTRU FOR STUDY OF ACT	, ABOUT 120 KEV. Adequate for incident energy JM. Fivation and heat release in	AND N CURE.
 A FART A SPECTRA REQUIRED A FORMA SPECTRA REQUIRED A FUTGALING A FU	1197	25.3 MV	15.0 MEV	10.0%	з	FR	8.DUCHEMIN	SAC	792050R
1 MEY D. MEY D. CUBACY AT 2 STANDARD DEVIATIONS. D. SUFFICIENT 25 STANDARD DEVIATIONS. EVALUATION MAY BE SUFFICIENT 24 PLUTONIUM 240 NEUTROM FISSIUN CROSS SECTION 1158 100. KEV 5.00 MEV 5.03 2 CCP 0 G RATID TO U-235 OR NP-237 FISSION CS *ANTED. MESSURGARD UP AVERAGE CS IN FISSION CS *ANTED. MESSURGARD UP AVERAGE CS IN FISSION CF 255 WITH ACCURACY OF 2 PERCENT 15 DESIRED. C : SEE GENERAL COMMENTS IN THE INTRODUCTION. 721080 0 RADIDACTIVE TARGET 6.57X(10*43) YR 0 F FAST REACTOR CALCULATIONS. 1200 500. KEV 100. KEV 9. X 2 USA MESTON ORL 721080 0 F FAST REACTOR CALCULATIONS. 1201 1.00 KEV 1CC. KEV 5. X 3 USA MEMMIG DOE 721080 0 F FAST KEACTOR CALCULATIONS. 1201 1.00 KEV 1CC. KEV 5. X 3 USA MEMMIG DCE 721080 0 F FAST KEACTOR CALCULATIONS. 1201 1.00 KEV 1CC. KEV 5. X 3 USA MEMMIG DCE 721080 0 F FAST KEACTOR CALCULATIONS. 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742022 1203 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USALHEV FEI 754003 ACCU						Q: A:	GAMMA SPECTRA RÉ Energy resolutio Than 1 Mev and 5	EQUIRED In OF 250 kev für gamma rays 500 kev for energies greatef	S LESS R THAN
S4 FLUTCNIUM 240 NEUTRON FISSION CROSS SECTION 1158 100. KEV 5.00 MEV 5.03 2 CCP M.N.NIKULAEV FEI 714030 1158 100. KEV 5.00 MEV 5.03 2 CCP M.N.NIKULAEV FEI 714030 1158 100. KEV 5.02 MEV 5.03 2 CCP M.N.NIKULAEV FEI 714030 1159 500. KEV 10.0 MEV 2. X 2 USA MESTON ORL 721080 1159 500. KEV 100. MEV 2. X 2 USA MESTON ORL 721080 1200 500. EV 100. KEV 9. X 2 USA MEMMIG DOE 721080 1201 1.00 KEV 100. KEV 5. X 3 USA MEMMIG DOE 721080 1201 1.00 KEV 15.0 MEV 5. X 3 USA MEMMIG DOE 721080 1202 1.000 KEV 15.0 MEV 5.03<						0:	1 MEV QUITED ACCURACY FOR SHIELDING CA SUFFICIENT	AT 2 STANDARD DEVIATIONS. Alculations - Evaluation Mai	1 8E
1198 100. KEV 5.00 MEV 5.01 2 CCP M.M.NIKOLAEV FEI 714030 01 RATID TO U-235 DR NP-237 FISSION CS MATEL, MEASUREMENT UF AVERAGE CS IN FISSION-RELIAUN SPECTRUM UF CF-252 TIMES NU-DAR OF CF-252 WITH ACCURACY OF 2 PERCENT IS DESIRED. 721080 1159 500. KEV 10.0 MEV 2. X 2 USA WESTON DRL 721080 1200 500. KEV 100. MEV 2. X 2 USA WESTON DRL 721080 1200 500. KEV 100. KEV 9. X 2 USA MEENTIG 000E 721080 1200 500. EV 100. KEV 9. X 2 USA MEMNIG 00E 721080 1201 1.00 KEV 100. KEV 9. X 2 USA MEMNIG 00E 721080 1201 1.00 KEV 100. KEV 5. X 3 USA MEMNIG 00E 721080 1201 1.00 KEV 100. KEV 5. X 3 USA MEMNIG 00E 721080 1202 1.00 KEV 15.0 MEV 5. X 3 USA MEMNIG </td <td>94 PLUTO</td> <td>NIUM 240</td> <td>NEUTRON</td> <td></td> <td>F 1 S S</td> <td>IUN CROS</td> <td>S SECTIÓN</td> <td></td> <td></td>	94 PLUTO	NIUM 240	NEUTRON		F 1 S S	IUN CROS	S SECTIÓN		
1130 100 KEV 300 12 CCP 1111 111 111	1169	100 KEV	5 CO MEV	5.08	2	C C H		551	7140365
1199 500. KEV 10.0 MEV 2.X 2 USA MESTON DRL 721080 1200 506. EV 100. KEV 9.X 2 USA HENNIG DDE 721080 1200 506. EV 100. KEV 9.X 2 USA HENNIG DDE 721080 1201 1.00 KEV 9.X 3 USA HENNIG DDE 721080 1201 1.00 KEV 9.X 3 USA HENNIG DDE 721080 1201 1.00 KEV 5.X 3 USA HENNIG DDE 721080 1201 1.00 KEV 15.4 3 USA HENNIG DDE 721080 1202 1.000 KEV 15.0 MEV 5.0X 1 GER 6.GDEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI <td>1170</td> <td>100</td> <td>Jevu mee</td> <td>5.04</td> <td>L</td> <td>Q: C:</td> <td>RATIO TO U-235 (MEASUREMENT OF A SPECTRUM OF CF ACCURACY OF 2 SEE GENERAL COMM</td> <td>DR NP-237 FISSION CS MANTED. Average CS IN Fission-Neltre -252 Times NU-Bar of CF-25; Percent IS Desired. Ments in the introduction.</td> <td>IN 2 WITH</td>	1170	100	Jevu mee	5.04	L	Q: C:	RATIO TO U-235 (MEASUREMENT OF A SPECTRUM OF CF ACCURACY OF 2 SEE GENERAL COMM	DR NP-237 FISSION CS MANTED. Average CS IN Fission-Neltre -252 Times NU-Bar of CF-25; Percent IS Desired. Ments in the introduction.	IN 2 WITH
0: RADIOACTIVE TARGET 6.57X(10**3) YR 1200 500. EV 100. KEV 9. X 2 USA HEMMIG DOE 721089 1201 1.00 KEV 100. KEV 5. X 3 USA HEMMIG DOE 721089 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DOE 721080 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DOE 721080 1202 1.00 KEV 1SC. MEV 5.0X 1 GER 6.600EL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003	1199	500. KEV	10.0 MEV	2. X	2	USA	WESTON	ORL	721088R
1200 500. EV 100. KEV 9. X 2 USA HEMMIG DDE 721089 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DUE 721089 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DUE 721080 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DUE 721080 1202 1.00 KEV 15.0 MEV 5.0X 1 GER 6.GOEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USALHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USALHEV FEI 754003 1205 1.00 KEV 10.0 MEV 5.0X 1 JAP N-SASAKI MAP 762213						0: 0:	RADIGACTIVE TARG	GET 6.57X(10**3) YR R Calculatiûns.	
0: RADIDACTIVE TARGET 6.57X(10**3) YR 0: FOR FAST KEACTOR CALCULATIONS. 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DUE 72105C 1201 1.00 KEV 1CC. KEV 5. X 3 USA HEMMIG DUE 72105C 1202 1.00 KEV 1S.C KEV 5.0X 1 GER 6.GOEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 3.5 PERCENT. FRCM 0.8 - 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. O: NEED FOR FAST REACTOR CALCULATIONS. 1205 1.00 KEV 1.00 MEV 5.0% 1 JAP N.SASAKI MAP 762213	1200	500. EV	100. KEV	9. X	2	USA	HEMMIG	002	721089F
1201 1.00 KEV 1CC. KEV 5. X 3 USA HENNIG DLE 72105C 1201 1.00 KEV 1CC. KEV 5. X 3 USA HENNIG DLE 72105C 1202 1.00 KEV 15.0 MEV 5.0X 1 GER 6.GOEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USALHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. FRGM 0.1 - 0.8 MEV ACCURACY 3.5 PERCENT. FRGM 0.8 - 4.5 MEV REQUIREMENTS 2.1 IMES WEAKER. O: NEED FOR FAST REACURACY 3.5 PERCENT. FOR MORE DETAIL SEE INTRODUCTIONS. 1205 1.00 KEV 1.00 MEV 5.0% 1 JAP M.SASAKI MAP 762213						0: 0:	RADIOACTIVE TARG	SET 6.57X(10**3) YR R Calculatiûns.	
G: 6.57X(10*3) YR RATID TO -106 KN ALPHA) DR -6LI(N, ALFHA) #ANTED. A: ACCURACY OF 5 PERCENT USEFUL. 1202 1.00 KEV 15.0 MEV 5.0% 1 GER B.GOEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. A BOVE 4.5 MEV ACCURACY 3.5 PERCENT. A BOVE 4.5 MEV ACCURACY 3.5 PERCENT. A BOVE 4.5 MEV ACCURACY 3.5 PERCENT. A BOVE 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. O: NEED FOR FAST REACTOR CALCULATIONS. 1205 1.00 KEV 1.00 MEV 5.0% 1 JAP MAP 762213	1201	1.00 KEV	1CC. KEV	5. X	3	. USA	HEMMIG	DüE	72105CR
1202 1.00 KEV 15.0 MEV 5.0% 1 GER 6.GOEL KFK 742022 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1205 1.00 KEV 10.0 MEV 5.0X 1 JAP M.SASAKI MAP 762213						4: A:	6.57X(10**3) YR RATIU TU -106(N Accuracy UF 5 PE	ALPHA) OR -6LI(N,ALFHA) WAN Ercent Useful.	NTED.
1203 UP TO 20.0 MEV 2 FR J.SALVY BRC 742105 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. FGGM 0.8 - 4.5 MEV ACCURACY 5.5 PERCENT. ABOVE 4.5 MEV ACCURACY 5.5 PERCENT. ABOVE 4.5 MEV ACCURACY 3.5 PERCENT. ABOVE 4.5 MEV ACCULATIONS. MEV 1205 1.00 KEV 1.00 MEV 5.0X 1 JAP MAP 762213	1202	1.00 KEV	15.0 MEV	5.0%	1	GER	8.GOEL	KFK	742022R
A: ACCURACY 5 PERCENT TG 1 KEV, 2 PERCENT ABOVE. O: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS. 1204 5.00 KEV 10.0 MEV 2 CCP L.N.USACHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. FRGM 0.8 - 4.5 MEV ACCURACY 3.5 PERCENT. ABOVE 4.5 MEV ACCURACY 3.5 PERCENT. ABOVE 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. O: NEED FOR FAST REACTJR CALCULATIGNS. FOR MORE DETAIL SEE INTRODUCTION. 1205 1.00 KEV 1.00 MEV 5.0X 1 JAP M.SASAKI MAP 762213	1203	UP TO	20.0 MEV		2	FR	J.SALVY	BRC	7421056
1204 5.00 KEV 10.0 MEV 2 CCP L.N.USALHEV FEI 754003 A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. FRGM 0.8 - 4.5 MEV ACCURACY 3.5 PERCENT. ABDVE 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. O: NEED FOR FAST REACTING CALCULATIONS. FOR MORE DETAIL SEE INTRODUCTION. 1205 1.00 KEV 1.00 MEV 5.0% 1 JAP M.SASAKI MAP 762213						A : 0: M:	ACCURACY 5 PERCE FOR CRITICAL ASS SUBSTANTIAL MOD	ENT TG 1 KEV, 2 PERCENT ABG Semblies. Ifications.	vë.
A: FRGM 0.1 - 0.8 MEV ACCURACY 5.3 PERCENT. FRGM 0.8 - 4.5 MEV ACCURACY 3.5 PERCENT. ABOVE 4.5 MEV REQUIREMENTS 2 TIMES WEAKER. O: NEED FOR FAST REACTUR CALCULATIGNS. FOR MORE DETAIL SEE INTRODUCTION. 1205 1.00 KEV 1.00 MEV 5.0% 1 JAP M.SASAKI MAP 762213	1204	5.00 KEV	10.0 MEV		2	ССР	L.N.USACHEV	FE1	754003R
1205 1.00 KEV 1.00 MEV 5.0% 1 JAP N.SASAKI MAP 762213						A: 0:	FRGM 0.1 - 0.8 P FRGM 0.8 - 4.5 P ABOVE 4.5 MEV RE NEED FOR FAST RE FOR MORE DETAIL	MEV ACCURACY 5.3 PERCENT. MEV ACCURACY 3.5 PERCENT. EQUIREMENTS 2 TIMES WEAKER. EACTUR CALCULATIGNS. SEE INTRODUCTICN.	
	1205	1.00 KEV	1.00 MEV	5.0%	1	JAP	M.SASAK I	MAP	762213R
D: FOR FAST REACTOR CALCULATIONS M: SUBSTANTIAL MODIFICATIONS.						0: M:	FOR FAST REACTOR SUBSTANTIAL MOD	R CALCULATIONS IFICATIONS.	

94 PLUTG	NIUM 240	NEUTRún		NEUTI	RENS ENI	TTED PER FISSION (NU	6AR)
1206		5.00 MEN	1.08				7140316
1200	0F 10	3.00 MEA	1.04	2	Q:	RATIO TO CF-252 NU-BA	R WANTED.
	WE TO	00 0 MEV			. .	SEE GENERAL CUMMENTS	
1207	04 10	2040 MEV		2	FR A:	ACCURACY 2 PERCENT TO	7421066 1 KEV. 1 PERCENT ABOVE.
					0: M:	FOR CRITICAL ASSEMBLI SUBSTANTIAL MODIFICAT	ES. IONS.
1208	5.00 KEV	10.0 MEV		2	CCP	L.N.USACHEV FEI	754004R
					A: G:	FROM 0.1 - 0.8 MEV AC FROM 0.8 - 4.5 MEV AC Above 4.5 Mev Require Need For Fast Reactor For More Detail See I	CURACY 3 PERCENT. Curacy 2 percent. Ments 2 times beaker. Calculations. Ntroduction.
94 FLUTC	NIUM 240	NEUTRON	• • • • • • • • • • • • • • • • • • •	DELA	YED NEU	RUNS EMITTED PER FISS	10N
1200	25.3 MV	5.00 MEV					7610655
1209	2302 47	JICC MEV	10. *	2	034 Q:	RADIGACTIVE TARGET 6.	57X(10##3) YR
1210	25.3 MV	10.0 MEV	5. X	2	JAP	T.MURATA NIG	762045N
					Q:	THE REQUESTED QUANTIT	IES ARE THE GROUP HALF LIVES MALIZED TO 1 FISSION) BHICH
					٥:	CAN USED TO FIT THE D NEUTRONS FOR THE TIME ACCURACY OF 5 PER CEN INCIDENT ENERGY STEP	ECAY CURVE OF DELAYED Range 0.1-300 Sec Within an T. Less Than 2 Mey.
STATUS						ACTIVE ASSAY OF MIXED	FRESH AND IRRADIATED FUEL
L	NDER CONTINUGU	S REVIEW BY IN	DC AND N	EANDC.	SEE API	PENDIX A.	
94 PLUTO	19222222222222222 Nium 240 22222222222			ENER	GY SPEC	RUM OF FISSION NEUTRO	======================================
1211	UP TO	15.0 MEV	3.0%	2	FR	M.SALVATORES CAD	732058R
					A: 0: M:	ACCURACY FOR AVERAGE U-235 OR PU-239. FOR FAST REACTOR CALC SUBSTANTIAL MUDIFICAT	E' RELATIVE TO AVERAGE E' ULATIONS. Ions.
		NEUTRON		RESO			

1212	20.0 EV	10.0 KEV	10. X	2	USA	SMITH ANL HEMMIG DOE	691351R
					0: 0:	RADIGACTIVE TARGET 6. TO RESOLVE DISCREPANC FOR FAST REACTOR CALC EFFECT.	57X(10**3) YR IES IN EXISTING CATA. ULATICNS. INCLUDING DOPPLER
					м:	SUBSTANTIAL MODIFICAT	IUNS.
1213	10.0 EV	5.00 KEV		2	ССР 0:	M.N.NIKOLAEV FEI	714628R
						OF SELF SHIELDING I AND EVALUATION OF A SELF-INDICATION CAPTU FOR P-WAVE RESONANC	N RESOLVED RESONANCE REGIONS Verage resonance parameters. Re measurements are desired e deservation.
					0:	AVERAGE S AND P WAVE BE DERIVED. STATISTICAL ANALYSIS PARAMETERS WANTED. SEE ALSO GENERAL COMM	RESONANCE PARAMETERS SHOULD GF MEASURED RESONANCE IENTS IN THE INTRODUCTION.
1214	1.00 EV		1.0 %	1	USA	HEMMIG DGE	821021R
					o: 0:	RADIDACTIVE TARGET 6 RESONANCE STRONGLY IN	•57X(10**3) YR IFLUENCES THERMAL CRGSS
					M:	SECTION EVALUATION. DIFFERENTIAL AND IN THIS REQUEST WAS REVI AS DESERVING SPECIA NEW REDUEST.	THERE IS DISCHEPANCY EETWEEN ITEGRAL DATA- Ewed by csewg and recommended I Emphasis.
54 PLUT(NIUM 240			MISC			
1215			0.3%	2	GER	V.SCHNEIDER ALK	7020756
					a:	SPECIFIC DECAY HEAT I PERCENTAGE OF HEAT CA PARTICLES (X-RAYS.C FUE CALORIMETRIC PUT	N WATTS/GRAN REQUIRED. RRIED OFF BY LONG RANGE Amma Rays) USEFUL. Sternination.
94 PLUT(=======	INIUM 241 Ispansaesesese	***********		GAMM 			
1216			5. X	1	JAP	T.SUZUKI JAE	762012N
					Q:	YIELD PER DISINTEGRAT AND 160 KEV GAMMA RAY (FOLLOWING ALPHA DE	ION DF 56.4.77.103.5.148.6 'S Recuired. Cay event)
					A:	1 PER CENT ACCURACY F RAYS, 5 PER CENT ACCU GAMMA RAYS-	CR 103.5 AND 148.6 KEV GAMMA Racy fur 56.4.77 and 160 KeV
					0:	THOUGH PRESENT STATUS THE REQUIREMENT CONFI ASSAY OF PU-ISOTOPES	OF ACCURACY SEEMED TO MEET RMATION IS REQUIRED. BY GAMMA-RAY SPECTRCSCCPY

94 FLUTC	NIUM 241	GAN	100 22 22 21 1MA		TOTA			ELD		*********************	=======
1217	UP TO	10.0	NEV	10.0%	2	CCP	V.K.	MARKOV	GAC		714049N
						0:	FOR	PHUTUNUCLEAP	R ASSAY OF	PU•	
S4 PLUTC	NIUM 241	GAN	MA		FISS	IGN CROS	SS SE	CTION			
1218	UP TO	10.0	NEV	10.0%	2	CCP	V •K •	MARKOV	GAC		7140476
						0:	FOR	PHOTONUCLEAR	R ASSAY OF	Ρυ.	
S4 PLUTC	NIUM 241	GAN	MA		FISS	ICN PRO		MASS YIELD	SPECTRUM		
1215	UP TO	0 10.0	MEV	10.0%	2	ССР	V .K .	MARKOV	GAC		7140481
						c:	FOR	PHOTONUCLEA	R ASSAY OF	PU •	
94 PLUTO	NIUM 241	NEL	TRON		TGTA	L CROSS	SECT	IGN			
	~										
1220	1.0C KE	v 15.0	NEV	10.0%	2	GER	B.GC)EL	KFK		692455H
1221	1.00 KE	20.0	NEV	1. X	2	USA	WEST	ION	URL		801265R
						Q:	RADI	GACTIVE TAR	GET 14.4 YR		
							NEEL	ED IN EVALU	ATTON TO LI	MIT MUDEL CALCULA	ILUNS.
1222	1.0C MV	1.00	Eν	0.5 X	1	USA	HEMM	IG	DGE		821010R
						0: 0:	R AD I NEEC	LACTIVE TAR	GET 14.4 Y	R ERMAL SHAPE ACCUR	ATELY.
							THIS	6 REQUEST WAS 5 DESERVING	S REVIEWED Special Emp	BY CSEWG AND RECO HASIS.	MMENDED
						M:	NEW	REQUEST.			
S4 PLUTC	NIUM 241	NËU	TRON		A850	RPTION (CROSS	SECTION			
1223	15.0 EV	300.	EV	8.0%	Э	UK	J.FE	LL	WIN		7120956
						A:	ACCL	AND 2E.	ERAGE VALUE	OF THE ERROR BET	WEÊN
						a:	FGR	THERMAL REAL	CTORS.		
1224	1.00 KEN	2.00	KEV	20.0%	3	UK	J.FE	ill.	WIN		71209cR
						Α:	ACCL	IRACY FUR AVE	ERAGE VALUE	OF THE ERRCH BET	DEEN
						0:	FOR	THERMAL REAG	CTORS.		
94 PLUTC	NIUM 241	NEU	TRON	=============	CAPT	URE CROS	SS SE	CTION	**********	****************	
					====						
1225	25.3 MV	300.	KEV	3. X	1	USA	WEST	UN	ORL		671132A
						0:	R AD I ALPH	GACTIVE TARG	GET 14.4 YR ED.		
						A: C:	ACCU	RACY OF 3 PERIONED PRECIS	ERCENT IN E Iún néeded	TA. FOR THERMAL REACT	CRS.
							ALSU	S WANTED FUR	FAST REACT	ORS.	
1226	200. EV	1.00	MEV	10.0%	2	GER	B.GC	DEL	KFK		692471F
						a :	ALPH	A IS USEFUL	•		
1227	5.0C KE	10.0	MEV		2	ССР	L.N.	USACHEV	FEI		7540C1R
						Α:	FROM	5.0 - 100	KEV ACCURAC	Y 18 PERCENT.	
							FROM	0.1 - 0.8	MEV ACCURAC	Y 30 PERCENT. Y 50 PERCENT.	
						0:	NEED	FUR FAST RE Nore Detail	EACTOR CALC	ULATIONS. UCTION.	
1228	500. EV	5.00	MEV	7.0%	2	ССР	LeNe	USACHEV	FEI		7940026
						G: 01	RE	QUESTED.	ECTION IN A	FAST-REALTLE SPE	CINUM
						0.	SEE	GENERAL COM	MENTS.		
1229	1.00 MV	1.00	έV	0.5 X	1	USA	HEMM	4 I G	DOE		821C12R
						a :	RADI	UACTIVE TAR	GET 14.4 Y	R	
						6:	THIS	REQUEST WAS	WINE THE TH S REVIEWED	ERMAL SHAPE ACCUR By CSEWG AND RECO	MMENCES
						м:	NEW	REQUEST.	SPECIAL EMP	n-313.	
S4 PLUTO	NIUN 241				 TOTA		 N PR/	DUCTION CRO	SS SECTION	****************	
222222222			======		=====	=======					
1230	120. KEN	/		20.0%	з	UK	C.G.	CAMPBELL	WIN		692460F
						Q:		A SPECTRUM	ABOUT 120	KEV.	
						~•	LON	RESOLUTION A	ADEQUATE FO	R INCIDENT ENERGY	AND
						0:	FOR	STUDY OF AC	TIVATION AN	D HEAT RELEASE IN	CCRE.

94 PLUTL		=====	NEU ==========	=====		=====	========			
1231	25.3	MV	15.0	MEV	10.0%	3	FR	B.DUCHENIN	SAC	7520E1R
							Q: A:	GAMMA SPECTRA F Energy Resoluti Than 1 Mev and	REQUIRED Ion of 250 kev for gamm. 500 kev for energies gi	A RAYS LESS Reater than
							0:	1 MEV QUOTED ACCURACY FOR SHIELDING O SUFFICIENT	Y AT 2 STANDARD DEVIATI Calculations - Evaluati	CNS. CN MAY BE

94 PLUTC	NIUM 24	1 ======	NEU:			FISS	ION CROS	S SECTION		
1232	25•3	MV	10.0	ΕV	3. X	1	USA	SMITH Weston	ANL OFL	651328k
							Q:	RADIUACTIVE TAP RATIO TO U-235	RGET 14+4 YR Or PJ-239 WOULD BE USEN	FUL.
1233	U	P TO	5.00	KEV	5.0%	2	FR	H.TELLIER	SAC	732059R
							A: 0:	QUOTED ACCURACY REACTOR CALCUL	Y AT 2 STANDARD DEVIATI Ations.	CNS.
1234	1.00	KEV	15.0	MEV	3.0%	2	GER	H.GOEL	KFK	742013R
1235	5.00	KEV	10.0	MEV		2	CCP	L.N.USACHEV	FEI	754002R
							A: 0:	FRGM 5.0 - 100 FRGM 0.1 - 0.8 FROM 0.8 - 4.5 ABUVE 4.5 MEV / NEED FOR FAST / FOR MORE DETAIL	KEV ACCURACY 3.7 PERCE MEV ACCURACY 3.0 PERCE MEV ACCURACY 9.7 PERCE Reduirements 2 times me Reactor calculations. L see introduction.	NI. NI. NI. Aker.
1236	10.0	ΕV	30.0	KEV	2. %	1	USA	DONCALS	WEW	761042R
							۵:	RADIGACTIVE TA RATIO TO U-235	RGET 14.4 YR OR PU-239 WOULD BE USE	FUL.
1237	1.00	ΕV	1.00	MEV	1-5.%	1	RUM	S.RAPEANU	RUM	763007F
1238	500.	ΕV	5.00	MEV	5.0%	2	ССР	L.N.USACHEV	FE1	7540C5R
							0: 0	AVERAGE CROSS Reguested. For FAST-Reacti See general com	SECTION IN A FAST-REACT GR BURN-UP CALCULATION. MMENTS.	CR SPECTRUM
1239	1.00	MV	1.00	Eν	0.5 X	1	USA	HEMMIG	DOE	621011R
							0: 0: M:	RADIOACTIVE TAN NEEDED TO DETEN THIS REQUEST & AS DESERVING NEW REQUEST.	RGET 14.4 YR Rmine The Thermal Shape As Reviewed By Csewg An Special Emphasis.	ACCURATELY. D RECOMMENDED
1240	25.3	MV	10.0	Ëν	3.0 X	1	USA	HEMMIG	DOE	8210225
							a: 0: M:	RADICACTIVE TA RATIO TO U-235 THIS REQUEST W AS DESERVING NEW REQUEST.	RGET 14.4 YR AND PU-239 WOULD BE US As Reviewed by CSEWG AN Special Emphasis.	EFUL. D RECOMMENDED
1241	20.0	KEV	400.	KEV	3.0 X	1	USA	HEMMIG	DOE	821023R
							0: 0: M:	RADICACTIVE TA RATIL TO U-235 THIS REQUEST W AS DESERVING NEW REQUEST.	RGET 14.4 YR FISSIGN WANTED. As reviewed by csewg an Special Emphasis.	D RECOMMENDED
94 PLUTC	 NIUM 24		 NEU	 TRON		CAPT		ISSIGN RATIO	======================================	

1242	1.00	KEV	2.00	MEV	10. %	1	USA	HEMMIG	DCE	691332R
							Q:	RADIGACTIVE TA	RJET 14.4 YR	
1243	25.3	MV			1.0%	2	FR	H.TELLIER	SAC	7C2043R
							C:	EVALUATION MAY DISCREPANCIE	SUFFICE IF IT EXPLAINS	LNS.
STATUS										STATUS
T	HERMAL	VALUE	UNDER CO	NTINU	OUS REVIEW	8¥ IN	IDC AND	NEANDC. SEE APP	ENDIX A.	
	NIUM 24		NEU	TRON	=======================================	NEUT	RONS EN	ITTED PER NEUTR	ON ABSORPTICN (ETA)	
1244	10.0	MV	15.0	E۷		1	UK	J.FELL	W 1 N	642007k
							Q: A: D:	VALUE RELATIVE Accuracy 2 per For thermal re Evaluation req	TO 25.3 MV ETA WANTED. CENT TO 1 EV, 6 PERCENT ACTORS. UIREMENT.	ABOVE .
1245	25.3	MV			1.0%	2	FR	H.TELLIER	SAC	692464R
							A: 6:	QUUTED ACCURAC For thermal re Evaluation May Discrepancie	Y AT 2 STANDARD DEVIATI ACTOR CALCULATIONS. ' SUFFICE IF IT EXPLAINS S.	CNS.

94 PLU	TONIUM 2	41 =======	NEU	TRON			NEUTR	ONS EM	TTED PER NEUTRO	N ABSORPTIGN (ETA) (CL	NTINUED)
STATUS											STATUS
	THERMAL	VALUE	UNDER CO	NTINUO	US REV	IEN B	Y IND	C AND I	NEANDC. SEE APPE	NDIX A.	
94 PLU	TONIUM 2	++++++++++++++++++++++++++++++++++++++	======= NÉU	TRON			NEUTR	CNS EN	TTED PER FISSIC		
1246	1.00	KEV	15.0	MEV	5 - 0	×	2	GER	B.GGEL	KFK	ES2466R
1247	5.00	KEV	10.0	MEV			2	ССР	L.N.USACHEV	FE1	754013R
								A: U:	FROM 5.0 - 100 FROM 0.1 - 0.6 FROM 0.8 - 4.5 Abgve 4.5 Mev R Need for fast R For More Detail	KEV ACCURACY 1.2 PERCENT. MEV ACCURACY 2.3 PERCENT. MEV ACCURACY 4.0 PERCENT. Equirements 2 times "Eaker. Eactor Calculations. SEE Introduction.	
STATUS											STATUS
	THERMAL	VALUE	UNCER CC		US REV	IEW B	Y IND	C AND	NEANDC. SEE APPE	NDIX A.	
54 PLU	ILNIUM 2	41	NEU	TRCN			DELAY	ED NEU	RONS EMITTED PE	k FISSION	
1240	25.3	MV	10.0	MEV	5 -	•	2		T-MUDATA	NIG	7620501
1270	2343	~	10.0	MEV	5.	^	2	G:	THE REQUESTED O	UANTITIES ARE THE GROUP HAL	F LIVES
								0:	AND GRGUP YIELD CAN USED TO FIT NEUTRONS FOR TH ACCURACY OF 5 P ACTIVE ASSAY OF INCIDENT ENERGY	S (NORMALIZED TU 1 FISSION) THE DECAY CURVE GF DELAYED E TIME RANGE 0.1-JOO SEC WI ER CENT. MIXED FRESH AND IRRAUIATED STEP LESS THAN 2 MEV.	WHICH THIN AN FUEL
STATUS											STATUS
	UNDER C	=======	UUS REVIE	• 8Y 1	NDC AN	U NEA	NDC. =====	522 AP	PENDIX A.		
94 PLU	TONIUM 2	41 =====	NEU	TRON		 	ENERG =====	Y SPEC	TRUM OF FISSION	NEUT HÜNS ====================================	
1249	1.00	KEV	1.00	MEV	2.0	x	1	USA	HEMMIG	DOE	821024R
								а: J: м:	RADIOACTIVE TAR THIS REQUEST WA AS DESERVING NëW REQUEST.	GET 14.4 YR 5 Reviewed by Csewg and Rec Special Emphasis.	GMMENDED
======		======:			======		=====			=======================================	
94 PLU =====	1LN10M 2	41 ≠≈====	NEU =======	II II II II	#### # =	======	=====		JUCI MASS VIELD ====================================	SPECIRUM ====================================	
1250	25.3	MV			5.0	x	3	ССР	S.A.SKVÜRTSÜV O.A.MILLER	KUR Kur	704021N
								c: 0:	YIELD OF RU-144 FOR ASSAY OF PU OF FISSION PR	WANTED. In fuel elements by means uduct gamma radiation.	
1251	25.3	MV			1.0	x	з	CAN	d .H.₩ALKER	CRC	711804R
								a: 0:	YIELD OF XE-135 FOR CALCULATION	MANTED. OF FISSION PRODUCT ABSORPT	IGN•
STATUS											STATUS
	UNDER C	UNTINU	GUS REVIE	W EY I	NDC. 5	SEE AP	PENDI	X A.			
54 PLU	TONIUM 2	======= 41 	 Neu	TREN	-t=d#4		RESUN	ANCE P	AR AMETERS		
TIARS		122222							*************		
1252	25.3	NV	100-	Eν	5.	x	2	USA	SMITH	ANL	721140F
								u.	RADIUACIIVE TAR	GEI 14.4 TK	
1253	100.	EV	400.	ΕV	10.	x	2	USA	SMITH	ANL	7211416
		======			=====		====		RADIGACTIVE TAR	661 14.4 YM ====================================	========
94 PLU ======	TCNIUM 2	41 ======		======			MISC		*************		
1254					1.5	5 X	2	GER	V+SCHNE IDER	ALK	70207JN
								a: c:	SPECIFIC DECAY PERCENTAGE OF H PARTICLES (X- FOR CALORIMETRI	HEAT IN WATTS/GRAM REQUIRED EAT CARRIED OFF BY LONG RAN RAYS.GAMMA RAYS) USEFUL. C PU DETERMINATION.	ĠE
=======					======					***************************************	
94 PLU ======	TENIUM 2	42	NEU ===≠=≈≈==	TRUN =======	== = = = = = =		FEEEE	======	SECTION ====================================	********	
1255	10.0	KEV	15.0	MEV	10.0	x	1	GER	F.FROEHNER	KFK	792255R
								A: 0;	5-10 PERCENT EN FOR CONSISTENT NO DATA AVAILAB DIFFICULT TO RE	ERGY RESOLUTION SUFFICIENT Evaluation of Partial Cross Le above Gookev, data Below Concile With Optical Medel	SECTION 150kev
54 PLU	TCNIUM 2	42	NEU	TRON				RE CRO	S SECTION		
									##################################		
1256	25.3	MV			5.0	X	1	FR	H.TELLIER	SAC	702C47H
								A: G:	UNITED ACCURACY EVALUATION MAY DISCREPANCIES	AT 2 STANDARD DEVIATIONS. SUFFICE IF IT EXPLAINS •	

94 PLUTC	NIUM 24	2	NEU	TRON		CAPTL	RE CROS	S SECTION)	NTINUED)
1257	tu.	P TO	5.00	KEV	5.0%	2	FR	H.TELLIER	SAC	702048H
							A: 0:	ACCURACY FOR RAT QUUTED ACCURACY Evaluation May So Discrepancies+	ID TO THERMAL CRUSS SECTION AT 2 STANDARD DEVIATIONS. UFFICE IF IT EXPLAINS	ΰN.
1258	1.00	KEV	3.00	MEV	20 • 0 ¥	1	FR	F.JOSSO	CAD	712102R
							Q: A: 0:	RELATIVE VALUES QUDTED UNCERTAIN FUR FAST REACTOR	VERSUS ENERGY ÜR TÜ U-238 Ty at 2 standard deviatigi Fuël cycle calculaticn.	CAPTURE. NS.
1259	1.00	ĸev	7.00	MEV		2	USA	HEMMIG	DOE	721058R
							0: A: D:	RADIOACTIVE TARG Accuracy Range Fur fast breeder	ET 3.76X(10##5) YR 6. Tú 20. Percent. Calculatiuns, CM, CF Proi	DUCTION.
1260	100.	Eν	1.00	ĸev		2	USA	SCHENTER	HED	72114JR
							Q: A: 0:	RADIOACTIVE TARGE ACCURACY RANGE WANT RESONANCE P 10 KEV. For fast breeder	ET 3.76X(10**5) YR 6. TO 10. PERCENT. ARAMETERS TO 10-20 PERCEN CALCULATIONS. CM, CF PRO	T BELCW Guction.
1261	5.00	ĸev	10.0	MEV		2	ССР	L .N.USACHEV	FE1	754014H
							A: 0:	FRON 5.0 - 100 K FROM 0.1 - C.6 M FROM 0.5 - 4.5 M Above 4.5 Mev Re Need for fast re For more detail	EV ACCURACY 30 PERCENT. EV ACCURACY 30 PERCENT. EV ACCURACY 50 PERCENT. QUIREMENTS 2 TIMES WEAKER ACTOR CALCULATIONS. SEE INTRODUCTION.	•
1262	10.0	NV	4.00	EV	10.0%	2	UK	J.FELL	WIN	792168R
							с:	FOR STUDIES OF PE Evaluation regula	LUTGNIUM RECYCLE. Rement.	
1263	560.	ΕV	5.00	NEV	15.0%	2	ССР	L.N.USACHEV	FEI	7940C3R
							a: c:	AVERAGE CROSS SE REQUESTED. For fast-reactor See general comm	CTION IN A FAST-REACTCE SI Burn-up calculation. Ents.	PECTRUM
	======= NIUM 24	2==== 2	 NEU	===== TR GN		TGTAL	- PHOTO	PRODUCTION CRUS	S SECTION	
=========	*******	=====	*******			=====:		:*=====================================	************************	
1264	25•3	MV	15.0	MEV	10.0%	3	FR Q: A: 0:	B.DUCHEMIN GAMMA SPECTRA RE ENERGY RESOLUTIG THAN I MEV AND 5 I MEV FOR SHIELDING CA SUFFICIENT	SAC QUIRED N GF 250 KEV FOR GAMMA RA OO KEV FCF ENERGIES GREAT LCULATIGNS - EVALUATICN M	7926E2R Ys Less Er Than Ay Ee
94 PLUTO		===== 2 =====	====±±±±± NEU	 TRON		FISS	ION CRUS	S SECTION		******
1265	1.00	E٧	1.00	MEV	1-5.*	1	RUM	S.RAPEANU	KUM	7630C8R
1266	1.00	ĸëv	3.00	MEV	20.0*	1	FR	F.J0550	CAD	792053A
1200					2000	-	A:	QUOTED UNCERTAIN	TY AT 2 STANDARD DEVIATIO	NS .
	========							FOR FAST REACTOR		*******
94 PLUTC	NIUM 24	2	NEU	=====	*********	NEU1	RUNS EN	THED PER FISSION	(NU dar)	*******
1267	500.	KEV	10.0	MEV	5 . X	2	USA	HEMMIG	DUE	691334R
	- 6 = = = = = = =						:. 	RADIGACTIVE TARG	ET 3.76X(10++5) YR	
94 PLUTO	NIUM 24	3	NEU	TRON		CAPT	URE CRO	S SECTION		******
1268	1.00	KEV	3.00	MEV	50.0%	з	FR	M.SALVATORES	CAD	792054K
							С: М:	FOR FAST REACTOR Substantial Modi	CALCULATIONS. Fications.	
94 PLUTO	====== NIUM 24	===== 3	 NEU	TRCN		FISS	ICN CRO	SS SECTION		
	======	=====		=====	***********					
1265	1.00	KE V	3.00	MEV	50.0%	З	FR o·	M.SALVATORES	CAD	792055R
							M:	SUBSTANTIAL HODI	FICATIONS.	
95 AMER I	CIUM 24	1		IMA =====		TÚTA		JN YIELD		
1270	U	PTO	10.0	NEV	10.0%	2	ССР	V.K.MARKUV	GAC	714052N
							0:	FOR PHUTUNUCLEAR	ASSAY OF PU.	

1271 UP TQ 10.0 MEY 10.0 MEY 2 CCP YK,MARKOV GAC T14321M 64 ALEPTICIUM 241 CAMMA FIGSINA MADACT ASSAY UPLC SAFETING T14321M 1272 VP TQ 10.0 MEV 10.0 MEV 10.0 MEV 10.0 MEV T14321M 1273 VP TQ 10.0 MEV 10.0 MEV 10.0 MEV 10.0 MEV T14321M 1274 VP TQ 10.0 MEV 10.0 MEV 10.0 MEV 10.0 MEV T10.0 FMCONTOWER MADACT ASSAY UP PU. 1275 20.3 MENTCUM 241 MENTCUM 241 T10.0 FMCONTOWER MADACT ASSAY UP PU. T14322M 1274 VP TQ 3.0 MEV 10.0 MEV 10.0 MEV 10.0 MEV T10.0 FMCONTOWER MADACT ASSAY 1274 VP TQ 3.0 MEV 10.0 MEV 2 FME F10.0 FMCONTOWER MADACT ASSAY T2.0 FMEOREMENT 1275 VP TQ 3.0 MEV 10.0 MEV 2 FME F10.0 FMCONTOWER MADACT ASSAY T3.0 FMEOREMENT 1276 VP TQ 3.0 MENTCUM ASSAY SCCONTOWER MADACT ASSAY T3.0 FMEOREMENT 1277 VP TQ 3.0 MENTCUM ASSAY SCCONTOWER MADACT ASSAY	55 AMER 1	CIUM 241	******	GAM	======= MA ========		===== FISSI	UN CRO	SS SECTION		
Control Control Control Control Control 1272 UP TC 10.0 NEV 10.03 2 CCP VALABARDOV CAC 71.0000 1272 UP TC 10.0 NEV 10.03 2 CCP VALABARDOV CAC 71.0000 1273 UP TC 10.0 NEV 10.03 2 CCP VALABARDOV CAC 71.0000 1274 UP TC 10.0 NEV 10.03 1 CEN F.FRUDHER NEA 77.22264 1273 JAL 1.00 NEV 10.03 2 CPA F.FRUDHER NEA 77.22264 1274 UF TC J.00 NEV 10.03 2 FA F.FRUDHER NEA 77.22264 1274 UF TC J.00 NEV 10.03 2 FA F.FRUDHER NEA 77.22264 1275 2.53 NV J.03 Y FA H.TELLER SC 77.2000 1276	1271	UP	τo	10.0	MEV	10.0%	2	CCP	V.K.MARKOV	GAC	714051N
BARENELUN 21 CAMMA FESSION PRODUCT ASSA VIELD SPECTRUM 1272 UP TO 10.00 MEV 10.00 Z CCP VAR.MARKOV CAC 71.0050A 1273 UP TO 10.00 MEV 10.00 Z CCP VAR.MARKOV CAC 71.0050A 1273 25.3 MV 1.00 MEV 10.01 I GEN F-FANGEMEN MAK 75.2200 1273 25.3 MV 1.00 MEV 10.02 I GEN F-FANGEMEN MAK 75.2200 1274 VF TO 3.00 MEV 10.02 I FM C-FORT CAO 7920576 1274 VF TO 3.00 MEV 10.02 I IMAL ATI CACONS SECTION 7220577 1275 25.3 MV 5.03 Z IMAL ATI CACONS SECTION 7220577 1275 25.3 MV 5.03 Z IMAL ATI CACONS SECTION 721066 1276 25.3 MV 1.0 X Z IMA CACONT ATI Z STARAMOR DEV ATI Z STARAMOR		=====±≠	**====				*****	*=====	=======================================	***************************************	=============
1172 UP TO 10.0 MEV 10.0 2 CCP V.K.MARKOV DATE TOTAL CALL DEFEND TOTAL CALL DEFEND TOTAL 1173 26.0 M.V. NUMBER	95 AMERIO	CIUM 241		GAM	MA 	===========	F1551	CN PRU	DUCT MASS YIELD S	PECTRUM ====================================	
UI FOR PHOTOHOLEAR ASSAY OF PU. 51 MARTICLUE 31. NUMBER ITAL CADDS SECTION 1272 25.3 MU 1.00 MEV 10.02 1 CER F-FROMMEN MAR ASSAY OF PU. 1273 25.3 MU 1.00 MEV 10.02 1 CER F-FROMMEN MAR ASSAY OF PU. 1274 10.0 MEV 10.02 TO CONSTRUCT MARANA OROS SECTION 1000000000000000000000000000000000000	1272	UF	то	10.0	MEV	10.0%	2	ССР	V.K.MARKOV	GAC	714050N
Standbar(clus 24) NUMBER TTTL CRGS SECTION 1273 25-3 AV 1.00 AEV 10.02 1 GER F-FRGENER AFA 762256 1273 25-3 AV 1.00 AEV 10.02 1 GER F-FRGENER AFA 762256 1274 LEDIRGE TECHTEGON FOR THE MARK ACCES SECTION TECHTEGON FOR THE MARK ACCES SECTION 792057 1274 LET G 3.00 HEV 10.02 2 FR E-FORT CAD 792057 1276 25.3 AV 5.03 2 FR E-FORT CAD 792057 1277 LEDIRGE AUXATION FORCE SECTION 7121665 7121665 1276 25.3 AV 5.03 2 FA N.TELLER SECTION 7121665 1277 100. EV 10.02 2 UGA ORTING ACCARACY AT 2 STANDARD DEVIATIONS 7121665 1277 100. EV 10.03 1 UGA ORTING ACCARACY AT 2 STANDARD ACCUTION OF CADE							_	0:	FOR PHOTONUCLEAR	ASSAY DE PU.	
1173 25.3 NV 1.00 NEV 10.03 1 GEN F-#Relevant AFK Total and the second and the seco						******					
1273 29.3 MV 1.00 MEV 10.00 1 GEM F. F. PORCHENN KKK F. S. PORCHENN F. S. PORCHENN F. S. PORCHENN F. S. PORCHENN MEDIALIZE CARLES SECTION 55 AMERICIUM 241 MEDIACO INELASTIC CODES SECTION MEDIACO MEDIACO F. S. PORCHENN MEDIACO MEDIACO 1374 UF TO 3.00 MEV 10.00 2 F. R. E. FORT CAD F. S. PORCHENN F. S. PORCHENN <td>STATESTAL</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>======</td> <td></td> <td>500110N</td> <td>***************************************</td> <td></td>	STATESTAL						======		500110N	***************************************	
At 5 - 10 PERCENT ENERGY FEELUTION STILLENT COOS SECTIONS & STATUS 55 - AMERICUM 241 1274 UF TG 3.00 MEV 10.02 2 FR E-FORT CAD 7920576 1274 UF TG 3.00 MEV 10.02 2 FR E-FORT CAD 7920577 1274 UF TG 3.00 MEV 10.02 2 FR E-FORT CAD 7920576 1275 25.3 MV S-OX 2 FR H-TELLIER SAC 1121064 1275 25.3 MV S-OX 2 FR H-TELLIER SAC 1121064 1276 25.3 MV S-OX 2 FR H-TELLIER SAC 1121064 1277 100.0 KEV 10.0 KEV	1273	25.3	MV	1.00	MEV	10.0%	1	GER	F.FROEHNER	KFK	752256R
SA AMERICIUM 241 NUTREN INCLUSIVE CROSS SECTION 1274 UF TG 3.00 MEV 10.02 2 FR E-FORT CAD 7920574 1274 UF TG 3.00 MEV 10.02 2 FR E-FORT CAD 7920574 1276 25.3 MV S.03 2 FR M-TELLIER SAC 7121667 1276 25.3 MV S.03 2 PR M-TELLIER SAC 7121667 1276 25.3 MV S.03 2 USA ORTON RL C7112167 1276 25.3 MV 1.00 KEV 10.1 X 2 USA ORTON RL C7112167 1277 100. KEV 10.0 KEV 0.0 X 2 USA ORTON RL C7112167 1277 100. KEV 100. KEV 0.0 X 1 USA ORTON RL C7112167 1277 100. KEV 100. KEV 0.0 X 1 USA MAING DCE 7112167 1276 1.00 KEV 10.0 MEV 2 FR C0HILIS								A: 0:	5-10 PERCENT ENER NEEDED FOR CONSIS CROSS SECTIONS. I SHOULD BE CHECKER	RGY RESGLUTION SUFFICIENT Stent Evaluations of Parti Existing Thermal CRCSS SEC D	AL TICNS
1274 UF TG 3.800 MEV 10.02 2 FR E.FORT CAD 7920576 1274 JEURCIN ASSCAPTICK CROSS SECTION 0: EVALUATION PROCLEMES 121067 1275 25.3 MV S.02 2 FR H-TELLER SAC 7121667 1276 25.3 MV S.02 2 FR H-TELLER SAC 7121667 1276 25.3 MV 1.00 KEV 10.5 2 USA OFFON RL 6711366 1277 25.3 MV 1.00 KEV 10.5 2 USA OFFON RL 6711366 1276 25.3 MV 1.00 KEV 10.5 2 USA OFFON RL 6711366 1277 100 EV 100.5 KEV 10.07 REAMAND PARCUNTER TARGET MAD PARCUNTERATED. 1277 100 KEV 100.5 KEV 10.07 REAMAND PARCUNTERATED. 72121656 <	S5 AMERI	CIUM 241	=== = = = = =	====== NEU	====== TRCN		INELA	STIC C	RUSS SECTION	***********************	
1274 UF TO 3.00 MEV 10.01 2 FF E_FORT CAD 7920574 551 MERICIUM 241 NEUVICIN ASSCRPTICI CREAS SECTION 1000000000000000000000000000000000000				******			======				********
O : E VALUATION PRÉGREMS 1276 AMERICIUM 241 MEUTACN ABSCRPTICA CASS SECTION 1276 25.3 MV 5.03 2 FR H-TELLIER SAC 1276 25.3 MV 5.03 2 FR H-TELLIER SAC 121106 1276 25.3 MV 1.00 KEV 10.1 2 USA ORIGO TIAN FACE AND AN-232M FACE AND AN-242M FACE AND	1274	UF	TG	3.00	MEV	10.0%	2	FR	E.FORT	CAD	7920576
St. AMERICIUM 241 NUTREM ASSERTIEN 1275 25.3 MV 5.03 2 FR M.TELLIER SAC 712166 1275 25.3 MV 5.03 2 FR M.TELLIER SAC 712166 1276 25.3 MV 5.03 2 FR M.TELLIER SAC 712166 1276 25.3 MV 1.00 KEV 10.3 2 USA GATORI R.G.CURACY AT 2 STANDARD DEVIATIONS 1277 100. EV 100. KEV 10.3 2 USA 10.00 KEV 7121667 1277 100. EV 100. KEV 8.03 1 UK C.G.CAMPGELL VIN 7121667 1278 1.00 KEV 2.00 MEV 2.1 USA MEMAGINE 72107 1278 1.00 KEV 2.00 MEV 2.00 MEV 1.00 KEV 2.00 MEV 72107 1278 1.00 KEV 10.00 KEV 2.00 KEV 1.00 KEV 2.00 PRODUCTION GE STIMATEON 722038 1279 1.00 KEV 10.00 KEV <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0:</td> <td>EVALUATION PROBLE</td> <td>EMS</td> <td></td>								0:	EVALUATION PROBLE	EMS	
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1. GUILD ACCOMMENT AT 2 SIMUAND DEFINITIONS. 25 IMPRICION 241 NUMERON CAPTURE CRISS SECTION 1276 25.3 MV 1.00 KEV 10.1 X 2 USA ORTON RL 67.1326K 1277 100. EV 100 KEV 10.1 X 2 USA ORTON RL 67.1326K 1277 100. EV 100. KEV 8.03 I UK C.G.CAMPJELL VIN 712165K 1277 100. EV 100. KEV 8.03 I UK C.G.CAMPJELL VIN 712165K 1277 100. EV 100. KEV 8.03 I UK C.G.CAMPJELL VIN 712165K 1278 1.00 KEV 2.06 MEV 20. X I USA MEMAIG DCE 741127K 1276 1.00 KEV 2.06 MEV 2.1 JAP MADIOACTIVE TARGET 4.13 YR MADIA AND AN-242M WANTED. 1276 1.00 KEV 10.0 MEV 2 FR C.PHILIS BEC 74216BK 1276 1.00 KEV 10.0 MEV 1 JAP RYMOTD PAC <	1275	25•3	MV			5.0%	2	FR	HATELLIER	SAC	7121665
95 AMERICIUM 241 NEUTRON CAPTURE CRCSS SECTION 1276 25.3 NV 1.00 KEV 10.X 2 USA ORTON RL 671136K 1277 100. KEV 10.X 2 USA ORTON RL 671136K 1277 100. KEV 100. KEV 8.0X 1 VK C.G.CARAFGEL NIN 71216SK 1277 100. KEV 2.00X 1 VK C.G.CARAFGEL NIN 71216SK 1278 1.00 KEV 2.00X 1 USA C.G.CARAFGEL NIN 71216SK 1275 1.00 KEV 2.00 NEV 1 USA MEMOLTION OF DOTH AR-2242 AND AM-242M WANTED. 1275 1.00 KEV 10.0 MEV 2 FR C.PHILIS BRC 742108K 1275 1.00 KEV 15.0 MEV 1 JAP R.YUNDIJ FX 1280 500. KEV 15.0 MEV	=========			=======				A:	TUDIED ACCURACY	AT 2 STANDARD DEVIATIONS.	
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 D:: FOR FAST REACTORS. 1278 I.00 KEY 2.CO MEY 20.3 I USA MEMIG DCE 7411278 1278 I.00 KEY 2.CO MEY 20.3 I USA MEMIG DCE 741279 1275 I.00 KEY 10.0 MEY 2 FR C.APHILIS BRC 142108 1275 I.00 KEY 10.0 MEY 2 FR C.APHILIS BRC 75203R 1280 500. KEY 15.0 MEY 1 JAP R.YUNOTD PNC 75203R 1280 500. KEY 15.0 MEY 1 JAP R.YUNOTD PNC 75203R 1280 500. KEY 3.00 MEY 10.0 TF FR F.JOSSO CAD PERCENT BLC I MEY 20 DEFICENT 1281 1.00 KEY 3.00 MEY 10.0 I FR F.JOSSO CAD PERCENT ANTED ACCURATIONS. 1281 1.00 KEY 3.00 MEY 10.0 I FR F.JOSSO CAD 762153R 1281 1.00 KEY 100. KEY 20.01 I GER MAXUESTERS KFK 75223GF 1282 100. EV 100. KEY 20.01 GER MAKUESTERS KFK 75223GF 1283 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1284 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1285 1.00 KEY 20.0 MEY 1 GER MAKUESTERS KFK 75223GF 1286 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1287 1.00 KEY 20.01 FR F.JOSSO CAD 762153R 1288 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1289 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.3 MV 15.0 MEY 1 GER MAKUESTERS KFK 75223GF 1280 25.0 MEY 20.0 MEY 5.0 T FRECTOR SECTION 	1277	100.	EV	100.	KEV	8.0%	ı	UK	C.G.CAMPBELL	WIN	712109R
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 RADIOACTIVE TARGET 632 VR D: FOR SPENT FUEL SHIELDING. 1275 1.00 KEV 10.0 MEV 2 FR C.PHILIS BRC 1421CAR 1280 500. KEV 15.0 MEV 1 JAP R.YUNOTO PNC 752033R T.HOJUYAMA JAP 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JOSSO CAD 76215A 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JOSSO CAD 76215A 1281 1.00 KEV 20.0 MEV 10.02 1 GER H.KUESTERS KFK 75223R 1282 100. EV 100. KEV 20.03 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1285 1.00 KEV 20.0 MEV 10.02 1 FR F.JOSSS FARTER KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1285 1.000 KEV 20.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 1.000 KEV 20.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 1.000 KEV 20.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 1.000 KEV 20.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.0 MEV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 25.0 MEV 15.0 MEV 1 GER H.KUESTERS KFK 75223R 1286 1.000 KEV 20.0 MEV 5.0 1 FR C.PHILIS ERC 742107R	1278	1.00	KEV	2.00	MEV	20. %	1	USA	HEMMIG	DCE	741127R
 1275 1.00 KEV 10.0 MEV 2 FR C.PHILIS BRC 1421CBR 0: ACCURACY S PERCENT TO 3 MEV. 20 PERCENT ABEVE. 0: ACCURACY S PERCENT TO 3 MEV. 20 PERCENT ABEVE. 1280 500. KEV 15.0 MEV 1 JAP R.YUMOTI PAC THOJUSTANIAL MODIFICATIONS. 1280 500. KEV 15.0 MEV 1 JAP R.YUMOTI PAC THOJUSTANIAL MODIFICATIONS. 1280 500. KEV 15.0 MEV 1 JAP R.YUMOTI PAC THOJUSTANIAL MODIFICATIONS AND ESTIMATION OF THOJUSTANIAL MODIFICATIONS AND ESTIMATIONS CONTRACTOR FUEL (VICLE OCALCULATIONS) CONTRACTOR FUEL (VICLE OCALCULATION) CONTRACTOR FUEL (VICLE OCALCULAT								a: D:	RADIOACTIVE TARGE PRODUCTION OF BOT FOR SPENT FUEL SI	ET 432 YR FH AM-242 AND AM-242M WANT HIELDING•	ED.
C: ACCURACY 5 PERCENT TO 3 MEV, 20 PERCENT ABEVE. C: FOR GATICAL ASSEMBLIES. 1280 500. KEV 15.0 MEV 1 JAP R.YUMOTD PNC 752033R T.MOJYAMA JAP C: PRODUCTION CF M-282 AND AM-242 M WANTED A: ACCURACY 10.0 PERCENT BELGW 1 MEV. 20.0 PERCENT C: REACTOR BUNN-UP CA.CULATIONS AND ESTIMATION OF TRANS-URANIUM NUCLIDE BULDO-UP IN SPENT FUEL NEUTRON SHEEDING OF SPENT-FUEL TRANSPURT CASK. 1281 1.000 KEV 3.00 MEV 10.02 1 FR F.JDSSD CAD 762153R C: BRANCHING RATIO. AM-242. M.YANTGAN. 1282 100. EV 100. KEV 20.02 1 GER M.KUESTERS KFK 792226R C: MEASUREMENT WANTED. 1283 25.3 MV 15.0 MEV 20.02 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1284 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1285 1.000 KEV 20.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 25.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 425.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 425.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 425.3 MV 15.0 MEV 1 GER M.KUESTERS KFK 752230R C: EVALUATION WANTED. 1286 1.000 KEV 20.0 MEV 5.02 1 FR C.PHILIS BRC 742107R C: WANT RATIO UF AM-242M PREDUCTION IC THAT CF GROUND STATE. C: SUBSTANTIAL MODIFICATIONS.	1279	1.00	KEV	10.0	MEV		2	FR	C.PHILIS	BRC	7421C8R
1280 500. KEV 15.0 MEV 1 JAP R.YUMOTIJ PNC 752033R 1280 500. KEV 15.0 MEV 1 JAP R.YUMOTIJ PNC 752033R 1280 S00. KEV 15.0 MEV 1 JAP R.YUMOTIJ PNC 752033R 1281 1.00 KEV 3.00 MEV 10.02 R REACTOR BURN-UP CALCULATIONS AND ESTIMATION OF METABOLIT TASSENT FUEL. 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JDSSO CAO 762153R 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JDSSO CAO 762153R 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JDSSO CAO 762153R 1282 100. EV 100.0 KEV 20.03 1 GER H.KUESTERS KFK 792226R 1283 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230R 1284 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Q: D: M:</td><td>ACCURACY 5 PERCEN FOR CRITICAL ASSE SUBSTANTIAL MODIN</td><td>NT TG 3 MEV, 20 PERCENT AE Emblies. Fications.</td><td>CVE.</td></t<>								Q: D: M:	ACCURACY 5 PERCEN FOR CRITICAL ASSE SUBSTANTIAL MODIN	NT TG 3 MEV, 20 PERCENT AE Emblies. Fications.	CVE.
C: PRODUCTION OF AM-242 AND AM-242 M VANTED A: ACQUARCY 10.0 PERCENT BELCW I MEV. 20.0 PERCENT IN THE MEV REGION. C: REACTOR BURN-UP CALCULATIONS AND ESTIMATION OF TRANS-URANIUM NUCLIDE BUILD-UP IN SPENT FUEL. NEUTRON SHIELDING OF SPENT-FUEL TRANSPURT CASK. H: SUBSTANTIAL NUDIFICATIONS. 1281 1.00 KEV 3.00 MEV 10.02 1 FR F.JOSSO CAD 762153R O: BRANCHING RATIO. AM-242, AM-242M A: QUOTED UNCERTAINTY AT 2 STANDARD DEVIATIONS. 1282 100. EV 100. KEV 20.02 1 GER H.KUESTERS KFK 792228F O: MEASUREMENT WANTED. 1283 25.3 MV 15.0 MEV 20.02 1 GER H.KUESTERS KFK 752230F O: EVALUATION WANTED. 1284 25.3 MV 15.0 MEV 10.02 1 GER H.KUESTERS KFK 752230F O: WANT RATIO UF AM-242M PRODUCTION IC THAT CF GROUND STATE. EVALUATION WANTED. 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230F O: WANT RATIO UF AM-242M PRODUCTION IC THAT CF GROUND STATE. EVALUATION WANTED. 1285 1.00 KEV 20.0 MEV 5.02 1 FR C.PHILIS BRC 74210 FUEL 1285 1.00 KEV 20.0 MEV 5.02 1 FR C.PHILIS BRC 742107F	1280	500.	KEV	15.0	MEV		1	JAP	R • YUMOTD H • MATSUNDBU T • HOJUYAMA	PNC SAE JAP	752033R
1281 1.00 KEV 3.00 MEV 10.02 1 FR F. JOSSO CAD 762153R 2: BRANCHING RATIO, AM-242, AM-242M A: GUOTED UNCERTAINTY AT 2: STANDARD DEVIATIONS. 0: FOR FAST REACTOR FUEL (YCLE CALCULATIONS. 1282 100. EV 100. KEV 20.02 1 GER H.KUESTERS KFK 792226R 1283 25.3 MV 15.0 MEV 20.02 1 GER H.KUESTERS KFK 752230R 1284 25.3 MV 15.0 MEV 20.02 1 GER H.KUESTERS KFK 752230R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R 1285 1.00 KEV 20.0								C: A: C: M:	PRODUCTION OF AN- ACCURACY 10.0 PEI IN THE MEV REGIO REACTOR BURN-UP TRANS-URANIUM NEUTRON SHIELDIN SUBSTANTIAL MODIA	-242 AND AM-242 M WANTED RCENT BELGW 1 MEV, 20.0 PE N. Calculations and estimatio NUCLIDE Build-UP in Spent S OF Spent-Fuel Transpurt Fications.	RCENT N OF Fuel. Cask.
0: BRANCHING RATIO, AM-242, AM-242M 1: 000 ENTIAL MODIFICATIONS. 1:282 100. EV 100. KEV 20.0X 1 GER H.KUESTERS KFK 792226F 1:283 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 792226F 1:283 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 792230F 1:284 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 752230F 1:284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230F 0: EVALUATION WANTED. 1 GER H.KUESTERS KFK 752231F 0: WANT RATIO OF AM-242M PREDUCTION TE THAT OF GROUND STATE. EVALUATION WANTED. EVALUATION WANTED. 55 AMERICIUM 241 NEUTREN FISSIEN CROSS SECTION EVALUATION WANTED. EVALUATION WANTED. 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS	1281	1.00	KEV	3.00	MEV	10.0%	1	FR	F.JOSSQ	CAD	762153R
1282 100. EV 100. KEV 20.0X 1 GER H.KUESTERS KFK 792226F 1283 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 792226F 1283 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 792230F 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230F 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752230F 0: WANT RATIO UF AM-2422M PREDUCTION TE THAT OF GROUND STATE. EVALUATION WANTED. 55 AMERICIUM 241 NEUTREN FISSIEN CROSS SECTION FISSIEN CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R 0: FOR CRITICAL ASSEMBLIES.								Q: A: O: M:	BRANCHING RATIO, QUOTED UNCERTAIN FUR FAST REACTOR SUBSTANTIAL MODIF	AM-242, AM-242M Fy at 2 standard deviation Fuel cycle calculation. Fications.	5.
C: MEASUREMENT WANTED. 1283 25.3 MV 15.0 MEV 20.0% 1 GER H.KUESTERS KFK 752230R G: EVALUATION WANTED. 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R G: WANT RATIO OF AM-242M PRODUCTION IC THAT OF GROUND STATE. EVALUATION WANTED. 55 AMERICIUM 241 NEUTRON FISSION CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0% 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.	1282	100.	Eν	100.	KEV	20.0%	1	GER	H.KUESTERS	KFK	792228F
1283 25.3 MV 15.0 MEV 20.0X 1 GER H.KUESTERS KFK 752230R G: EVALUATION WANTED. 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R G: WANT RATIO OF AN-242M PRODUCTION IC THAT OF GROUND STATE. EVALUATION WANTED. 55 AMERICIUM 241 NEUTRON FISSION CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.								٥:	MEASUREMENT WANTE	ED.	
Q: EVALUATIUN WANTED. 1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R Q: WANT RATIO OF AN-242M PREDUCTION IC THAT OF GROUND STATE. EVALUATION WANTED. 55 AMERICIUM 241 NEUTRON FISSION CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.	1283	25.3	MV	15.0	MEV	20.0X	1	GER	H.KUESTERS	KFK	792230R
1284 25.3 MV 15.0 MEV 1 GER H.KUESTERS KFK 752231R G: WANT RATIO OF AM-242M PREDUCTION IC THAT OF GROUND STATE. EVALUATION WANTED. GROUND STATE. EVALUATION WANTED. 95 AMERICIUM 241 NEUTREN FISSIEN CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R 0: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS. D: FOR TATIONS.								۵:	EVALUATION WANTED).	
Q: WANT RATIO UF AN-242M PREDUCTION IC THAT OF GROUND STATE. EVALUATION WANTED. 55 AMERICIUM 241 NEUTRON FISSION CROSS SECTION 1285 1.00 KEV 20.0 MEV 5.0% 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.	1284	25.3	MV	15.0	MEV		1	GER	H.KUESTERS	KFK	752231R
95 AMERICIUM 241 NEUTRCN FISSICN CROSS SECTIUN 1285 1.00 KEV 20.0 MEV 5.0% 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.								Q:	WANT RATIO OF AN- Ground State. Evaluation Wanted	-242M PREDUCTION TO THAT O).	F
1285 1.00 KEV 20.0 MEV 5.0X 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.					====== TD(N	205052522	======				
1285 1.00 KEV 20.0 MEV 5.0% 1 FR C.PHILIS BRC 742107R D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.	YD AMERIC 22222335	241					F1351 ======	======	33 SECTION 2282##3#322######		
D: FOR CRITICAL ASSEMBLIES. M: SUBSTANTIAL MODIFICATIONS.	1285	1.00	KEV	20.0	MEV	5.0%	1	FR	C.PHILIS	BRC	742107R
								0: M:	FOR CRITICAL ASSE SUBSTANTIAL MODIF	MBLIES. ICATIONS.	

95 AMERI	ICIUM 24	====: 1	**************************************	TRON		NEUTR	ONS EM	ITTED PER FISSIGN	(NU EAR		
	*******		********							*************	
1286	25.3	MV	10.0	MEV	5.0%	1	GER	B.GCEL	KFK		712104R
							A: 0:	10 PERCENT ACCUR Für Fast Reactor	ACY BELOW DESIGN.	100EV AND ABC	VE 1.0MEV
1267	25.3	MV	15.0	MEV	20.0%	1	GER	H.KUESTERS	KFK		792232k
							G :	EVALUATION WANTE	D •		
95 AMERI		=====	1======= NFU				et lon	RESONANCE INTEGRA	=======================================	***************	
			**********	=====							
1288					10.0%	2	FR	H.TELLIER	SAC		7121076
							A:	QUDTED ACCURACY	AT 2 STAN	DARD DEVIATION	S •
				== == \$		======	*****				
						======		*=======	********	**************	
1289	25.3	MV	100.	KEV	8.0X	1	υĸ	C.G.CAMPBELL	WIN		792142R
							٥:	BRANCHING RATIO.	_		
							0: M:	FUR FAST REACTOR SUBSTANTIAL MODI	S. FICATIONS	•	
					385231226 2 5				********		
SERTER ST				=====			=======				
1250	25.3	MV	15.0	MEV	10.0%	1	GER	F.FRGEHNER	KFK		792257R
							A:	5-10 PERCENT ENE	RGY RESOL	UTION SUFFICIE	NT FCR
							G:	AVERAGES. THERMAL CROSS SE	CTIONS, R	ESUNANCES AND	ABCVE IKEV
								AVERAGE PARAMETE Evaluation of Pa	RS NEEDED	FOR CONSISTEN' SS SECTIONS.	T
		2	 NFU	TRGN		CAPTU		SS SECTION		*************	
*				=====					********		**********
1 29 1	25.3	MV	10.0	KEV		2	USA	SHARP	SRL		691341R
							۵:	RADIGACTIVE TARG	ET 16.01-	HR AND 152-YR	ISOMERS
							A:	ACCURACY RANGE 1	0 • TO 20 •	PERCENT.	
							0.	FUR FU-238 FR000			
1292	25.3	MV				3	CAN	W.H.WALKER	CRC		7118656
							G: A:	FOR 16 HOUR ISON ACCURACY REQUIRE	ER. D 500 B.		
							с:	UNKNOWN CROSS SE	CTION.		
1293	10.0	MV	5.00	KEV	10.0%	2	FR	H.TELLIER	SAC		7321016
							G:	FOR NETASTABLE S	TATE OF A	M-242 (152 YEA	RS).
							2:	FOR BURN UP PHYS	ICS. E SUFFICI	ENT.	
		_				_					
1294	500.	Eν	15.0	MEV	50.0X	2	FR	M.SALVATORES			732102R
							G:	FOR METASTABLE S VALUE RELATIVE T	TATE CF A	M-242 (152 YEA Apture cross s	RS). ECTION.
							M:	SUBSTANTIAL MODI	FICATIONS	•	
1295	25.3	MV	100.	KEV		2	JAP	R.YUMDTO	PNC		752036R
								H.MATSUNOBU R.SHINDC	SAE JAE		
							Q:	WANTED FOR GROUN	D AND ISC	MERIC STATES.	
							ô:	REACTOR BURN-UP	CALCULATI	ENS AND ESTINA	TICN GF NT EVEL
								NEUTRON SHIELDIN	IG OF SPEN	T-FUEL TRANSPO	RT CASK.
1296	25.3	MV	15.0	MEV	30.0%	1	GER	H.KUESTERS	KFK		792234R
							c:	TARGET IN METASI	ABLE STAT	E.	
								EVALUATION WANTE	.D.		
1257	500.	Eν	5.00	MEV	20.0%	2	CCP	L.N.USACHEV	FEI		7540C4R
							a:	TARGET IN METASI AVERAGE CROSS SE	TABLE STAT	E. A FAST-REACTOR	SPECTRUM
							0:	REQUESTED. FOR FAST-REACTOR	BURN-UP	CALCULATION.	
								SEE GENERAL COM	ENTS.		
SS AMER	ICIUM 24	42	NEL	TRON		FISS	ICN CRO	SS SECTION			
1298	500.	ΕV	15.0	MEV	15.0%	2	FR	N.SALVATURES	CAD		7321CCR
							c:	FOR METASTABLE S	TATE OF A	M-242 (152 YEA Issicn cross s	RS). Ection.
							0: M:	FOR FAST REACTOR SUBSTANTIAL MODI	R CALCULAT	1GNS •	
1260	25.7	MV	15-0	MEV	15-01	1	GFP	H.KUESTERS	KFK		7622530
	2000	•	1000	- 		-	01	TARGET IN METASI	TABLE STAT	F.	FJEECCR
								EVALUATION WANTE	ED.		

95 AMERI	CIUM 24	2	NEU 	TRON		FISS	ION CRO	SS SECTION ====================================	******************	(CENTINUED)
1300	500.	εv	5.00	MEV	20.0%	2	ССР	L.N.USACHEV	FEI	794010R
							۵:	TARGET IN METAST	ABLE STATE.	
							0:	REQUESTED. FOR FAST-REACTOR SEE GENERAL COMM	BURN-UP CALCULATION ENTS.	•
95 AMERI	CIUN 24	2	NEU	TRON		NEUT	Rúns Em	ITTED PER FISSION	(NU BAR)	
1301	25.3	NV	15.0	MEV	15.0%	1	GER	H.KUESTERS	KFK	792235R
							.	EVALUATION WANTE	D.	
95 AMER1	CIUN 24	 3 	NEU	== 222 TRON == = = = =		TOTA	L CROSS	SECTION		======================================
1 30 2	25.3	MV	15.0	MEV	10.0%	1	GER	F.FROEMNER	KFK	792258R
							A: 0:	S-10 PERCENT ENE Thermal Cross se Average paramete Evaluation of pa	RGY RESOLUTION SUFFI CTIONS, RESONANCES A RS NEEDED FOR CONSIS RTIAL CRESS SECTIONS	CIENT NC ABOVE 5KEV Tent •
55 AMER I	CIUM 24	 3		===== Trcn		A850	RPTION	CROSS SECTION		
			========							
1303	25.3	MV			5.0%	2	FR	H.TELLIER	SAC	712113F
							A:	QUDTED ACCURACY	AT 2 STANDARD DEVIAT	ICNS.
95 ANER	CIUM 24)3 :======		===== TRCN =====	=======================================	CAPT	URE CRG	SS SECTION		
1304	25.7	мч	10-0	MEN	20 - *	2	USA	SCHENTER	HEO	2211016
1.04	2040	M V	10.0	AL V	20. *	2	03- G:	RADIDACTIVE TARG	ET 7.37X(10**3) YR	7211018
							0:	FOR LONG TERM RE SPENT FUEL SHI	ACTIVITY CALCULATION ELDING.	S AND FOR
1305	1.00	KEV	3.00	MEV	20.0%	1	FR	F.JūSSO	CAD	7321G4F
							A: 0:	QUOTED UNCERTAIN For Fast Reactor	TY AT 2 STANDARD DEV Fuel cycle calculat	IATIONS. ICNS.
1306	1.00	KEV	200.	KEV	8. X	2	USA	HEMMIG	DOE	741128R
							a: C:	RADIOACTIVE TARG FOR SPENT FUEL S	ET 7.37X(10**3) YR Hielding.	
1 307	25.3	MV	15.0	MEV	30.0%	1	GER	H.KUESTERS	KFK	792237F
							۵:	EVALUATION WANTE	D •	
1 308	500.	εv	5.00	MEV	20.0%	2	CCP	LONOUSACHEV	FEI	794005R
							C:	AVERAGE CROSS SE REQUESTED.	CTION IN A FAST-REAC	TOR SPECTRUM
							u:	SEE GENERAL COMM	ENTS.	•
1305	1.00	MEV	15.0	MEV	20.0%	2	JAP	R.YUMOTO H.MATSUNOBU	PNC	812047N
								R.SHINDÜ T.HOJUYAMA	JAE JAP	
							Q:	CAPTURE CROSS SE	CTIONS TO GROUND AND	ISOMER STATES
							A:	IN KEV AND MEV R ACCURACY FROM 5	PERCENT TO 20 PERCEN	T REQUIRED.
							0:	FOR BURN-UP CALC REACTORS, ESTIMA	ULATIONS OF THERMAL	AND FAST TRANSURANIUM
							м:	TRANSPORT CASKS SUBSTANTIAL MODI	FOR SPENT FUEL. FICATIONS.	SHIELDING OF
1310	100.	Eν	100.	KEV	10.0%	з	UK	C.G.CAMPBELL	WIN	832051R
							0: M:	FOR FAST REACTOR New Request.	S∙	
95 AMERI	CIUM 24	===== 3	NEU	TRON		FISS	ION CRO	SS SECTION		
			=======	= = = =		22580				
1311	1.00	KEV	3.00	MEV	20.0%	1	FR	F.JCSSO	CAD	712111R
							A: 0;	GUDTED UNCERTAIN	TY AT 2 STANDARD DEV FUEL CYCLE CALCULAT	IATIONS. ICN.
1312	25.3	MV	15.0	MEV	15.0%	1	GER	H.KUESTERS	KFK	792236R
							Q:	EVALUATION WANTE	D•	
S5 AMERI	CIUM 24	3	NEU	== = = = TRCN		NEUT	RCNS EM	ITTED PER FISSION		***************
1313	500.	EV	15.0	MEV	25.0¥	2	FR	F.JOSSO	CAD	7121125
						-	٥:	RELATIVE TO CF-2	52 NU.	
							A: 0:	QUDIED UNCERTAIN FOR FAST REACTOR	TY AT 2 STANDARD DEV Fule Cycle Calculat	IATIENS. Iens.

M: SUBSTANTIAL MODIFICATIONS.

55 AMERI	Clum 243	NEU IR CN		NEUTR	GNS EM	ITTED PER FISSION (NU BAR)	(CCNTINUED)
1314	25.3 MV	15.0 MEV	15.0X	1	GER Q:	H.KUESTERS KFK Evaluation wanted.	792238R
	CIUM 243					RESONANCE INTEGRAI	
				======			***********
1315			10-0%	2	FR	H.TELLIER SAC	712114R
					Α:	QUDTED ACCURACY AT 2 STANDARD DEVIATION	NS •
96 CURIU	N 242	NEUTRON		CAPTL		SS SECTION	
1316	25.3 MV		20. %	2	USA Q: Q:	SHARP SRL RADIOACTIVE TARGET 163 DAY FOR PU-238 PRODUCTION•	671135R
1317	10-0 MV	5.00 KEV	10-0*	2	FD	H-TELLIER SAC	7321075
				-	A: 0:	QUETED ACCURACY AT 2 STANEARD DEVIATION BURN UP PHYSICS.	NS.
1318	25.3 NV	100. KEV		2	JAP	R.YUMUTO PNC H.MATSUNOBU SAE T.HOJUYAMA JAP	752042F
					A: D: M:	ACCURACY REQUIRED 10 TO 20 PERCENT. REACTOR BURN-UP CALCULATIONS AND ESTIMA TRANS-URANIUM NUCLIDE BUILD-UP IN SPE NEUTRON SHIELDING OF SPENT-FUEL TRANSPO SUBSTANTIAL MODIFICATIONS.	ATICN CF ENT FUEL. DRT CASK.
1319	500. EV	200. KEV	50.0%	2	FR	F.JOSSG CAD	762154R
					A: 0: M:	QUOTED UNCERTAINTY AT 2 STANDARD DEVIAT FUR FAST REACTOR FUEL CYCLE CALCULATION SUBSTANTIAL MODIFICATIONS.	TICNS. N.
1320	25.3 MV	15.0 MEV	30.0%	1	GER	H.KUESTERS KFK	79224CK
					Q÷	EVALUATION WANTED.	
96 CURIU	======================================	NEUTRON		N, 2N			
=======	*============		*======	==#===#			
1321	UP TO	15.0 MEV	30.0%	1	GER	H.KUESTERS KFK	792241R
					a: 	EVALUATION WANTED.	
96 CURIU	M 242	NEUTRON		F1551	ON CRO	SS_SECTION	
1.322	50C. EV	15.C MEV	25.0%	2	FR	F	732165B
					Q: A: U: M:	VALUE RELATIVE TO U-235 FISSION CRGSS S QUOTED UNCERTAINTY AT 2 STANDARD DEVIA FOR FAST REACTOR FUEL CYCLE CALCULATION SUBSTANTIAL MODIFICATIONS.	SECTION. TIONS. NS.
1323	100. KEV	15.0 MEV		1	JAP	R.YUMOTO PNC H.MATSUNOBU SAE T.HGJUYAMA JAP	752041R
					A: 0: M:	ACCURACY REQUIRED 10 TO 20 PERCENT. REACTOR BURN-UP CALCULATIONS AND ESTIM TRANS-URANIUM NUCLIDE BUILD-UP IN SPO NEUTRON SHIELDING OF SPENT-FUEL TRANSPO SUBSTANTIAL MODIFICATIONS.	ATIGN OF Ent fuel. Drt cask.
1324	25.3 MV	15.0, NEV	30.0%	. 1	GER Q:	H-KUESTERS KFK Evaluation banted.	792239H
						ITTED PER FISSION (NU FAR)	
					**====		
1325	5GC. EV	15.0 MEV	30.0%	2	FR	F•JOSSO CAD	7321C6R
					Q: A: D: N:	VALUE RELATIVE TO CF-252 NU. Gugted Uncertainty at 2 Standard Devia For Fast Reactor Fuel Cycle Calculatic Substantial Mudifications.	TIONS. N+
1326	25.3 MV	15.0 MEV	30.0%	1	GER	H.KUESTERS KFK	792242F
					a:	EVALUATION WANTED.	
		NEUTRON		RESO	NANCE P	AR AME TER S	
1327	25.3 MV	1.00 KEV	20. X	3	USA	ORTON RL	671192F
					Q:	RADIGACTIVE TARGET 163 DAY ELASTIC AND GAMMA-WIDTHS WANTED.	
					0	FOR PU-238 PRODUCTION.	

				========= TD c.v			======			
	243		======	======================================		EZET	RE CRU	55 5ECTIUN ====================================		
1328	20.0	EV	100.	KEV		2	JAP	R .YUMOTO H .MATSUNOBU	PNC SAE	752047R
							A: D: M:	ACCURACY REQUIRE REACTOR BURN-UP TRANS-URANIUM NEUTRON SHIELDIN SUBSTANTIAL MODI	D 10 TO 20 PERCENT. CALCULATIONS AND ESTIMATION NUCLIDE BUILD-UP IN SPENT F G OF SPENT-FUEL TRANSPORT O FICATIONS.	N OF TUEL • TASK •
1329	500.	EV	200.	KEV	50.0%	2	FR	F.JOSSO	CAD	762156R
							A: G: M:	QUDTED ACCURACY For fast reactor Substantial Modi	AT 2 STANDARD DEVIATIONS. Fuel cycle calculation. Fications.	
1330	25.3	MV	15.0	MEV	30.0%	2	GER	H.KUESTERS	KFK	792248k
							۵:	EVALUATION WANTE	D •	
96 CURIUM	243		NEU	asasassa Trgn		FISSI	 GN CRO	SS SECTION	8.5.10.228.2222.2222.2222.22	. 20 252 ± 2
==========										
1331	3.00	MEV	10.0	MEV		2	JAP	R.YUMUTO H.Matsunobu	PNC SAE	7520456
							A: C:	ACCURACY REGUIRE Reactur Burn-Up Trans-Uranium Neutron Shieldin	D 10 TG 20 PERCENT. CALCULATIONS AND ESTIMATION NUCLICE BUILD-UP IN SPENT F G GF SPENT-FUEL TRANSPORT (CF UEL • CASK •
1332	500.	ΕV	15.0	MEV	50.0%	2	FR	F.JCSSO	CAD	762155R
							A: G: M:	QUDTED UNCERTAIN FOR FAST REACTOR SUBSTANTIAL MGDI	TY AT 2 STANDARD DEVIATIONS Fuel cycle calculation. Fications.	.
1333	25.3	MV	15.0	MEV	30.0%	2	GER	H.KUESTERS	KFK	7922476
							¢:	EVALUATION WANTE	D •	
	244		====== NFU	======= TRGN			===== ເອດຣຣ			*******
			======	== == == == == =			-21222			
1334	1.00	KEV	15.0	MEV	10.0%	2	GER	F.FROEHNER	KFK	792255R
							A: C:	5-10 PERCENT ENE Needed for consi Cross sections.	RGY RESOLUTION SUFFICIENT STENT EVALUATION OF PARTIAL	-
		******	******			CAOT.				
========		======	======	5255555		=====		55 5201100	**********************	
1335	10.0	MV	5.00	KEV	10.0%	2	FR	H.TELLIER	SAC	732109A
							A: 0:	QULTED ACCURACY Burn up physics.	AT 2 STANDARD DEVIATIONS.	
1336	500.	Eν	15.0	MEV	20.0%	1	FR	F.JCSS0	CAD	762157R
							A: 0:	QUOTED UNCERTAIN For fast reactor	TY AT 2 STANDARD DEVIATIONS FUEL CYCLE CALCULATION.	5.
1337	25.3	MV	15.0	MEV	30.0%	1	GER	H+KUESTER\$	KFK	752244R
							c:	EVALUATION MANTE	υ.	
S6 CURIUM	== = = = = = = = = = = = = = = = = = =		===== NEU	 TRCN		N.2N	======			
		******	======	=======						
1338	U	P TO	15.0	MEV	30.0%	1	GER Q:	H.KUESTERS Evaluation wante	К F K D•	792245R
									***====================================	
96 CURIUN	244		NEU	TR GN =========		F1551	ON CRO ======	SS SECTION ====================================		
1339	500.	EV	15.0	MEV	20.0%	1	FR	F.JCSSG	CAD	7321CER
							Q: A: D:	VALUE RELATIVE T QUOTED UNCERTAIN FUR FAST REACTOR	Ú U-235 FISSIGN CROSS SECTI Ty at 2 standard deviations Fuel Cycle Calculaticn.	(CN. 5.
1340	25.3	MV	15.0	MEV	30.0%	1	GER	H.KUESTERS	KFK	792243h
					*******		u. 	EVALUATION WANTE		
96 CURIUN	244		NEU	TR ON	*****	NEUTR	ONS EM	ITTED PER FISSION	(NU ÊAR)	
1341	25.3	MV	15.0	MEV	30.0%	1	GER	H.KUESTERS	KFK	79224¢R
							0:	EVALUATION WANTE	D •	
96 CURIUM	245		 NEU	TRON		CAPTU	RE CRO	SS SECTION		
=======									***************************************	
1342	500.	EV	200.	KEV	50.0%	2	FR A:	F.JCSSG QUOTED UNCERTAIN	CAD TY AT 2 STANDARD DEVIATIONS	762159R
							U: M:	FOR FAST REACTOR SUBSTANTIAL MODI	FUEL CYCLE CALCULATION. FICATIONS.	

96 CURIUN	4 245		NEU'	TR ON		CAPT	URE CRG	SS SECTION		(CGNTINUED)
1343	25.3	MV	15.0	MEV	30.0%	2	GER Q:	H.KUESTERS	KFK Manted.	79225CR
		=====								
=======		*****		=====		=====	SESSESS	======================================		
1344	500-	ΕV	15.0	MEV	50.0*	2	FR	E.J0550	CAD	762158 6
						-	A: []: M:	QUOTED UNCER FOR FAST REA SUBSTANTIAL	RTAINTY AT 2 STANDARG ACTOR FUEL CYCLE CALC MODIFICATIONS.	DEVIATIONS. CULATION.
1345	25.3	ΜV	15.0	MEV	30.0%	2	GER	H.KUESTERS	KFK	792245R
							Q:	EVALUATION N	WANTED.	
######################################	4 246		 NEU	===== TRON		===== Tota				
1346	25.3	MV	10.0	KEV	10. X	2	USA	SHARP	SRL	67114cā
							a: A:	RADIOACTIVE SHAPE OF THE INPORTANT RESGNANCE ST ACCURACY OF	TARGET 4.7X(1C**3)) ERMAL CROSS SECTION I TRUCTURE NEEDED. 10 PERCENT IN RI.	IR ESPECIALLY
		*****				*====				
96 CURIU	4 246	**===	NEU NEU	TR CN =====		CAPT	URE CRG	SS SECTION		
						-				
1347	25.3	MA	10.0	KEV	10. X	2	USA Q:	RADIDACTIVE	SRL TARGET 4.7X(10**3)	691350A (R
							A: 0:	TO EVALUATE	CF PRODUCTIÓN.	
1348	1.06	KEV	3.00	MEV	50.0%	з	FR	F.J0\$\$0	CAD	792058R
							A: 0:	QUUTED UNCER	RTAINTY AT 2 STANDARI	DEVIATIONS. Lulation.
		*****		== ===			M:	SUBSIANIIAL	MUDIFICATIONS.	
	4 240 =======		NEU	=====		====		55 SECTION ====================================		**************
1349	1.00	KEV	3.00	MEV	50.0%	3	FR	F.JOSSO	CAD	792059R
							A: 0: M:	FUR FAST REAST SUBSTANTIAL	RTAINTY AT 2 STANDARD ACTOR FUEL CYCLE CALO MODIFICATIONS.	D CEVIATIONS. Culation.
S6 CURIL	 M 247		NEU	TRCN		CAPT	URE CRU	SS SECTION		
				====:	***********	====				
1350	25.3	MV	10.0	KEV		2	USA	SHARP	SRL	6711496
							۵:	RADICACTIVE SHAPE OF THE	TARGET 1.6×(10++7) ' Ermal cross section i	YR ESPECIALLY
							A:	IMPGRTANT	• NGE 5• TG 10• PERCE	NT •
							0:	ACCURACY OF TO EVALUATE	5-10 PERCENT IN THEI CF PRODUCTION .	WAL VALUE AND RI.
1351	1.00	ĸEv	3.00	MEV	50.0%	з	FR	F.JUSSO	CAD	792060R
							A: 0: M:	QUOTED UNCER FOR FAST REA SUBSTANTIAL	RTAINTY AT 2 STANDARI ACTOR FUEL CYCLE CAL MGDIFICATIONS.	D DEVIATIONS. Culation.
96 CURIU	M 247			 TR CN		==== F 1 S S	ION CRO	SS SECTION	2222222222222222222	
									=======================================	
1352	25.3	ΜV	10.0	KEV		2	USA	SHARP	SRL	671148R
							٥:	RADIGACTIVE SHAPE OF TH	TARGET 1.6X(10**7) ERMAL CROSS SECTION	YR ESPECIALLY
							A:	IMPORTANT ACCURACY RAI ACCURACY OF	NGE 5. TO 10. PERCEN 5-10 PERCENT IN THE	NT. RMAL VALUE AND RI.
1363	1 00		3 00	MEV	50.0*	-	E 0	E 10530	CAD	2020615
1323	1.00	NEV	3.00	MCV	30.04	5	- FR 	P.JUSSU	CAU DTAINTY AT 2 STANDAD	7920CIR
							0: M:	FOR FAST RE	ACTUR FUEL CYCLE CAL MODIFICATIONS.	CULATION.
			1827228232 NC**			Deer				
98 CORTO	4 247			====		====	======	======================================		
1354	25.3	MV	10.0	KEV	20. X	2	USA	SHARP	SRL	671147R
							Q:	RADIDACTIVE	TARGET 1.6×(10**7) 20 PERCENT IN RI.	YR
							ō:	TO EVALUATE	CF PRODUCTION.	
96 CURIU	N 248		NEU	TRON		CAPT	URE CRG	SS SECTION		
		****		====			======			
1355	1.00	KEV	3.00	MEV	50.0%	з	FR At	F.JOSSO	CAD RTAINTY AT 2 STANDAD	792062R D DEVIATIONS-
********							: 	FOR FAST RE	ACTUR FUEL CYCLE CAL MODIFICATIONS.	CULATION.

96 CURIL	JM 248		NEU	===== TRON =====		F155	ION CRO	SS SECTION		**************	
1356	1.00	KEV	3.00	MEV	50.0%	3	FR	F.J0550	CAD		792063R
							A:	QUOTED UNCER	TAINTY AT 2 S	TANDARD DEVIAT	IONS.
							M:	SUBSTANTIAL	MODIFICATIONS	•	
97 EEAKE	LIUM 24	9	NEU	TRCN		CAPT	URE CRO	SS SECTION			
1357	1.00	KEV	3.00	MEV	50.0%	З	FR	F.JUSSO	CAD		752064R
							A: 0:	QUGTED UNCER	RTAINTY AT 2 S Actor fuel Cyc	TANDARD DEVIAT Le calculation	IONS.
					=================		M:	SUBSTANTIAL	MODIFICATIONS	•	
97 EERKE	EL IUM 24	9 =====	NEU	TRGN =====	**********	FISS	ION CRO	SS SECTION			
1358	1.00	KEV	3.00	MEV	50.0X	£	FR	F.JGSSG	CAD		7920¢5R
							A: 0:	QUOTED UNCER	RTAINTY AT 2 S ACTOR FUEL CYC	TANDARD DEVIAT Le calculatign	IGNS.
							м: =======	SUBSTANTIAL	MGDIF (CATIONS	•	
98 CALII	FOAN IUM 	249	NEU	TRON	**********	CAPT	URE CRO	SS SECTION		232352522222	
1359	1.00	KEV	3.00	MEV	50.0%	з	FR	F.JCSSC	CAD		792066R
							A: 0:	GUDTED UNCER	RTAINTY AT 2 S ACTOR FUEL CYC	TANDARD DEVIAT Le calculation	ICNS.
							M; CZ25222	50857AN11AL	MUDIFICATIONS	• a====================================	
98 CALIF		245	NEU	TR GN =====		FISS	ICN CRG	SS SECTION			
1360	1.00	KEV	3.00	MEV	50.0%	3	FR	F.JGSSG	CAD		7920E7R
							A: G:	QUOTED UNCER	RTAINTY AT 2 S ACTOR FUEL CYC	TANUARD DEVIAT LE CALCULATION	110NS.
========		== == =		=====						•	
98 CALIF		250	NEU	=====		CAPT SEES		55 SECTION	====		
1361	25.3	MV	10.0	KEV	10. X	2	USA	SHARP	SRL		691357R
							Q: A: D:	RADIOACTIVE ACCURACY OF TO EVALUATE	TARGET 13.1 Y 10 PERCENT IN CF PRODUCTION	R RI.	
		250	NEU	== == = TR GN		FISS		SS SECTION			
1362	25.3	MV	10.0	KEV	10 . X	2	USA	SHARP	SRL	· ·	671153R
							A: 0;	ACCURACY OF TG EVALUATE	10 PERCENT IN CF PRODUCTION	RI.	
98 CALIF	FORN IUM	 250	NEU	== === TR ON		RESO	NANCE P	ARAMETERS			***********
		====;		=====					***********		
1363	25.3	MV	10.0	KEV	20. X	2	USA Q:	SHARP RADIOACTIVE	SRL TARGET 13.1 Y	R	671152R
							A: 0:	ACCURACY OF TO EVALUATE	20 PERCENT IN CF PRODUCTION	* *	
98 CALIF	ORN IUM	251	NEU	TR CN		CAPT	URE CRO	S5 SECTION			
1360		M.		*= = = = = =				C LADO			· · · · · · · · · · · · · · · · · · ·
1364	23.3	м¥	1010	NC V	10. *	2	034 Q:	RADIOACTIVE	TARGET 9.0X(1	0**2] YR	G/1124R
							A: 0;	ACCURACY OF Tũ Evaluate	10 PERCENT IN CF PRODUCTION	kl. •	
98 CALI#	FORN IUM	251	NEU	TRCN		FISS	ICN CRO	SS SECTION			
1365	25.3	MV	10.6	KEV	10 . x	2	USA	SHARP	SRL		7411328
							۵:	RADIOACTIVE	TARGET 9.0X(1	0++2) YR	INDOUTANT
							A: 0:	10 PERCENT D TO EVALUATE	IN RÉSONANCE I CF PRODUCTION	TEGRAL.	IMPORTANTS
	FORN LUM	 251	NEU	TR ON		RESO	NANCE P	ARAMETERS		**************	*********
=== =====				=====	*******						
1366	25.3	MV	10.0	KEV	10. X	2	USA G:	SHARP	SRL TARGET 9.0X(1	0++2) YR	7611C6R
				=====							
30 LALIM		232	546			NEUT	RCN5 EM	14 ILU PER FIS	SILN LNU BAR	, ====================================	
1 367					0.3%	1	FR	E.FORT	CAD		712119F
							0:	DISCREPANCY SPECTRUM E FCR 22001	BETWEEN DIFFE Experiments Ha 4/s data.	RENTIAL AND MA Vê từ be rescl	XWELL VEC

98 CALIF	ORNIUM	252 =======	SPO	NT ANEO	us ==========	NEUTR	RGNS EN	ITTED PER FISS	ION (NU BAR)	(CONTINUED)
1368						1	CCP	M.N.NIKOLAEV	FEI	714033R
							A: 0:	ACCURACY NOT MUST BE GUARA OF AT LEAST LESS THAN T SEL GENERAL C FIRST PRIORIT RECONCILE T EXPERIMENTS	WORSE THAN 0.3 PERCE NTEED BY AGREEMENT W FOUR EXPERIMENTS CA BU DIFFERENT METHODS GNMENTS IN THE INTRL Y BECAUSE IT IS DIFF HIS STANDARD WITH MA	NT. ITHIN 0.5 PERCENT RRIEC GUT EY NGT DUCTIGN. ICULT TG CRCSCCPIC
1369					•25 X	1	USA	HEMMIG	DGE	82101SF
							G:	RADIOACTIVE T THIS REQUEST 0.2 PERCENT (1982).	ARGET 2.64 YR May be satisfied by Measurement at crni	A RECENT , NSE, 80, 603
							0: M:	THIS REQUEST AS DESERVIN NEW REQUEST.	WAS REVIEWED BY CSEN G SPECIAL EMPHASIS.	G AND RECOMMENDED
STATUS										STATUS
U 	INDER CC	NTINUGUS	REVIE	■ 8Y 1 ======	NDC AND N	EANDC.	SEE API	PENDIX A.		
96 CALIF	ORNIUM	252	SP0	NTANEO	US ============	ENER	GY SPEC	TRUM OF FISSIC	N NEUTRUNS	================================
1376					2.0x	2	UK	E.LYNN	HAR	7321176
							A: U:	ACCURACY FOR 10 PERCENT AC NEUTRONS AB STANDARD.	MEAN SPECTRUM ENERGY Curacy wanted fur th Ove 5 Mev and belgw	• IE NUMBER LF •25 Mev•
1371					2.0%	1	GER	H.KUESTERS	KFK	752185k
							Α:	2 PERCENT ACC 10 PERCENT AC NEUTRONS ABOV NEUTRONS ABOV NEUTRONS ABOV NEUTRONS ABOV	URACY ON MEAN FISS. CURACY WANTED ON THE E 5 MEV AND BELCW .2 E 5 NEV AND BELCW .2 E 5 MEV AND BELCW .2 E 5 MEV AND BELCW .2	SPECTRUM ENERGY. NUMBER <i>LF</i> 15 MEV. 15 MEV. 15 MEV. 15 MEV.
1372					1.0 X	1	USA	HEMMIG	DOE	821026R
							Q: 0: M:	RADIDACTIVE T MEAN SPECTRUM FOR INTERPR NEED THE SP 5 PERCENT (ABSGLUTE ME SPECTRUM MA THIS REQUEST AS DESERVIN NEW REQUEST.	ARGET 2.64 YR ENERGY DESIRED TL I ETATION LF NUBAR RAT ECTRUM SHAPE. DELTA 130 KEV) WOULD NOT E ASUREMENT OF THE SHA Y DE NECESSARY. WAS REVIEWED BY CSEW G SPECIAL EMPHASIS.	.0 PERCENT IG MEASUREMENT. E(AVG) TG IS CSEPUL. AN IFE OF THE IG AND RECOMMENDED
STATUS										STATUS
		NTINUCUS	REVIE	W 8Y 1						
	INDER CG				NDC AND N	EANDC.	SEE AP	PENDIX A.		
98 CALIF	UNDER CC	252 252	====== NEU	TR CN	NDC AND N ===================================	EANDC. FISS	SEE AP	PENDIX A. SS Section		
98 CALIF	25.3	252 852 852	NEU	TR (N TR (N K EV	NDC AND N	EANDC . F 155	SEE AP	SHARP	SRL	7411295
98 CALIF	25.3	252 	NEU	τρςΝ τρςΝ κεν	NDC AND N	EANDC. Fiss 2	SEE AP ICN CRO USA G: A: USA	PENDIX A. SS SECTION SHARP RADIGACTIVE T ACCURACY OF 1 TU EVALUATE C	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION.	74112ys
98 CALIE 98 CALIE 1373	25.3	NV	10.0	TR CN TR CN K EV K EV	NDC AND N	EANDC. FISS 2 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION.	7 4 1 1 2 y f
98 CALIF 98 TALIF 1373 FISSICN	25.3 PRODUCT	NV	10.0	KEV	10. X	EANDC. FISS 2 2 INEL	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION.	7 4 1 1 2 y 5
98 CALIF 98 CALIF 1373 FISSICN 1374	OGNIUM 25.3 PRODUCT 80C.	NV S KEV	10.0 NEU NEU S.00	K EV	10. X	EANDC - F ISS 2 INEL 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI	74112ys 74112ys 754022F
98 CALIF 98 CALIF 1373 FISSICN 1374	25.3 PRODUCT	NV S	10.0 NEU	K EV K EV	10. 2	EANDC - F ISS 2 I NEL 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TD EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. FROM 1.4 - 2. FROM 1.4 - 5. SHEED FOR FAST FCR MORE DETA	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 15 F C MEV ACCURACY 3C F REACTOR CALCULATION IL SEE INTRODUCTION.	7411296 7411296 7540226 PERCENT. PERCENT.
98 CALIF 98 CALIF 1373 FISSICN 1374 STATUS	25.3 PRODUCT 80C.	NV S KEV	10.0 NEU NEU S.00	KEV KEV TR CN TR CN MEV	10. X	EANDC - F ISS 2 I NEL 2 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TÛ EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. NEED FOR FAST FCR MORE DETA	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F C MEV ACCURACY 15 F REACTOR CALCULATION. IL SEE INTRODUCTION.	741129R 74129R 754022P PERCENT - PERCENT - PERCENT - STATUS
1373 FISSICN 1374 STATUS U	PRODUCT	NV S KEV NT INUOUS	NEU 10.0 NEU 5.00	KEV KEV TR GN MEV WEY L	10. 2 	EANDC - F ISS 2 INEL 2 APPEND ======= CAPT	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. FROM 1.4 - 2. FROM 1.4 - 2. FROM 2.5 - 5. NEED FOR FAST FCR MORE DETA	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F C MEV ACCURACY 13 F REACTOR CALCULATION IL SEE INTRODUCTION.	7411295 7411295 7540225 PERCENT - PERCENT - PERCENT - PERCENT - STATUS
98 CALIF 98	25.3 PRODUCT 80C.	NV S KEV NT INUQUS S	10.0 NEU NEU S.00	KEV KEV TRCN TRCN MEV WEY A TRGN TRGN	NDC AND N	EANDC - F ISS 2 I NEL 2 APP END CAPT	SEE AP	SHARP RADICACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. FROM 1.4 - 2. NEED FOR FAST FCR MORE DETA	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F C MEV ACCURACY 15 F C MEV ACURACY 15	741129R 754022F PERCENT. DERCENT. PERCENT.
1373 98 CALIF 98 CALI	25.3 PRODUCT 80C. UNCER CG PRODUCT	NV S KEV NT INUGUS S EV	NEU 10.0 NEU 5.00 5.00	TR CN TR CN TR CN TR CN TR CN TR CN KEV	NDC AND N 10. X NDC. SEE 20.0X	2 F ISS I NEL I NEL 2 APPEND CAPT	SEE AP USA G: AST IC C CCP A: U: IX A. URE CRO CCP Q:	SHARP RADIGACTIVE T ACCURACY OF 1 TÛ EVALUATE C I EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. FROM 2.5 - 5. NEED FOR FAST FCR MORE DETA SS SECTION M.N.NIKULAEV AVERAGE CAPTU PRODUCTS, S FISSION PRO DATA FOR FISS PU-239 AND SEE GENERAL C	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F 6 MEV ACCURACY 13 F 7 REACTOR CALCULATION IL SEE INTRODUCTION. FEI FEI FEI FEI FEI FEI FEI CCCSS SECTION FCG TABLE, LUNG-LIVED AN DUCTS JION PRODUCTS OF U-2: PU-240 ARE OF GREAT 	741129R 741129R 754022P PERCENT. PERCENT. PERCENT. 754022F PERCENT. 754022F PERCENT. 714036F R LUMPED FISSION NO EQUILIERIUM 35. U-238. INTEREST. EDUCTIEN.
98 CALIF 98 CALIF 98 CALIF 98 CALIF 98 CALIF 98 CALIF 1373 1373 1373	25.3 PRODUCT 80C.	NV 252 NV NV S KEV NT INUOUS S EV KEV	10.0 NEU NEU S.00	TR CN TR CN TR CN MEV W EY I TRGN KEV	NDC AND N	EANDC - F ISS 2 INEL 2 APP END CAPT CAPT 2 2	SEE AP	SHARP RADICACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. NEED FOR FAST FCR MORE DETA SS SECTION SS SECTION M.N.NIKULAEV AVERAGE CAPTU PRODUCTS, S FISSION PRO DATA FOR FISS PU-239 AND SEE GENERAL C L.N.USACHEV	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F C MEV ACCURACY 15 F C MEV ACCURACY 15 F REACTOR CALCULATION IL SEE INTRODUCTION FEI FEI FEI FEI FEI FEI FEI FEI	741129R 754022F PERCENT. DERCENT. DERCENT. FROM FROM TI4036F R LUMPED FISSION TI4036F R LUMPED FISSION S5. U-238. INTEREST. COUCTION. 7540156
1373 98 CALIF 98 CALIF 98 CALIF 98 CALIF 98 CALIF 1373 1373 1373 1375	25.3 PRODUCT 80C. UNCER CG PRODUCT 100.	KEV KEV	NEU 10.0 NEU 5.00 REVIE 100.	K EV K EV TR CN TR CN M EV W EY I TR GN K EV M EV	NDC AND N	EANDC . F ISS 2 I NEL 2 APP END CAPT 2 2 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. FROM 2.5 - 5. NEED FOR FAST FCR MORE DETA SS SECTION M.N.NIKULAEV AVERAGE CAPTU PRODUCTS, S FISSION PRO DATA FOR FISS PU-239 AND SEE GENERAL C L.N.USACHEV FROM 5.0 - 10	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F C MEV ACCURACY 15 F C MEV ACCURACY 15 F REACTOR CALCULATION IL SEE INTRODUCTION FEI FEI FEI FEI FEI FEI FEI C CRCSS SECTION FCF TABLE, LUNG-LIVED AN DOUCTS JION PRODUCTS OF U-2: PJ-240 ARE OF GREAT CGMMENTS IN THE INTRO FEI C KEY ACCURACY 7	741129R 741129R 754022F PERCENT. PERCENT. PERCENT. 754036F 714036F R LUMPED FISSION NO EQUILIERIUM 35, U-238. INTEREST. FOUCTION. 754015F
98 CALIF 98 CALIF 98 CALIF 98 CALIF 98 CALIF 98 CALIF 1373 1373 1374	25.3 PRODUCT 80C. UNCER CG PRODUCT 100.	NV S KEV NT INUOUS S EV KEV	NEU 10.0 NEU 5.00	TR CN TR CN TR CN TR CN KEV	NDC . SEE	EANDC - F ISS 2 INEL 2 APP END CAPT 2 2	SEE AP ICN CRO USA G: A: USA CCP A: U: IX A. URE CRO Q: Q: Q: CCP A: CCP A: CCP	SHARP RADIGACTIVE T ACCURACY OF 1 TO EVALUATE C ROSS SECTION L.N.USACHEV FROM 1.4 - 2. FROM 1.4 - 2. FROM 2.5 - 5. NEED FOR FAST FCR MORE DETA M.N.NIKULAEV AVERAGE CAPTU PRODUCTS. S FISSION PRO DATA FOR FISS SEE GENERAL C L.N.USACHEV FROM 0.1 - 0. FROM 0.1 - 0. FROM 0.2 - 10 FROM 0.1 - 0. FROM 0.2 - 10 FROM 0.1 - 0. FROM 0.2 - 10 FROM 0.2 - 10 FROM 0.2 - 10 FROM 0.2 - 10 FROM 0.1 - 0. FROM 0.2 - 10 FROM 0.1 - 0 FROM 0.2 - 10 FROM 0.2 -	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 13 F 7 MEV ACCURACY 15 F C MEV ACCURACY 30 F REACTON CALCULATION IL SEE INTRODUCTION FEI FEI FEI FEI C KEV ACCURACY 7 F 8 MEV ACCURACY 7 F 8 MEV ACCURACY 14 F 5 MEV ACURACY 14 F 5 MEV ACU	741129R 754022F PERCENT. PERCENT. PERCENT. PERCENT. 714036F R LUMPED FISSION NO EQUILIERIUM 35. U-238. INTEREST. EDUCTION. 754015F PERCENT. PERCENT. PERCENT. PERCENT.
98 CALIF 98 CALIF 1373 FISSICN 1374 STATUS U FISSION 1375 1376 STATUS	25.3 PRODUCT 80C. UNCER CG PRODUCT 100.	NV 252 NV S KEV NT INUGUS S E V KEV	NEU 10.0 NEU 5.00 S REVIE 100.	TR CN TR CN TR CN TR CN MEV W EY I TRGN KEV	10. X	EANDC - F ISS 2 INEL 2 APPEND CAPT 2 2 2	SEE AP	SHARP RADIGACTIVE T ACCURACY OF 1 TD EVALUATE C TD EVALUATE C ROSS SECTION L.N.USACHEV FRGM 0.8 - 1. FROM 1.4 - 2. NEED FOR FAST FCR MORE DETA SS SECTION N.N.NIKULAEV AVERAGE CAPTU PRODUCTS.S FISSION PRO DATA FOR FISS PU-239 AND SEE GENERAL C L.N.USACHEV FROM 5.0 - 10 FROM 0.1 - 0. FROM 0.3 - 4. ABDVE 4.5 MEV NEED FOR FAST FUR MORE DETA	SRL ARGET 2.64 YR O PERCENT IN RI. F PRODUCTION. FEI 4 MEV ACCURACY 13 F 5 MEV ACCURACY 15 F C MEV ACCURACY 15 F C MEV ACCURACY 16 F REACTOR CALCULATION IL SEE INTRODUCTION FEI VRE CRCSS SECTION FOR TABLE, LUNG-LIVED AT DUCTS SION PRODUCTS OF U-2: PU-240 AFE OF GREAT JOHNENTS IN THE INTRO FEI OC KEV ACCURACY 14 F 5 MEV ACCU	741129R 754022F PERCENT. PERCENT. PERCENT. FORCENT. T14036F R LUMPED FISSION NO EQUILIERIUM 35, U-238. INTEREST. DERCENT. PERCENT. PERCENT. S WEAKER. NS.

STEEL NEUTRON		'RON ====================================	CAPTURE CROSS SECTION							
EV 8	00.	KEV	1	ССР	M.N.NIKULAEV	FEI	7140356			
				0: A: 0:	RATIOS WANTED F LI-6, HE-3 AR 10 PERCENT BELC SEE GENERAL CU ANALYSIS OF FA' THAT THE CAP STEEL IS MUCI MICROSCOPIC L FIRST PRIORITY STEEL CAPTURE ACCURACY FRO	RELATIVE TO U- ND H-1 STANDAR DW. 20 FERCENT MENTS IN THE ST CRITICAL AS FURE CROSS SEC 4 GREATER THAN DATA. BECAUSE IT IS E CROSS SECTIU M MACROSCOPIC	235 FISSIGN, 8-10, DS. ABUVE 10C KEV WANTED INTRODUCTION. SEMBLIES INDICATES TION OF STAINLESS CALCULATED FRUM DIFFICULT TG EVALUATI N TO REQUESTED EXPERIMENTS ONLY.			
κεν 1	0.0	MEV	2	CCP	L.N.USACHEV	FEI	754016			
				A: 0:	FRUM 5.0 - 100 FRUM 0.1 - 0.8 FRUM 0.8 - 4.5 ABOVE 4.5 MEV 1 NEED FOR FAST 1 FOR MORE DETAIL	KEV ACCURACY MEV ACCURACY NEV ACCURACY Requirements 2 Reactor calcul See Introduc	11 PERCENT. 15 PERCENT. 20 PERCENT. TIMES BEAKER. ATIGNS. TIGN.			
	EV 8	ΝΕυΤ Εν 800.	NEUTRON EV 800. KEV KEV 10.0 MEV	NEUTRON CAPT	NEUTRON CAPTURE CRO EV 800. KEV 1 CCP u: A: D: KEV 10.0 MEV 2 CCP A: 0:	NEUTRON CAPTURE CROSS SECTION EV 800. KEV 1 CCP M.N.NIKÜLAEV Q: RATIOS WANTED F LI-6, HE-3 AN A: 10 PERCENT BELC O: SEE GENERAL CCD ANALYSIS OF FAX THAT THE CAPT STEEL IS MUCC MICROSCOPIC I FIRST PRIORITY STEEL CAPTURE ACCURACY FROM KEV 10.0 MEV 2 CCP L.N.USACHEV A: FRUM 5.0 - 100 FROM 0.1 - 0.8 FROM 0.8 - 4.5 ABDVE 4.5 MEV I C: NEED FOR FAST I FOR MORE DETAIL	NEUTRON CAPTURE CROSS SECTION EV 800. KEV 1 CCP M.N.NIKÜLAEV FEI Q: RATIDS WANTED RELATIVE TO U- LI-6. HE-3 AND H-1 STANDAR A: 10 PERCENT BELOW. 20 PERCENT O: SEE GENERAL COMMENTS IN THE ANALYSIS OF FAST CRITICAL AS THAT THE CAPTURE CROSS SEC STEEL IS MUCH GREATER THAN MICROSCOPIC DATA. FIRST PRIORITY BECAUSE IT IS STEEL CAPTURE CROSS SECTIO ACCURACY FROM MACROSCOPIC KEV 10.0 MEV 2 CCP L.N.USACHEV FEI A: FRUM 5.0 - 100 KEV ACCURACY FROM 0.1 - 0.8 MEV ACCURACY FROM 0.3 - 4.5 MEV ACCURACY ABDVE 4.5 MEV REQUIREMENTS 2 C: NEED FOR FAST REACTOR CALCUL FOR MORE DETAIL SEE INTRODUC			

V. INDEX OF SATISFIED AND WITHDRAWN REQUESTS

The following index lists all requests which appeared in the previous edition but which, since then, have been removed from the request file. For convenient cross-reference, the WRENDA 81/82 reference number (see <u>Section II.A.</u>) of each request is listed in parentheses next to the identification number.

To remove a request from the file, the requestor may declare it either "satisfied" (if he considers that newly available data meets the expressed need) or "withdrawn" (if it is to be removed for any other reason).

There would be two separate lists: one for "satisfied" and the other for "withdrawn" requests.

				OF SATIS	FIED REQUESTS
				• :	
1 HYCROG	EN 2	ALPHA		ELASTIC	CROSS SECTION
(10)	50.0 KEV	2.JO MEV		į US	A BERK DOE 781071F ACCURACY 10.C PERCENT RELATIVE, 30.0 PERCENT ABSOLUTE REQUIRED. REQUIRED TO CALCULATE HEATING OF PLASMA FUEL BY FUSION PRODUCT ALPHAS.
1 HYERDG	EN 3	CEUTERON		0.0	
(13)	10.J KEV	5.00 MEV		1 US	A BERK DOE 301233F ACCURACY 10 PERCENT RELATIVE. 30 PERCENT ABSOLUTE. CROSS SECTIONS FOR ALTERNATE FUEL CYCLES.
1 HYCROG	EN 3	DEUTERON		D. ALPHA	
. 14)	UP'TO	10.0 KEV	. :	1 US	A BERK DOE 751069F RADIDACTIVE TARGET 12.33 YR ACCURACY 10.0 PERCENT RELATIVE, 30.0 PERCENT ABSOLUTE REQUIRED.
I HYEROG	EN 3	TRITON		T, ALPHA	
(15.)	OT AL	10.0 KEV		ı Us	A BERK DOE 791070F RADIDACTIVE TARGET 12.33 YR ACCURACY 10.0 PERCENT RELATIVE, 30.0 PERCENT ABSOLUTE REQUIRED. DATA REQUIRED TO ANALYZE BACKGROUND NEUTRONS AND ESTIMATE TRITIUM ION TEMPERATURES.
1 HYDROG	EN 3	АЦРНА		ELASTIC	CROSS SECTION
(16)	50.J KEV	2.00 MEV		1 US	A BERK DOE 791072F RADIDACTIVE TARGET 12.33 YR ACCURACY 10.0 PERCENT RELATIVE. 30.0 PERCENT ABSOLUTE REQUIRED. REQUIRED TO CALCULATE HEATING OF PLASMA FUEL BY FUSION PRODUCT ALPHAS.
2 HEL IUM	3	DEUTERON		D, P	
(25.)	2.00 MEV	5.00 MEV		1 US	A BERK DCE
2 HELIUM	3	DEUTERON		D.D	
(26)	300. KEV	1.00 MEV		1 US	A BERK DOE S01284F ACCURACY 10 PERCENT RELATIVE, 30 PERCENT ABSOLUTE. CROSS SECTIONS FOR ALTERNATE FUEL CYCLES.
Z HELIUM	· · · · · · · · · · · · · · · · · · ·	HEL1UM-3		HELIUM-3	.HELIUM-3
(27)	50.0 KEV	3.00 MEV		2 US	A BERK DOE 801075F ACCURACY 10 PERCENT RELATIVE, 30 PERCENT ABSOLUTE. CROSS SECTIONS FOR ALTERNATE FUEL CYCLES.
3 LITHIU	IM	NEUTRON		TOTAL PR	DTON PRODUCTION CROSS SECTION
(28)	9.00 MEV	15.0 MEV	10. %	1 US	A BERK DOE 301040F TOTAL HYDRDGEN PRODUCTION. RADIATION DAMAGE CALCULATIONS.
3 LITHIU	IM	NEUTRON		ENERGY-A	NGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(29)	15.0 MEV			2 US	A BERK DOE 801093F

ACCURACY TO BE DETERMINED. DATA REQUIRED FOR RADIATION DAMAGE CALCULATIONS.

3 LITHIUM			NEU	TRCN		ENERC	SY-ANGL	E DIFF. ALPHA-PRCDUCTION CROSS SECTION
(30)	15.0	MEV				2	USA	BERK DOE 301094F ACCURACY TO BE DETERMINED. DATA REQUIRED FOR RADIATION DAMAGE CALCULATIONS.
3 LITHIUM	5		NEU	TRCN		N. T		
(54)	300.	ĸEV	15.0	MEV	5.0%	1	GER	J.DARVAS JUL 722062F TOTAL TRITIUM PRODUCTION REQUIRED. ENERGY RESOLUTION SHOULD REPRODUCE TRUE SHAPE. FOR DETERMINATION OF MORE ACCURATE TRITIUM SREEDING RATIOS.
3 LITHIUM	- - 5		 NEU	TRON		N. T		
(57)	5.00	KEV	15.0	MEV	5.0%	1	GER	M.KUECHLE KFK 742110F STANDARD.
3 LITHIUM	6		NEU	TRON		N, T		
(60)	500.	KEV	5.00	MEV	10. X	1	USA	BERK DOE 781160F NEEDED TO DESCRIBE BREEDING IN D-T SYSTEMS.
3 LITHIUM	7		NEU.	TRON		DIFFE	RENTIA	L ELASTIC CROSS SECTION
(70)	1.00	ME V	15.0	MEV	10.0x	1	GER	J.DARVAS JUL 722066F AODITIONAL DISTRIBUTIONS BETWEEN 1 AND 7 MEV REQUIRED IN STEPS OF 0.5 TO 1 MEV. FOR CALCULATION OF NEUTRON TRANSPORT.
3 LITHIUM	7		NEU	TRON		INELA	STIC C	ROSS SECTION
(74)	500.	 κεν	15.0	MEV	10.0%	2	GER	J.DARVAS JUL 722068F CROSS SECTION FOR C.478 MEV LEVEL REQUIRED. FOR SHIELDING ESTIMATES AND CALCULATION OF HEAT GENERATION.
3 LITHIUM	7		NEU	TRON		ENERG	Y-ANGL	E DIFF. NEUTRON-EMISSION CROSS SECTION
(83)	9.00	MEV	1 5.0	MEV	10. X	1	USA	BERK DCE 781042F FOR SHIELDING AND TRANSPORT STUDIES OF NEXT GENERATION D-T REACTOR DESIGNS.
3 LITHIUM	7		NEU	TRON		ENERG	Y-ANGL	E DIFF. PROTON-PRODUCTION CROSS SECTION
(26)	15.0	MEV		÷ -+		2	USA	BERK DOE 781135F ACCURACY TO BE DETERMINED. DATA REQUIRED FOR RADIATION DAMAGE CALCULATIONS.
3 LITHIUM	7		NEU	TRCN		N, NT		
(£8)	 ני	р то	15.0	MEV	5.0%	1	GER	J.DARVAS RESOLUTION AND ENERGY STEPS OF .2 TO .5 MEV SUFFICIENT. DETERMINATION OF MORE ACCURATE TRITIUM BREEDING RATIOS.
3 LITHIUM	7		NEU	TRCN		N. NT		
(53)	5.00	MEV	16.0	NEV		1	USA	BERK DOE 781159F ACCURACY RANGE 5. TO 10. PERCENT. NEEDED TO DESCRIBE BREEDING IN D-T SYSTEMS.
3 LITHIUM	7		NEU	TRCN		ENERG	Y-ANGL	E DIFF. ALPHA-PREDUCTION CROSS SECTION
(<u>S</u> č)	15.0	MEV				2	USA	BERK DOE 731114F ACCURACY TO EE DETERMINED. DATA REQUIRED FER RADIATION DAMAGE CALCULATIONS.

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4 BERYLLIU	9 M		NEUT	RCN		ENERG	Y - ANGL	E DIFFERENTI4	AL INE	LASTIC CROSS SE	ECTION	
(103)	8.00	MEV	15.0	MEV	10.0%	2	GER	J.DAR VA S		JUL		722074F
4 BERYLLIU	M 9		NEUT	RON		TOTAL	ALPHA	PRODUCTION C	CROSS	SECTION		
(115)	9.00	MEV	15.0	MEV	10. %	2	USA	BERK FOR RADIATIO	ON DAM	DOE AGE CALCULATIO	NS .	731091F
4 BERYLLIU	лм 9		NEUT	RON		ENERG	Y-ANGLE	E DIFF. ALPHA	A-PR GD	UCTION CROSS S	ECTION	
(119)	15.0	MEV				2	USA	BERK ACCURACY TO DATA REQUIRE	BE DE ED FOR	DOE TERMINED. RADIATION DAMA	AGE CALCULAI	731124F
5 CRON 10	 >		NEU1	FCN		ENERG	Y-ANGL	E DIFF. NEUTR	RON-EM	ISSION CRESS S	ECTION	
(131)	9.00	MEV	15.0	MEV	10. %	1	USA	BERK DATA NEEDED TRANSPORT	FOR SI	DOE HIELDING AND NI LATIONS.	EUTRON	781088F
5 BCRCN 10	>		NEUT	RCN		TOTAL	PROTO	N PRODUCTION	CROSS	SECTION		
(122)	9.00	MEV	14.0	MEV		2	USA	BERK ACCURACY RAN ACCURACY TO FOR RADIATIO	NGE 10 BE DE DN DAM	DOE • TO 50• PERCEI TERMINED FROM : AGE CALCULATIO	NT . SENSITIVITY NS .	781112F STUDIES
5 BCRON 10			NEUT	RON		ENERG	Y-ANGLE	DIFF. PROTO	0 N-P R 01	DUCTION CROSS	SECTION	
(133)	15.0	MEV				2	USA	BERK ACCURACY TO DATA REQUIRE	BE DE	DOE TERMINED. RADIATION DAM	AGE CALCULAT	731154F
3 BCRON 10)		NEUT	RCN		N. ALP	 HA					
(144)	10.0	MV	10.0	EV	1. %	2	USA	CARLSON TO CHECK FOR	R MOLE	NBS Cular Sinding (EFFECTS.	791176R
3 BCRGN 10)		NEUT	RCN		ANGUL	AR DIST	TRIBUTION OF	ALPHA	PARTICLES		
(146)	50.0	KEV	200.	KEV	5. %	2	USA	HALE NEEDED FOR F	R-MATR	LAS IX FIT.		801293R
5 BCRCN 10)		NEUT	RCN		TOTAL		PRODUCT ION	CROSS	SECTION		
(147)	9.00	MEV	14.0	MEV		2	USA	BERK ACCURACY RAN ACCURACY TO FOR RADIATIO	NGE 10 BE DE CN DAM	DOE • TO 50• PERCEI TERMINED FROM S AGE CALCULATIO	NT. SENS IT I V I TY NS.	781100F STUDIES
5 acron 10)		NEUI	RGN		ENERG	Y-ANGLE	E DIFF. ALPHA	A-PRCD	UCTION CROSS SI	ECTION	
(149)	15.0	ME V				2	USA	BERK ACCURACY TO DATA RECUIRE	BE DE ED FOR	DOE TERMINED. RADIATION DAM	AGE CALCULAR	781133F
S BCRCN 11			NEUT	RCN		ENERG	Y-ANGLE	E DIFF. NEUTR	RON-EM	ISSION CROSS SI	ECTION	
(152)	9.00	MEV	15.0	MEV	10. %	2	USA	BERK FOR SHIELDIN GENERATIO	NGN ANI CN D-T	DOE D TRANSPORT ST REACTOR CESIG	UDIES OF NE; NS -	781047F XT
5 BCRON 11			NEUI	RGN		TOTAL	PROTO	N PRODUCTION	CROSS	SECTION		
(153)	9.00	MEV	15.0	MEV	10. X	2	U SA	BERK TOTAL HYDROC FOR RADIATIC D-T REACTS	GEN PRI	DOE CDUCTION WANTE AGE STUDIES OF IGNS.	D. NEXT GENER	731 056F

V.4

5 BCRON	11		NEU	TRCN		ENERG	Y-ANGL	E DIFF. PROTON-PRODUCTION CROSS SECTION
(154)	15.0	MEV				2	USA	BERK DOE 781140F ACCURACY TO BE DETERMINED. DATA REQUIRED FOR RADIATION DAMAGE CALCULATIONS.
5 BCRCN	11		NEU	TRCN		TOTAL	ALPHA	PRODUCTION CROSS SECTION
(156)	9.00	MEV	15.0	MEV	10. %	2	USA	BERK DOE 781065F TOTAL HELIUM PRODUCTION WANTED. FOR RADIATION DAMAGE STUDIES OF NEXT GENERATION D-T REACTOR DESIGNS.
5 BCRON	11		NEU	TRCN		ENERG	Y-ANGL	E DIFF. ALPHA-PRODUCTION CROSS SECTION
(157)	1 5. 0	MEV				2	USA	BERK DOE 781119F ACCURACY TO BE DETERMINED. DATA REQUIRED FOR RADIATION DAMAGE CALCULATIONS.
5 3CRCN	11		ALP	на		ALPHA	.Р	
(165.)	500.	KEV	2.00	MEV		2	USA	BERK DOE 781076F ACCURACY 10.0 PERCENT RELATIVE, 30.0 PERCENT ABSOLUTE REQUIRED. FOR ADVANCEC FUEL FUSION DEVICES.
7 NITROG	ΞΞ Ξ.Ν		NEU	TRCN		TOTAL	PROTO	N PRODUCTION CROSS SECTION
(150)	9.00	MEV	15.0	MEV	10. X	1	USA	BERK DOE 781109F FOR RADIATION DAMAGE CALCULATIONS.
11 SCDIU	M 23		NEU	TRCN		CAPTU	RE GAM	MA RAY SPECTRUM
(269)	3.00	KEV			10. X	2	USA	SMITH 721032R SUFFICIENT ACCURACY IN E(GAMMA)(3 KEV) TO COMPARE WITH E(GAMMA)(THERMAL).
11 SODIU	M 23		 NEU	TRGN		RESCN	ANCE P	
(274.)	2.95	KEV		**	10. X	1	USA	SMITH ANL 62100BR ELASTIC AND GAMMA WIDTHS WANTED.
13 ALUMI	NUM 27		NEU	TRON		N. ALP	на	
(288)					2.0%	1	EUR	NEUTRON DOSIMETRY GROUP AVERAGE CROSS SECTION IN A U-235 FISSION SPECTRUM DESIRED. FOR NORMALIZATION OF AVERAGE CROSS SECTIONS FOR DOSIMETRY PURPOSES.
16 SULFU	 R		NEU	TRCN		CAPTU	RE CRO	SS SECTION
(303)	10.0	KEV	500.	KEV	10. X	2	USA	HEMMIG DOE 741023R FOR SHIELDING EFFECT OF CONCRETE.
16 SULFU	R		NEU	TRCN		CAPTU	RE CRO	SS SECTION
(304)	25.3	MV			10. %	2	USA	DIVADEENAM BNL 801145R FOR EVALUATION NEEDS. THERMAL CAPTURE FOR MANGANESE BATH EXPERIMENTS.
16 SULFU	R R		NEU	TRCN		CAPTU	RE CRO	SS SECTION
(365)	1.00	KEV	1.00	MEV	10. %	2	USA	DIVADEENAM ENL 801146R FOR EVALUATION NEEDS.

16 SULFI	JR 32	NEUTRCN		N, P		
(307)	UP TO	20.0 MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 812001R Covariance data on cross section from threshold Evaluation requirement.
22 T I TAN	VIUM 48	NEUTRCN		N. P		• • • • • • • • • • • • • • • • • • • •
(340)	UP TO	30.0 MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 812004R For high energy accelerator based neutron sources
23 VANAC	DIUM 51	NEUTRON		DIFF	RENTI	AL ELASTIC CROSS SECTION
(343)	1.40 MEV	10.0 MEV	10. X	3	USA	SMITH ANL 521009R HEMMIG DOE INCIDENT ENERGY RESOLUTION: 500 KEV. ANGULAR RESOLUTION 10 DEGR.
23 VANAD	DIUM 51	NEUTRON		ABSC	RPTICN	CROSS SECTION
(349)	1.00 KEV	150. KEV	10. X	3	USA	SMITH ANL 621015R Hemmig doe Incident energy resolution: 10, percent. To resolve ciscrepancies in existing data.
24 CHRON	4IUM	NEUTRON		CAPTI	URE CR	DSS SECTION
(389)	100. EV	100. KEV	20.0%	1	GER	H•KUESTERS KFK 792198R
24 CHROM	41 UM 50	NEUTRON		RESCI	NANCE	PARAMETERS
(425)	JP TO	300. KEV	10. X	2	USA	PRINCE BNL 741033R ENERGY REQUESTED IS A MAXIMUM VALUE ONLY. NEUTRON WIDTH, GAMMA-WIDTH, SPIN AND PARITY WANTED.
24 CHRON	11UM 52	NEUTRON		RESO	ANCE	PARAMETERS
(429)	JP TO	300. KEV	10. X	2	USA	PRINCE BNL 741034R ENERGY REQUESTED IS A MAXIMUM VALUE ONLY. NEUTRON WIDTH, GAMMA-WIDTH, SPIN AND PARITY WANTED.
24 CHRON	41UM 53	NEUTRON		RESO	ANCE	PARANETERS
(430)	JP TO	300. KEV	10 . X	2	USA	PRINCE BNL 741035R ENERGY REQUESTED IS A MAXIMUM VALUE ONLY. NEUTRON WIDTH, GAMMA-WIDTH, SPIN AND PARITY WANTED.
25 MANGA	NESE 54	NEUTREN		CAPT	RE CR	DSS SECTION
(433)	25.3 MV		5.0%	2	8L G	N.MAENE MOL 692092R For Burn-up (Alculation of FE-54(N.P) MN-54 Reaction product.
25 MANG	NESE 55	NEUTRON		CAPT	JRE RE	SCNANCE INTEGRAL
(442)	0.50 EV		5. X	2	USA	DEI BET 741036R ENERGY REQUESTED IS A MINIMUM VALUE ONLY. NEEDED FOR ANALYSIS OF MANGANESE BATH EXPERIMENTS.
26 IRCN		NEUTECN		ENER	GY-ANG	LE DIFF. NEUTRON-EMISSION CROSS SECTION
(454)	15.0 MEV	35.0 WEV		1	USA	BERK DOE 781036F ACCURACY RANGE 10. TO 40. PERCENT. ACCURACY TO BE DETERMINED FROM SENSITIVITY STUDIES. FOR MATERIAL DAMAGE CALCULATIONS.

26 IRCN			NEU	TRGN		SPECI		NTITY (DESCRIPTION BELOW)
(501)	1.00	ME V	15.0	MEV	10 . X	1	USA	ENGHOLM GA 301314F DAMAGE CROSS SECTIGN. DAMAGE TO STAINLESS STEEL FIRST WALL.
26 IRCN			 NEU	TRON		SPECI	AL CUA	NTITY (DESCRIPTION BELOW)
(5C4)	1.00	MEV	35.0	MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 312007R FOR PRODUCTION OF MN-54 FOR USE AS A FLUENCE MONITOR. THE REACTION INCLUDES FE-54(N,P), FE-56(N,T), FE-56(N,ND) AND FE-56(N,2NP). FOR THE REACTION FE-54(N,P) THE ENERGY RANGE EXTENDS TO 20MEV FOR HIGH ENERGY ACCELERATOR BASED NEUTRON SOURCES
26 IRON	57		 NEU	TRCN		RESCN	ANCE P	ARAMETERS
(315)	 U	ер то	100.	KEV	10 . X	2	USA	FU ORL 741049R HEMMIG DGE SMITH ANL ENERGY REQUESTED IS 4 MAXIMUM VALUE ONLY. NEUTRON WIDTH, GAMMA-WIDTH, SPIN AND PARITY WANTED.
27 CCBALT	 39		NEU	TRCN		N, 2N		
(522)	U	р то	50.0	MEV		1	USA	BERK DOE 781014F ACCURACY RANGE 10. TO 20. PERCENT. DOSIMETRY FOR FMIT FACILITY.
28 NICKEL			NEU	TREN		TOT AL	CROS S	SECTION
(330)	1.00	KEV	20.0	MEV	3. 2	2	USA	HEMMIG DOE 721047R ACCURACY NEEDED TO 3-5 PERCENT IN DEEP MINIMA. ENERGY RESOLUTION SUFFICIENT TO RESOLVE MAJOR STRUCTURE. FOR USE IN INCONEL SHIELD CALCULATIONS.
28 NICKEL	·		NEU	TRCN		DIFFE	RENTIA	L ELASTIC CRCSS SECTION
(525)	15.0	MEV	35.0	 ₩EV		1	USA	BERK DOE 731031F ACCURACY RANGE 10. TO 40. PERCENT. ACCURACY TO BE DETERMINED FROM SENSITIVITY STUDIES. FOR MATERIAL DAMAGE CALCULATIONS.
28 NICKEL	63					HALF	LIFE	
(615)					10. X	2	USA	DEI EET 761054R RADIDACTIVE TARGET 100 YR FLUX MONITOR FROM CU(N.P) REACTION.
29 CCPPER	65		 NEU	TRCN		CAPTU	RE CRO	SS SECTION
(641)	25.3	мv	1.00	KEV		2	USA	HEMMIG ACCURACY - 2 PERCENT NEAR THERMAL, 5 PERCENT ABOVE THERMAL. FOR DETECTOR APPLICATIONS.
41 NICBIU	IM 93		NEU	TRCN		CAPTU	RE CRO	SS SECTION
(709)	1.00	κäν	100.	KEV	10. X	2	USA	HEMMIG DOE 621049R SMITH ANL ACCURACY - 5 PERCENT IN CALCULATED DILUTE AND SELF- SHIELDED RESONANCE INTEGRAL. FOR FAST REACTOR CALCULATIONS, TO RESOLVE DISCREPANCIES IN THERMIONIC REACTOR WORTHS.

42 MCLYBDENUM			NEU	TRCN		ε	NERG	Y DIFF	FERENTIAL INELASTIC CROSS SECTION			
(742)	1.50	MEV	3.00	₩EV	20.	x	3	ŲSA	SMITH ANL HEMMIG DCE TOTAL INTEGRAL OVER 4PI IS REQUIRED. SPECTRA AT SEVERAL ANGLES IF SIGNIFICANTLY ANISOTROPIC. INCIDENT ENERGY RESOLUTION: 20. PERCENT. DELTA E(N*) = 20 PERCENT.	721070R		
42 NOLYS	DENUM		NEU	TRCN			APTU	RE CRO	DSS SECTION			
(747)	1.00	KEV	1 +0 0	MEV	10.	x	3	USA	HEMMIG DOE TO RESOLVE DISCREPANCY IN REACTIVITY WORTH MEASUREMENTS.	7213 7 2R		
42 MCLYB	DENUN 9	7	NEU	TRCN		с С	CAPTURE CROSS SECTION					
(774)	1 00 .	KEV	1.00	MEV	20.	x	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FOR CALCULATIONS OF REACTIVITY AND BURN-UP REACTORS.	801268R REACTOR IN FAST		
43 TECHN	ETIUM 9	9	NEU	TRCN			CAPTURE CROSS SECTION					
(775)	20.0	KEV	1.00	MEV	10.	x	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST Flux weighting spectrum. For Calculations of reactivity and burn-up reactors.	301269R REACTOR IN FAST		
44 RUTHE	N IUM 10	1	NEU	TRON		c	APTU	RE CR	USS SECTION			
(780)	1.00	MV	10.0	KEV	10.	X	3	USA	DEI THERMAL CROSS SECTICN AND RI WANTED. CALCULATION OF FISSION PRODUCT POISON FOR REACTORS.	741077R THERMAL		
44 RUTHE	NIUM 10	1	NEU	TRCN		c	APTU	RE CR	DSS SECTION			
(781)	1.30	KEV	1.00	MEV	10.	x	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FOR CALCULATIONS OF REACTIVITY AND BURN-UP REACTORS.	301270R REACTOR In Fast		
44 RUTHE	NIUM 10	2	NEU	TRCN		c	CAPTURE CROSS SECTION					
(762)	1.00	KEV	1.00	MEV	10.	x	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FOR CALCULATIONS OF REACTIVITY AND BURN-UP REACTORS.	BO1271R REACTOR In Fast		
47 SILVE	R 109		NEU	TRCN			APTU	RE CR	DSS SECTION			
(9(7)	1.00	KEV	1.00	₩EV	20.	x	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FOR CALCULATIONS OF REACTIVITY AND BURN-UP REACTORS.	301275R REACTOR IN FAST		
33 ICDINE 127			NEU	TRCN			APTU	RECR	DSS SECTION			
(328)	25.3	MV	10.0	KEV	10.	x	2	USA	RAWLINS HED NEED SETTER MEASUREMENTS OF RESONANCE PARA FROM THERMAL TO 10 KEY FOR ISOTOPES IN W CAPTURE LEADS TO BUILD-UP OF GAS-TAG ISO FOR FFTF.	BOILIZR METERS HICH TOPES		

33 ICDINE	1 29		NEU	TRCN		CAPTU	RE CRC	SS SECTION	
(931)	10.0	KEV	100.	KEV	30. X	2	USA	SCHENTER HED RADIDACTIVE TARGET 1.6X(10##7) YR ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FCR CALCULATIONS OF REACTIVITY AND BURN-UP REACTORS.	801276R REACTOR In Fast
55 CESIUM	135		NEU	TRCN		CAPTU	RE CRO	SS SECTION	
(364)	1.00	MV	19.0	KEV	10. %	2	USA	DEI RADIDACTIVE TARGET 3.0X(10**6) YR THERMAL CROSS SECTION AND RI WANTED. FOR FISSION PRODUCT PDISON CALCULATIONS.	741090R
SC NEDDYM	IUM 14	3	NEU	TRCN		CAPTU	RE RES	ONANCE INTEGRAL	
(373)	0.50	εν	1.00	KEV	5. X	1	USA	DEI BET For Calculation of Fission Product Poisons	671034R
C NECDYM	IUM 14	5	NEU	TRCN	•	CAPTU	RE RES	ONANCE INTEGRAL	
(374)	0.50	EV	1.00	KEV	10 . X	1	USA	DEI FOR CALCULATION OF FISSION PRODUCT POISONS	671036R
61 PROMET	HIUMI	48	NEU	TRCN		CAPTU	RE CRO	ISS SECTION	
(365)	1.00	MV	1.00	ĸEV	10. *	2	USA	DEI BET 41.3 DAY ISCMER Thermal cross section and ri wanted. Energies above i ev of interest to give ri 10 percent. For calculation of fission product poisons.	671044R TO
61 FRCMET	HIUM 1	49	NEU	TRCN		CAPTU	RE CRO	SS SECTION	
(859)	1.00		1.00	κεv		2	USA	DEI RADIDACTIVE TARGET 53.1 HR THERMAL CROSS SECTION AND RI WANTED. ACCURACY - 10 PERCENT IF SIGMA>1000 BARNS. 20 PERCENT IF FROM 10-1000 BARNS. ENERGIES ABCVE 1 EV OF INTEREST TO GIVE - 10 PERCENT IN RI IF > 10.000 BARNS. 20 PU IF 1000-10,000 BARNS.	671049R ERCENT
61 FRCMET	HIUM I	49	NEU	TRCN		CAPTU	RE CRO	SS SECTION	
(350)	1.00	MV	1.00	EV		2	USA	FEINER KAP RADIDACTIVE TARGET 53.1 HR THERMAL CROSS SECTION AND RI WANTED. ACCURACY RANGE 10. TO 20. PERCENT. ACCURACY - 10 PERCENT IF SIGMA>1000 BARNS. 20 PERCENT IF FRGM 10-1000 BARNS.	671051R
02 SAMARI	UM 149		NEU	TRON		CAPTU	RE CRO	SS SECTION	
(356)	1.00	KEV	1.00	MEV	10. X	2	USA	SCHENTER HED ACCURACY DETERMINATION SHOULD REFLECT FAST FLUX WEIGHTING SPECTRUM. FOR CALCULATIONS OF REACTIVITY AND BURN-UP FAST REACTORS.	801251R REACTOR IN
tà ERBIUM	167		NEU	TRCN		CAPTU	RE CRO	SS SECTION	
(936)	5	Р ТО	2.00	٤v	3. X	2	US▲	DAHLBERG GA ENERGY REQUESTED IS A MAXIMUM VALUE ONLY. NEEDED FOR BURNABLE POISON IN TRIGA PEACTO	741133R

74 TUNGS	TEN		NEU	TRCN		ENERG	Y - A NG I	E DIFF. NEUTRON-EMISSION CROSS SECTION
(967)	9.00	MEV	-15.0	MEV	10. X	1	USA	BERK DOE 781092F DATA NEEDED FCR SHIELDING AND NEUTRON TRANSPORT CALCULATIONS.
74 TUNGS	TEN		NEU	TRCN		SPECI	AL QU	ANTITY (DESCRIPTION BELOW)
(975)	9.00	MEV	15.0	MEV	20 . %	1	USA	BERK DOE BO1043F ALL SIGNIFICANT ACTIVATION REACTION CROSS SECTIONS. DATA NEEDED FOR SHIELDING, ACTIVATION AND NEUTRON TRANSPORT CALCULATIONS.
79 GCLD	1 97		NEU	TRON		CAPTU	RE CR	DSS SECTION
(975)	10.0	KEV	3.00	MEV	3.0%	1	BLG	A.FABRY MOL 682041R DETECTOR APPLICATIONS. SATISFIED ON THE BASIS OF INTEGRAL CROSS SECTION MEASUREMENTS IN U-235 AND CF-252 FISSION SPECTRA COMPARED WITH CALCULATIONS USING ENDF-B/V.
75 GOLD	1 97		NEU	TRCN		N. 2N		
(9E3) ,	j.	P TO	40.0	MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 812013R For High Energy Accelerator based neutron scurces
75 GOLD	1 97		NEU	TRON		• N. 4N		
(966)	23.0	MEV	40.0	MEV	5.0%	2	EUR	NEUTRON DOSIMETRY GROUP GEL 812014R MEASURED UP TO 23MEV, EXTENSION REQUESTED TO 40MEV FOR HIGH ENERGY ACCELERATOR BASED NEUTRON SOURCES
33 81 SMU	JTH 209		NEU	TRGN		TOTAL	CROS	5 SECTION
(1007)	25.3	MV	15.0	MEV	5.0%	1	FR	8.DUCHEMIN SAC 812053R FOR INSTRUMENTATION AND SHIELDING CALCULATION- EVALUATION MAY BE SUFFICIENT.
33 EISMU	JTH 209		NEU	TRCN		DIFFE	RENTI	AL ELASTIC CRCSS SECTION
(1008)	23.3	_ MV	15.0	MEV	20.0%	1	FR	B.DUCHEMIN SAC
33 EISMU	JTH 209		NEU	TRCN		ENERG	Y DIF	FERENTIAL INELASTIC CROSS SECTION
(1009)	25.3	MV	15.0	MEV	20.0%	1	ŕR	B.DUCHEMIN SAC FOR INSTRUMENTATION AND SHIELDING CALCULATION- EVALUATION MAY BE SUFFICIENT
83 EI SM	JTH 209		NEU	TRCN		ABSOR	PT ION	CROSS SECTION
(1010)	25.3	MV	15.0	MEV	5.0%	1	FR	B.DUCHEMIN SAC 312054R FOR INSTRUMENTATION AND SHIELDING CALCULATION- EVALUATION MAY BE SUFFICIENT.
33 BISMU	JTH 209		NEU	TRCN		TOTAL	РНОТ	ON PRODUCTION CROSS SECTION
(1012)	25.3	MV	15.0	MEV	10.0%	l	FR	B.DUCHEMIN SAC B12058 ENERGY RESOLUTION OF 250KEV FOR GAMMA RAYS LESS THAN IMEV AND SOCKEV FOR ENERGIES GREATER THAN I MEV FOR INSTRUMENTATION AND SHIELDING CALCULATIONS- EVALUATION MAY BE SUFFICIENT.
83 EISMU	JTH 209		NEU	TRCN		N, 2N		
(1014)	25.3	MV	15.0	MEV	20.0%	1	FR	B.DUCHEMIN SAC 812055R FOR INSTRUMENTATION AND SHIELDING CALCULATIONS- EVALUATION MAY BE SUFFICIENT.

		N, 3		TRCN	NÊU		TH 209	33 EISMU
MUIR LAS 801115 MEASUREMENT SHOULD INCLUDE SEVERAL ENERGIES BELOW 15 MEV. ACCURACY 25 PERCENT OR 1 M8. NEEDED FOR ACTIVATION OF BI NEUTRON MULTIPLIERS.	USA	3	25. X	MEV	16.0	MEV	14.0	(1015)
AL ELASTIC CRCSS SECTION	ERENTIA	DIF		TRCN	NEU		UM 232	90 THCR
SMITH ANL 721074	USA	3	10. X	MEV	5.00	MEV	1.00	(1020)
FERENTIAL INELASTIC CROSS SECTION	GY DIFF	ENE		ITRCN	NEU		UM 232	C THOR
SMITH ANL 721075 INCIDENT ENERGY RESOLUTION: 20. PERCENT. DELTA E(N') = 20 PERCENT. ACCURACY OF 20 PERCENT IN (1-COS THETA), IF ANISOTROPIC.	USA	3	5. X	MEV	4.00	MEV	1.00	(1022)
OSS SECTION	ION CRO	FIS		TRCN	NEU		UM 232	C THOR
MCELROY HED 801243 ACCURACY 20 PERCENT ABOVE 25 NEV. FOR FMIT DOSIMETRY.	USA	1	10 . X	MEN	40.0	MEV	20.0	(1043)
	LIFE	HAL					UM 233	32 URANI
DEI BET 741115 RADIDACTIVE TARGET 1.592X(10**5) YR VERIFICATION OF LATEST MEASUREMENTS DESIRED.	USA	1	.5 %					(1066)
LIFE	IA HALF	ALPI	US	INT AN EC	SPG		UM 233	92 LRANI
GILLIAM NBS 761119 RADIDACTIVE TARGET 1.592X(10**5) YR FOR MASS DETERMINATION OF FISSIONABLE DEPOSITS.	USA	1	1. X					(1067)
LIFE	A HALF	 ALPI	us	NTANEC	SPO		UM 235	52 URANI
GILLIAM NBS 761121 For mass determination of fissionable deposits.	USA	1	.3 %					(1127)
FISSION RATIO (ALPHA)	URE TO	CAP		TRCN	NEU		UM 235	32 URANI
SMITH ANL 691249 Memmig doe Capture cross section equally useful. Accuracy Range 3. To 10. Percent. Experimental uncertainties need verification.	USA	2		NEV	7.00	MV	1.00	(1165)
OSS SECTION	ION CRO	FIS		TRCN	NEU	7	NIUM 23	33 NEPTU
NEUTRON DOSIMETRY GROUP GEL BI2016 FOR Surveillance of Damage in pressure vessels USING CS-137 WITH LONG HALF LIFE,	EUR	1	2.0%	MEV	3.00	P 10	U	(1302)
OSS SECTION	URE CRO	CAP		TRCN	NEU	8	N1UM 23	94 FLUTC
P.HAMMER CAD 732096 VALUE RELATIVE TO U-238 CAPTURE CROSS SECTION. GUDTED ACCURACY AT 2 STANDARD DEVIATIONS. FOR FAST REACTOR CALCULATIONS.	FR	1	15.0%	MEV	3.00	KEV	1.00	(1325)
OSS SECTION	ION CRO	FISS		TRCN	NEU	9	NIUM 23	94 FLUTO
J.SALVY BRC 682064 MEASUREMENTS DDNE AT LOS ALAMOS MAY SATISFY THIS REQUEST UP TO 1 MEV. EVALUATION MAY BE SUFFICIENT	FR	1	20.0%	MEV	15.0		 Ui	(1331)

34 FLUTO	NIUM 23	9	NEU	TRGN		ABSO	RPTICN	CROSS SECTION	
(1348)	10.0	MV	0.80	Eν	1.0%	1	UK	J.FELL WIN FOR THERMAL REACTORS. EVALUATION REQUIREMENT.	792167R
S4 FLUTO	NIUM 24	0	3P0	NTANE	ous	ALPH	A HALF	LIFE	
(1414)					1. X	1	USA	GILLIAM NBS FDR MASS DETERMINATION OF FISSIONABLE DEPO	761125R SITS.
94 FLUTO	NIUM 24	0	NEU	TRCN		NEUTR	RONS EN	ITTED PER FISSION (NU BAR)	
(1441)	U	P TO	10.0	MEV	3. X	2	USA	HEMMIG DGE RADIDACTIVE TARGET 6.57X(1C*#3) YR	691323R
94 FLUTO	NIUM 24	0	NEU	TRON		NEUTE	RONS EM	ITTED PER FISSION (NU BAR)	
(1443)		р ТС	10.0	MEV	3 . X	2	USA	SMITH ANL RADIDACTIVE TARGET 6.37X(10++3) YR ACCURACY OF 5 PERCENT USEFUL.	7210928
54 FLUTO	NIUM 24	2	NEU	TRCN		NEUTI	RGNS EM	ITTED PER FISSION (NU BAR)	•••
(1516)	500.	εv	15.0	MEV	5.0%	2	FR	P.HAMMER CAD RELATIVE TO CF-252 NU. GUOTED ACCURACY AT 2 STANDARD DEVIATIONS. FOR FAST REACTOR CALCULATIONS.	712100R
35 AMERI	CIUM 24	1	NEU	TRCN		FISS.	ION CRO	SS SECTION	
(1541)	100.	εν	100.	KEV	20.0%	1	GER	H.KUESTERS KFK MEASUREMENT DANTED.	792227R
95 ANERI	CIUM 24	1	NEU	TRCN		FISS	IGN CRO	DSS SECTION	
(1342)	25.3	мv	15.0	MEV	20.0%	1	GER	H.KUESTERS KFK Evaluation wanted.	792229R
95 AMERI	CIUM 24	1	NEU	TRCN		NEUT	RONS EN	NITTED PER FISSION (NU BAR)	
(1544)	500.	E V	14.0	MEV	10.0%	2	FR	P.HAMMER CAD RELATIVE TO CF-252 NU. QUOTED ACCURACY AT 2 STANDARD DEVIATIONS. FOR FUEL CYCLE CALCULATIONS.	712105R
SE AMERI	CIUM 24	2	NEU	TRCN	سید ما ما خام پر پر بر به او	4850	RPT ICN	CROSS SECTION	
(1550)	25.3	мv			10.0 x	1	UK	J.FELL WIN V.BARNES UKW FOR METASTAELE STATE AM-242M. FOR STUDIES OF PLUTONIUM RECYCLING AND FOR REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.	7921718 FUEL
95 AM ER I	CIUM 24	2	NEU	TRCN		CAPT	URE CRO	DSS SECTION	
(1357)	25.3	MV	15.0	MEV	30.0%	1	UK	C.G.CAMPBELL WIN FOR FAST REACTORS.	792144R
SE AMERI	CIUM 24	2	NEU	TRCN		FISS	IGN CRO	SS SECTION	
(15(1)	25.3		15.0	MEV	15.0%	1	UK	C.G.CAMPBELL WIN FCR FAST REACTORS. Evaluation Requirement.	792143R

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LIST OF SATISFIED REQUESTS

95 AMER	ICIUM 24	2	NEU	TRCN		FISS	ION CR	DSS SECTION
(1562)	25.3	MV			10.03	1	UK	J.FELL WIN 792173 V.BARNES UKW 708 STUDIES OF PLUTONIUM RECYCLING AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
95 AMER	ICIUM 24	2	NEU	TREN		NEUT	RONS E	NITTED PER FISSION (NU BAR)
(1566)	25.3	MV	15.0	MEV	15.0%	1	UK	C.G.CAMPBELL WIN 792145 FOR METASTABLE STATE AM-242M. FOR FAST REACTORS. EVALUATION REQUIREMENT.
SS AMERI	ICIUM 24	2	NEU	TRCN		ABSO	RPTION	RESONANCE INTEGRAL
(1568)	0.35	EV	2.00	MEV	10.0x	1	UK	J.FELL WIN 7921721 V.BARNES UKW FOR STUDIES OF PLUTONIUM RECYCLING AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION FEQUIREMENT.
SE AMERI	ICIUM 242	2	 NEU	TRCN		FISS	ICN RE	SONANCE INTEGRAL
(1569)	0.55	EV	2.00	MEV	10.0 x	1	UK	J.FELL WIN 792174 V.BARNES UKW FOR STUDIES CF PLUTONIUM RECYCLING AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
SS AMERI	CIUM 243	3	NEU	TRCN		CAPT	JRE CR	DSS SECTION
(1377)	25.3	MV	15+0	MEV	10.0%	1	UK	C.G.CAMPBELL WIN 7921471 V.BARNES UKW 7921471 FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
SE AMERI	CIUM 24	3	NEU	TRCN		FISS	ION CRO	DSS SECTION
(1382)	25.3	MV	15.0	MEV	15.0%	1	UK	C.G.CAMPBELL WIN 7921467 V.BARNES UKW FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
SE AMERI	CIUM 243	 3	NEU	TRCN		NEU TI	RONS EN	AITTED PER FISSION (NU BAR)
(1585)	25.3	MV	15.0	MEV	15.0%	1	UK	C.G.CAMPBELL WIN 7921486 V.BARNES UKW FOR FAST REACTORS AND FCR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
SE CURIU	JM 242		NEU	TRCN		CAPTO	JRE CRO	DSS SECTION
(1553)	25.3	MV	15.0	мет	30.0%	1	UK	C.G.CAMPBELL WIN 7921515 V.BARNES UKW FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION FEQUIREMENT.
SE CURIU	M 242		NEU	TREN		N. 2N		
(1595)	U F	» то	1 5 • 0	MEV	30.0%	1	UK	C.G.CAMPBELL WIN 792149F V.BARNES UKW FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION FEQUIREMENT.

LIST OF SATISFIED REQUESTS

36 CURIUM	242		NEU	IRCN		FISS	ION CRO	DSS SECTION
(1399)	U	P TO	15.0	MEV	30.0%	1	UK	C.G.CAMPBELL WIN 792150 V.BARNES UKN FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
96 CURIUM	242		NEU	TRCN		NEUT	RONS EN	AITTED PER FISSION (NU BAR)
(1602)	 ان	от с	15.0	MEV	30.0%	1	UK	C.G.CAMPBELL #IN 792152 V.BARNES UK FOR FAST REACTORS AND FOR FUEL REPROCESSING AND STORAGE. EVALUATION REQUIREMENT.
36 CURIUM	243		NEU	TRON		CAPTI	JRE CRO	DISS SECTION
(1605)	25.3	MV	15.0	MEV	30.0%	1	υĸ	C.G.CAMPBELL WIN 792154 FOR FAST REACTORS. EVALUATION REQUIREMENT.
Já CURIUM	243		NEU	TRCN		FISS	10N CR 0	DSS SECTION
(1613)	25.3	MV	15.0	MEV	30.0%	1	UK	C.G.CAMPBELL WIN 792153 FOR FAST REACTORS. EVALUATION REQUIREMENT.
SE CURIUM	244		NEU	TRCN		CAPTI	URE CR	DSS SECTION
(1619)	25.3	мv	15.0	MEN	30.0%	1	UK	C.G.CAMPBELL WIN 792157 V.BARNES UKW FOR FAST REACTORS AND FCR FUEL REPROCESSING. EVALUATION REQUIREMENT.
96 CURIUM	244		NEU	TRCN		N. 2N		, , , , , , , , , , , , , , , , , , ,
(1521)	 ບ	р то	15.0	MEV	30.0X	1	υκ	C.G.CAMPBELL WIN 792155 V.BARNES UKW FOR FAST REACTORS AND FCR FUEL REPROCESSING EVALUATION REQUIREMENT.
96 CURIUM	244		NEU	TRON		FISS	ION CRO	DSS SECTION
(1624)	25.3	 MV	1 5. 0	MEV	30.0X	1	UK	C.G.CAMPBELL VIN 792150 V.BARNES UKN FOR FAST REACTORS AND FOR FUEL REPROCESSING. EVALUATION REQUIREMENT.
GE CURIUM	2 4 4		NEU	TRCN		NEUT	RONS EN	MITTED PER FISSION (NU BAR)
(1527)	25.3	мv	15.0	MEV	30.0x	1	UK	C.G.CAMPBELL WIN 792158 V.BARNES UKW FOR FAST REACTORS AND FOR FUEL REPROCESSING. EVALUATION REQUIREMENT.
Ja CURIUM	245		NEU	TRCN		CAPT	URE CRO	DSS SECTION
(1631)	25.3	мv	15.0	MEV	30.0x	1	UK	C.G.CAMPBELL WIN 792160 FCR FAST REACTORS. EVALUATION FEQUIREMENT.
SE CURIUM	245		 NEU	TRCN		FISS	ION CR	USS SECTION
(1535)	25.3	мv	15.0	MEV	30.0%	1	UK	C.G.CAMPBELL WIN 79215 FCR FAST REACTORS. EVALUATION REQUIREMENT.

LIST OF SATISFIED REQUESTS

FISSION	PRODUCT	s	NEU	TRCN		CAPT	URE CR	OSS SECTION		
(1572)	100.	EV	1 .00	MEV	20.0%	2	UK	C.G.CAMPBELL FCR FAST REACTO EVALUATION REQU EVALUATION REQU	WIN DRS. JIREMENT. JIREMENT.	792161R

LIST OF WITHDRAWN REQUESTS

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(3)	731179R	USA	11	HYDROGEN 1	NEUTRON	CAPTURE CROSS SECTION
(4)	301238R	USA	1 1	HYDROGEN 1	NEUTRON	CAPTURE CROSS SECTION
c :	5)	721002R	USA	1)	HYDROGEN 2	NEUTRON	ELASTIC CROSS SECTION
()	6)	721003R	USA	1 1	HYDROGEN 2	NEUTRON	ELASTIC CROSS SECTION
(73	761072R	USA	1 1	HYDROGEN 2	NEUTRON	ELASTIC CROSS SECTION
(٤)	7811 80R	USA	1 1	HYDROGEN 2	NEUTRON	N.2N
(2	L)	713001R	IND	2 i	HELIUM 3	NEUTRON	N+P
(3)	e)	801230F	USA	з і	LITHIUM 6	NELTRON	INELASTIC CROSS SECTION
6 3	s)	752054F	JAP	3 1	LITHIUM 6	NEUTRON	TOTAL PHOTON PRODUCTION CROSS SECTION
(4	IJ	301231F	USA	3 1	LITHIUM 6	NEUTRON	N. 2N
(4-	4)	801295F	USA	3 1	LITHIUM 6	NEUTRON	TOTAL PROTON PRODUCTION CROSS SECTION
(4	7)	752052F	JAP	31	LITHIUN 6	NEUTRON	N + ND
ί Ξ.	2)	713002R	IND	з	LITHIUM 6	NELTRON	N•T
(5	4)	301228F	USA	31	LITHIUM 6	NEUTRON	N.ALPHA
(ó	7)	301074F	USA	3 1	LITHIUM 6	HELIUM-3	HELIUM-3,HELIUM-3
ć Ĵ	ĉ)	301075F	USA	3 เ	LITHIUM 6	HELIUM-3	SPECIAL QUANTITY (DESCRIPTION BELOW)
(5	5)	731074F	USA	3 (LITHIUM 6	LITHIUM-6	SPECIAL QUANTITY (DESCRIPTION BELOW)
(7	5)	762059F	JAP	3 1	LITHIUM 7	NELTRON	TOTAL PHOTON PRODUCTION CROSS SECTION
(3	5)	781051F	USA	3 (LITHIUM 7	NEUTRON	TATAL PROTON PRODUCTION CROSS SECTION
(;	4)	7921 05F	ΙΤΥ	3	LITHIUM 7	NEUTRON	N , NT
()	5)	781060F	USA	3 1	LITHIUM 7	NEUTRON	TOTAL ALPHA PRODUCTION CROSS SECTION
(9	5)	301077F	USA	4	BERYLLIUM 7	NEUTRON	N. 2P
(10	0)	301030F	USA	4	BERYLLIUM 7	DELTERON	D.P
(10-	4)	792001F	FR	4	BERYLLIUM 9	NEUTRON	ENERGY-ANGLE DIFFERENTIAL INELASTIC CROSS SECTION
(11	c)	301012F	USA	4	BERYLLIUM 9	NEUTRON	N, 3N
(11	3)	781103F	USA	4	BERYLLIUM 9	NEUTRON	TOTAL PROTON PRODUCTION CROSS SECTION
(11	4 }	731145F	USA	4	BERYLLIUM 9	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(12	7)	762160N	SWD	5	BCRCN	ALPHA	ALPHA, N
(14	2)	721028R	USA	5	SORCN 10	NEUTRON	N,ALPHA
ذ 1)	εJ	301084F	USA	5	BORCN 11	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(15	5)	301079F	USA	5 .	BORCN 11	PROTON	CAPTURE CROSS SECTION
(1ô	0)	301287F	USA	5 :	BOREN 11	PRGTON	P , N
(15	1)	301081F	USA	5 1	BORGN 11	PRCTON	¢,₽
(15)	2)	301236F	USA	5 S	BORCN 11	PRCTON	THREE ALPHA PARTICLES PRODUCTION CROSS SECTION
(16	۲E	301078F	USA	5	BORCN 11	PRCTON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(1 Ś	4)	781077F	USA	5	BORCN 11	ALPHA	ALPHA . N
(15	ć)	781006F	USA	6	CARBON	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(16	נ7	731009F	USA	6	CARBON	NEUTRON	NGN-ELASTIC CROSS SECTION
(17	c)	301179F	USA	6	CAREON	NEUTRON	N•P
(17	1)	781052F	USA	6	CAREON	NEUTRON	TOTAL PROTON PRODUCTION CROSS SECTION
(17	2)	791136F	USA	6	CARBON	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(17	57	901180F	USA	Ó	CAREON	NEUTRON	N. ALPHA
(17	5)	781115F	USA	5	CARBON	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(17)	6)	801016≓	USA	5	CAREON	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(13	5)	301133F	USA	7	NITROGEN	NEUTRON	N•P
(19	1)	731151F	USA	7	NITROGEN	NELTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(19	2)	801134F	USA	7	NITROGEN	NEUTRON	N. ALPHA
(19	4)	781130F	USA	7	NITROGEN	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(20	2)	712004R	SWD	3	CXY GEN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(2)	4)	781206F	USA	э	OXYGEN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(20	7)	301131F	USA	3	UXYGEN	NEUTRON	N.P
(20	51	781155F	USA	3	UXYGEN	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION

LIST OF WITHDRAWN REQUESTS

21 C)	801132F USA	3 OXYGEN	NEUTRON	N, ALPHA
212)	781134F USA	B OXY GEN	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
215)	762162N SWD	3 DXYGEN	ALPHA	ALPHA, N
233)	762041N JAP	3 DXYGEN 18	ALPHA	TOTAL NEUTRON YIELD
234)	722080F GER	9 FLUCRINE 19	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
236)	722031F GER	9 FLUCRINE 19	NEUTRON	INELASTIC CROSS SECTION
2382	762068F JAP	9 FLUCRINE 19	NEUTRON	INELASTIC CROSS SECTION
2391	722083F GER	9 FLUORINE 19	NEUTRON	ENERGY-ANGLE DIFFERENTIAL INELASTIC CROSS SECTION
243)	762069F JAP	9 FLUORINE 19	NEUTRON	ABSORPTION CROSS SECTION
244)	722084F JER	9 FLUCRINE 19	NEUTRON	PHOTON PRODUCTION CROSS SECTION IN INELASTIC SCAT.
247)	781111F USA	9 FLUORINE 19	NEUTRON	TOTAL PROTON PRODUCTION CROSS SECTION
243)	781153F USA	9 FLUCRINE 19	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
245)	722086F GER	9 FLUCRINE 19	NEUTRON	N. ALPHA
250)	781099F USA	9 FLUGRINE 19	NEUTRON	TOTAL ALPHA PRODUCTION CROSS SECTION
251)	781132E USA	9 FLUCRINE 19	NEUTRON	ENERGY-ANGLE DIEF, ALPHA-PRODUCTION CROSS SECTION
2521	BOLDASE USA	9 ELLICATINE 19	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
2543	762161 N SWD	A FLUCPINE 19		
2561	301203E USA			SPECIAL QUANTITY (DESCRIPTION RELOW)
2507	71 20 05 P SHO	11 300104 23	NEUTRON	ENERGY-ANGLE DIFERENTIAL INCLASTIC CROSS SECTION
5751	POLOGIA JUD	11 30010M 23	NEUTRON	DIEEEDENTIAL THATIC CROSS SECTION
1911	7621630 630	13 ALUMINUM 27	NEUTRON	NEUTRON ENISEION CROSS SECTION
2021	2010535 USA	13 ALUMINUM 27	NEUTRON	
2901	301033F 03A	IS ACOMINOM 27	NEUTRON	SPECIAL GUANTITY (DESCRIPTION BELOW)
2921	7821048 340	14 SILICON	NEUTRON	NEUTRON EMISSION CRUSS SECTION
2961	781138F USA	14 SILICON	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
296.	731117F USA	14 SILICON	NEUTRUN	ENERGY-ANGLE DIFF. ALPHA-PRUDUCTION CRUSS SECTION
3363	792975R JAP	14 SILICUN 30	NECTRON	CAPTURE CRUSS SECTION
	301144R USA	16 SULFUR	NEUTRON	TOTAL CROSS SECTION
211)	BOIZO4F USA	19 PUTASSIUM	NECIRGN	SPECIAL QUANTITY (DESCRIPTION BELOW)
314)	752234F JAP	20 CALCIUM	NEUTRON	ELASTIC CROSS SECTION
215)	762076F JAP	20 CALCIUM	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
317)	762073F JAP	20 CALCIUM	NEUTRON	TOTAL PHOTON PRODUCTION CROSS SECTION
318)	762165R SWD	20 CALCIUM	NEUTRON	NEUTRON EMISSION CROSS SECTION
322)	301194F USA	22 TITANIUM	NEUTRON	TOTAL CROSS SECTION
323)	781033F USA	22 TITANIUM	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
324)	301137F USA	22 TITANIUM	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
325)	712007R FR	22 TITANIUM	NEUTRON	ABSORPTION CROSS SECTION
330)	781146F USA	22 TITANIUM	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
233)	781125F USA	22 TITANIUM	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
334)	301082F USA	22 TITANIUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
335)	801100F USA	22 TITANIUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
336)	301201F USA	22 TITANIUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
350)	7120108 FR	23 VANADIUM	NELTRON	ABSORPTION CROSS SECTION
344)	781032F USA	23 VANADIUM 51	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
36ć)	7811525 USA	23 VANADIUM 51	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
370)	781131F USA	23 VANADIUM 51	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
375)	781217F USA	24 CHROMIUM	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
37é)	301138F USA	24 CHROMIUM	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
382)	712014R FR	24 CHROMIUM	NEUTRON	ABSORPTION CROSS SECTION
393)	752095F JAP	24 CHROMIUM	NEUTRON	N • 2N
40C)	762096F JAP	24 CHROMIUM	NEUTRON	N.P
405)	791142F USA	24 CHRGMIUN	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
403)	762097F JAP	24 CHROMIUM	NEUTRON	N, ALPHA
415)	781121F USA	24 CHROMIUM	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION

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LIST OF WITHDRAWN REQUESTS

(416)	801013F USA	24 CHROMIUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(413)	801098F USA	24 CHROMIUN	NEUTR ON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(415)	801197F USA	24 CHROMIUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(432)	801198F USA	25 MANGANESE	NE UTR ON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(434)	812005R EUR	25 MANGANESE 54	NEUTRON	CAPTURE CROSS SECTION
(435)	812006R EUR	25 MANGANESE 54	NEUTRON	CAPTURE RESONANCE INTEGRAL
(437)	712017R FR	25 MANGANESE 55	NEUTRON	ABSORPTION CROSS SECTION
(435)	761052R USA	25 MANGANESE 55	NEUTRON	CAPTURE CROSS SECTION
(443)	712021R FR	26 IRCN	NEUTRON	TGTAL CROSS SECTION
(45()	781030F USA	26 IRCN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(451)	781205F USA	26 IRCN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(452)	801190F USA	26 IRON	NEUTRÓN	DIFFERENTIAL ELASTIC CROSS SECTION
(465)	781207F USA	26 IRCN	NEUTRON	NON-ELASTIC CROSS SECTION
(466)	712023R FR	26 IRON	NEUTRON	ABSORPTION CROSS SECTION
(475)	762166R SWD	26 IRCN	NEUTRON	TOTAL PHOTON PRODUCTION CROSS SECTION
(483)	762101F JAP	26 IRCN	NEUTRON	N+2N
(485)	752102F JAP	25 IRCN	NEUTRON	N,P
(492)	781141F USA	26 IRCN	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(45E)	762103F JAP	26 IRON	NEUTRON	N, ALPHA
(5C C)	781120F USA	26 IRCN	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(502)	801047F USA	26 IRCN	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(503)	301097F USA	26 IRON	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(305)	801038F USA	26 IRCN 54	NEUTRON	NoT
(511)	741043R USA	26 IRON 54	NEUTRON	RESONANCE PARAMETERS
(512)	801007F USA	26 IRON 56	NEUTRON	N .T
(51é)	792009R FR	26 IRON 59	NEUTRON	CAPTURE CROSS SECTION
(52\$)	801202F USA	27 COBALT 59	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(536)	801189F USA	29 NICKEL	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(544)	712031R FR	28 NICKEL	NEUTRON	ABSORPTION CRESS SECTION
(557)	762106F JAP	23 NICKEL	NEUTRON	N. 2N
(559)	301131R USA	25 NICKEL	NEUTRON	NEUTRON EMISSION CROSS SECTION
(564)	762107F JAP	28 NICKEL	NEUTRON	N,P
(558)	781137F USA	28 NICKEL	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(571)	762108F JAP	28 NICKEL	NEUTRON	N, ALPHA
(575)	781116F USA	29 NICKEL	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(575)	801015F USA	23 NICKEL	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(531)	801050F USA	29 NICKEL	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(532)	301200F USA	28 NICKEL	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(593)	781022F USA	28 NICKEL 58	NEUTRON	N•P
(620)	781034F USA	29 COPPER	NEUTRON	CIFFERENTIAL ELASTIC CROSS SECTION
(628)	731139F USA	29 COPPER	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(631)	301063F USA	29 COPPER	NEUTRON	TOTAL ALPHA PRODUCTION CROSS SECTION
(632)	781113F USA	29 COPPER	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(634)	801096F USA	29 COPPER	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(635)	801195F USA	29 CCPPER	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
·(646)	801177F USA	35 BROMINE	NEUTRON	N.P
(647)	801178F USA	35 BRCMINE	NEUTRON	N.ALPHA
(645)	762001N JAP	35 BROMINE 87		GAMMA RAY YIELD
(650)	762002N JAP	35 BROMINE 88		GAMMA RAY YIELD
(657)	762003N JAP	36 KRYPTON 90		GAMMA RAY YIELD
(663)	712034R FR	40 ZIRCONIUM	NEUTRON	ABSORPTION CROSS SECTION
(672)	301036F USA	40 ZIRCONIUM 90	NEUTRÓN	N + 2N
(680)	8010.37F USA	40 ZIRCONIUM 90	NEUTRON	N.P

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(531)	752092R TUK	40 ZIRCONIUM 91	NEUTRON	TGTAL CROSS. SECTION
(582)	752091R TUK	40 ZIRCONIUM 91	NEUTRON	CAPTURE CROSS SECTION
(693)	752090R TUK	41 NICBIUM \$3	NELTRON	TETAL CROSS SECTION
(597)	731221F USA	41 NICBIUM 93	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(70a)	712037R FR	41 NICBIUM 53	NELTREN	ABSORPTION CROSS SECTION
(712)	752039R TUK	41 NICEIUM 93	NELTRON	CAPTURE CROSS SECTION
(716)	752124F JAP	41 NICBIUM 93	NELTRGN	TOTAL PHOTON PRODUCTION CROSS SECTION
(729)	781147F USA	41 NIOBIUM 93	NELTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(734)	751126F USA	41 NICBIUM 93	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(742)	762236F JAP	42 MOLYBDENUM	NEUTRON	INELASTIC CROSS SECTION
(745)	712040R FR	42 MOLYƏDENUM '	NEUTRON	ABSORPTION CROSS SECTION
(752)	731150F USA	42 MOLYBDENUM	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(7óĉ)	731129F USA	42 MOLYSDENUM	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(765)	301086F USA	42 MOLYSDENUM	NEUTRON	SPECIAL QUANTITY (DESCRIPTION BELOW)
(772)	741075R USA	42 MOLYBDENUM 95	NELTRON	CAPTURE RESONANCE INTEGRAL
(777)	741076R USA	43 TECHNETIUM 99	NELTRON	CAPTURE CROSS SECTION
(778)	7520078 JAP	43 TECHNETIUM 99	NELTRON	CAPTURE CROSS SECTION
(734)	722002N 14P	44 RUTHENTUM 103		GANNA RAY YIELD
1 79 51	471016D 116A	AA DUTHENTUM 103		
(201)	301176E USA	AT STAND	NEUTRON	
(307)	3011767 034	AT SILVER	NEUTRON	
(202)	BUILTSP USA	47 SILVER	NEUTRON	N.ALPHA
(304)	301026F USA	47 SILVER 107	NECTRON	N • 2N
(205)	301025F USA	47 SILVER 107	NECTRUN	N, 3N
(313)	731035F UGA	50 TIN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(317)	731149F USA	50 TIN	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(315)	761123F USA	50 TIN	NEUTRON	ENERGY-ANGLE DIFF. ALPHA-PRODUCTION CROSS SECTION
(320)	301037F USA	SO TIN	NEUTRGN	SPECIAL QUANTITY (DESCRIPTION BELOW)
(365)	762005N JAP	53 IGCINE 137		GAMMA RAY YIELD
(837)	762006N JAP	53 ICDINE 138		GAMMA RAY YIELD
(838)	762013N JAP	53 ICDINE 139		HALF LIFE
(235)	762007N JAP	53 IODINE 139		GAMMA RAY YIELD
(244)	671025R USA	54 XENON 131	NELTRON	CAPTURE CRCSS SECTION
(353)	762003N JAP	54 XENON 139		GAMMA RAY YIELD
(29 2)	761058R USA	62 SAMARIUM 149	NEUTRON	CAPTURE CROSS SECTION
(\$38)	741102R USA	63 EUROPIUM 151	NELTRON	CAPTURE CROSS SECTION
(5!1)	741100R USA	53 EUROPIUM 151	NEUTRON	CAPTURE GAMMA RAY SPECTRUM
(920)	741106R USA	63 EURCPIUM 153	NELTRON	CAPTURE GAMMA RAY SPECTRUM
(535)	781199R USA	63 EREIUM 166	NEUTRGN	CAPTURE CROSS SECTION
(327)	731202R USA	63 EREIUM 167	NELTRON	CAPTURE CRCSS SECTION
(538)	731200R USA	63 ERBIUM 168	NEUTRON	CAPTURE CRCSS SECTION
(943)	7512018 USA	70 YTTERBIUM 170	NEUTRON	CAPTURE CROSS SECTION
(SoC)	5911948 USA	73 TANTALUM 181	NELTRON	CAPTURE CROSS SECTION
(962)	7920348 JAP	73 TANTALUM 182	NEUTRON	CAPTURE CROSS SECTION
(963)	301360F USA	74 TUNGSTEN	NEUTRON	DIFFERENTIAL ELASTIC CROSS SECTION
(971)	731:43F USA	74 TUNGSTEN	NEUTRON	ENERGY-ANGLE DIFF. PROTON-PRODUCTION CROSS SECTION
(\$74)	731127F USA	74 TUNGSTEN	NEUTRON	ENERGY-ANGLE DIFE. ALPHA-PRODUCTION CROSS SECTION
(975)	301103F USA	74 TUNGSTEN	NEUTRON	SPECIAL GUANTITY (DESCRIPTION BELOW)
(578)	671032R USA	79 5010 197	NEUTRON	CAPTURE CROSS SECTION
(336)	7920358 JAP	79 6610 193	NEUTRON	CAPTURE CROSS SECTION
(1)2 = 1	7510738 1123	90 THERIUM 272	NELTRON	
() 7573	7811020 USA	01 D0CTACTERINA 177	NELTOCN	TETAL CRESS SECTION
110503	7622020 112	OL ADOTACTINIUM 233	NELTOCN	ANTINE CRUSS SECTION
(1054)	752203K JAP	DI PRUTACTINIUM 233		CAPIURE CRUSS SECTION
110001	CONT NOTOCCA	ST PRETACTINIUM 234	NEVIRUN	TUTAL CRUSS SECTION

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(1055)	753017R IND	91 PROTACTINIUM 234	NEUTRON	ELASTIC CROSS SECTION
(1060)	753018R IND	91 PROTACTINIUM 234	NEUTRON	INELASTIC CROSS SECTION
(1061)	753019R IND	91 PRCTACTINIUM 234	NELTRON	CAPTURE CRESS SECTION
(1062)	753020R IND	91 PROTACTINIUM 234	NELTRON	FISSION CROSS SECTION
(1098)	621043R USA	92 URANIUM 233	NEUTRON	CAPTURE TO FISSION RATIO (ALPHA)
(1114)	761120R USA	92 URANIUM 234	SPONTANEOUS	ALPHA HALF LIFE
(1128)	761083R USA	92 URANIUM 235	NEUTRON	TOTAL CROSS SECTION
(1133)	692363R SWD	92 URANIUM 235	NEUTRON	INELASTIC CROSS SECTION
(1141)	741117R USA	92 URANIUM 235	NEUTRON	CAPTURE CROSS SECTION
(1142)	742005R SWD	92 URANIUN 235	NEUTRON	CAPTURE CROSS SECTION
(1)47)	691241R USA	92 URANIUM 235	NEUTRON	FISSION CROSS SECTION
(1145)	6912468 USA	92 URAN IUN 235	NEUTRON	EISSION CROSS SECTION
()150)	6914498 USA	92 URANTUM 235	NEUTRON	FISSION CROSS SECTION
(1151)	691450R USA	02 UP AN TUM 235	NEUTRON	EISSION CROSS SECTION
(1151)	69145UR USA	92 URANIUM 235	NEUTRON	
(1152)	691451R USA	92 URANIUM 235	NECTRON	
(1155)	N924968 5WD	92 URANIUM 235	NEURUN	
(1157)	74111BR USA	92 URANIUM 235	NEUTRUN	
(1160)	761107R USA	92 URANIUM 235	NEUTRON	FISSION CROSS SECTION
(1161)	7611 08R USA	92 URANIUM 235	NEUTRON	FISSION CROSS SECTION
(1198)	722040N JAP	92 URANIUM 236	NEUTRON	CAPTURE CROSS SECTION
(1202)	712063R FR	92 URANIUM 236	NEUTRON	NEUTRONS EMITTED PER FISSION (NU BAR)
(1206)	792090R JAP	92 URANIUM 237		GAMMA RAY YIELD
(1236)	691469R USA	92 URANIUM 238	NEUTRON	CAPTURE CRGSS SECTION
(1237)	691470R USA	92 URANIUM 238	NEUTRON	CAPTURE CROSS SECTION
(1241)	692406R SWD	92 URANIUM 238	NEUTRON	CAPTURE CROSS SECTION
(1243)	741123R USA	92 URANIUM 238	NEUTRON	CAPTURE CRCSS SECTION
(1255)	301024F USA	92 URANIUM 238	NEUTRON	N+2N
(1262)	742112R EUR	92 URANIUM 238	NEUTRON	FISSION CROSS SECTION
(1264)	301023F USA	92 URANIUM 238	NEUTRON	FISSION CROSS SECTION
(1274)	761037R USA	92 URANIUM 238	NEUTRON	DELAYED NEUTRONS EMITTED PER FISSION
(1277)	721145R USA	92 URANIUM 238	NELTRON	ENERGY SPECTRUM OF FISSION NEUTRONS
(1275)	762044N JAP	92 URANIUM 238	NEUTRGN	FISSION PRODUCT MASS YIELD SPECTRUM
(128C)	691236R USA	92 URANIUM 238	NEUTRON	RESONANCE PARAMETERS
(1231)	692385R SWD	92 URANIUM 238	NEUTRON	RESONANCE PARAMETERS
(1284)	781193R USA	92 URANIUM 238	NEUTRON	RESONANCE PARAMETERS
(1288)	792086R JAP	93 NEPTUNIUM 237	NEUTRON	CAPTURE CROSS SECTION
(1285)	792089R JAP	93 NEPTUNIUM 237	NEUTRON	CAPTURE CROSS SECTION
(1297)	762135F JAP	93 NEPTUNIUM 237	NEUTRON	FISSION CROSS SECTION
(1295)	801239F USA	93 NEPTUNIUM 237	NEUTRON	FISSION CROSS SECTION
(1302)	762169N SWD	93 NEPTUNIUM 238	NEUTRON	CAPTURE CRESS SECTION
(1305)	712075R JAP	93 NEPTUNIUM 239	NEUTRON	CAPTURE CRESS SECTION
(1307)	7622.099. JAP	93 NEPTUNIUM 239	NEUTRON	CAPTURE CROSS SECTION
(1312)	762150R FR	93 NEPTUNIUM 239	NEUTRON	NEUTRONS EMITTED PER FISSION (NU BAR)
(1315)	762151R FR	94 PLUTONIUM 236	NEUTRON	ABSORPTION CROSS SECTION
(1320)	762014N JAP	94 PLUTONIUM 238	SPONTANEOUS	FISSION MALF LIFE
(1327)	792087R JAP	94 PLUTONIUM 238	NEUTRÓN	CAPTURE CRESS SECTION
(1328)	792038R JAP	94 PLUTONIUM 238	NEUTRON	CAPTURE CROSS SECTION
(1334)	762018N JAP	94 PLUTONIUM 238		MISC
(1336)	7411248 USA	94 PLUTONIUM 239	NEUTRON	TCTAL CROSS SECTION
(1345)	6924378 SWD	94 PLUTONIUM 239	NEUTRON	CAPTURE CROSS SECTION
(1267)	742006R 5WD	94 PLUTONIUM 239	NELTRON	FISSIGN CRESS SECTION
(1375)	801240F LSA	94 PLUTENIUM 239	NEUTRON	FISSION CROSS SECTION
(137é)	691314R USA	94 PLUTONIUM 239	NEUTRON	CAPTURE TO FISSION RATIO (ALPHA)
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(1378)	691316R USA	94 PLUTONIUM 239	NEUTRON	CAPTURE TO FISSION RATIO (ALPHA)
(1381)	722046N JAP	94 PLUTONIUM 239	NEUTRON	CAPTURE TO FISSION RATIO (ALPHA)
(1387)	722048N JAP	94 PLUTONIUM 239	NEUTRUN	NEUTRONS EMITTED PER FISSION (NU BAR)
(1410)	691319R USA	94 PLUTONIUM 239	NEUTRON	RESCNANCE PARAMETERS
(1411)	691320R USA	94 PLUTONIUM 239	NEUTRON	RESCNANCE PARAMETERS
(1412)	692415R SWD	94 PLUTONIUM 239	NEUTRON	RESONANCE PARAMETERS
(1413)	762019N JAP	94 PLUTONIUM 239		MISC
(1415)	762016N JAP	94 PLUTONIUM 240	SPONTANEOUS	FISSION HALF LIFE
(1418)	7210878 USA	94 PLUTONIUM 240	NEUTRON	INFLASTIC CROSS SECTION
(1421)	6711 GAR USA	94 PLUTONIUM 240	NEUTRON	CAPTURE CROSS SECTION
(1425)	6924528 SWI	94 PLUTONEUM 240	NEUTRON	CAPTURE CROSS SECTION
(1428)	7211370 1154	94 PLUTONIUM 240	NEUTRON	
(1451)	7610930 1154	94 PLUTONIUM 240	NEUTRON	RESENANCE PARAMETERS
(1451)	7622150 140	94 PEUTONIUM 240	NEUTRON	RESUMANCE PARAMETERS
(1452)	762215R JAP	94 PLUTUNIUM 240	NEUTRUN	RESUNANCE PARAMETERS
(1453)	781194R USA	94 PLUTUNIUM 240	NEUTRUN	RESUNANCE PARAMETERS
(1455)	762020N JAP	94 PLUTONIUM 240		MISC
(1461)	781195R USA	94 PLUTONIUM 241	NEUTRON	TOTAL CROSS SECTION
(1466)	692470R SWD	94 PLUTONIUM 241	NEUTRON	CAPTURE CROSS SECTION
(1469)	761094R USA	94 PLUTONIUM 241	NEUTRON	CAPTURE CROSS SECTION
(1473)	762221R JAP	94 PLUTONIUM 241	NEUTRON	N • 2N
(1475)	721094R USA	94 PLUTONIUM 241	NEUTRON	FISSION CROSS SECTION
(1480)	761095R USA	94 PLUTONIUM 241	NEUTRON	FISSION CROSS SECTION
(1483)	6913318 USA	94 PLUTONIUM 241	NEUTRON	CAPTURE TO FISSION RATIG (ALPHA)
(1436)	722047N JAP	94 PLUTONIUM 241	NEUTRON	CAPTURE TO FISSION RATIO (ALPHA)
(1489)	691330R USA	94 PLUTONIUM 241	NEUTRON	NEUTRONS EMITTED PER FISSION (NU BAR)
(1497)	761096R USA	94 PLUTONIUM 241	NEUTRON	RESONANCE PARAMETERS
(1499)	762021N JAP	94 PLUTGNIUM 241		MISC
(1500)	762017N JAP	94 PLUTONIUM 242	SPONTANEOUS	FISSIJN HALF LIFE
(1506)	721142R USA	94 PLUTONIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1508)	722043N JAP	94 PLUTONIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1509)	742010R SWD	94 PLUTONIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1511)	761097R USA	94 PLUTONIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1519)	762022N JAP	94 PLUTONIUM 242		MISC
(1533)	761098R USA	93 AMERICIUM 241	NEUTRON	CAPTURE CROSS SECTION
(1535)	762170R SWD	95 AMERICIUM 241	NEUTRON	CAPTURE CROSS SECTION
(1540)	761099R USA	95 AMERICIUM 241	NEUTRON	FISSION CROSS SECTION
(1547)	762023N JAP	95 AMERICIUM 241		MISC
(1556)	762171R SWD	95 AMERICIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1565)	7321038 FR	95 AMERICIUM 242	NEUTRON	NEUTRONS EMITTED PER FISSION (NO BAR)
(1575)	761100R USA	95 AMERICIUM 243	NEUTRON	CAPTURE CROSS SECTION
(1576)	762028N JAP	95 AMERICIUM 243	NEUTRON	CAPTURE CROSS SECTION
(1592)	762173R S≥D	96 CURIUM 242	NEUTRON	CAPTURE CROSS SECTION
(1605)	761101R USA	96 CURIUM 242	NEJTRÜN	RESONANCE PARAMETERS
(1603)	7621748 SWD	96 CURIUM 243	NEUTRON	CAPTURE CROSS SECTION
(1617)	7611028 USA	96 CURIUM 244	NEUTRON	CAPTURE CROSS SECTION
(1626)	7321108 FR	96 CURIUM 244	NEUTRON	NEUTRONS EMITTED PER EISSION (NU HAC)
(1625)	7611038 USA	96 CURIUM 245	NEUTREN	CAPTURE CROSS SECTION
(1633)	761104R USA	96 CURIUM 245	NEUTRON	FISSION CROSS SECTION
(1638)	7611058 USA	96 CURIUM 246	NEUTRUN	TOTAL CROSS SECTION
				The course section
(1659)	691359P USA	OR CALLENDALINA JES	SPONTANEDUS	NEUTOONS EMITTED DED FIGUTES (N
(1659) (1662)	691359R USA	98 CALIFORNIUM 252	SPONTANEOUS	NEUTRONS EMITTED PER FISSION (NU SAR)
(1659) (1662)	691359R USA 721103R USA	98 CALIFORNIUM 252 98 CALIFORNIUM 252 98 CALIFORNIUM 252	SPONTANEOUS SPONTANEOUS SPONTANEOUS	NEUTRONS EMITTED PER FISSION (NU SAR) NEUTRONS EMITTED PER FISSION (NU EAR)
(1659) (1662) (1663)	691359R USA 721103R USA 761063R USA	98 CALIFORNIUM 252 98 CALIFORNIUM 252 98 CALIFORNIUM 252	SPUNTANEOUS SPUNTANEGUS SPUNTANEGUS	NEUTRONS EMITTED PER FISSION (NU SAR) NEUTRONS EMITTED PER FISSION (NU BAR) NEUTRONS EMITTED PER FISSION (NU BAR)

(1666)	761064R USA	98 CALIFORNIUM 252	SPONTANEOUS	ENERGY	SPECTRUM OF	FISSION	NEUTRUNS
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APPENDICES

APPENDIX A

Review Reports by INDC and NEANDC

The two technical subcommittees of the International Nuclear Data Committee (INDC), the Subcommittee on Nuclear Standard Reference Data and the Subcommittee on Discrepancies in Important Nuclear Data and Evaluations have assumed a continuing responsibility for the review of particularly important nuclear data. The Nuclear Energy Agency Nuclear Data Committee (NEANDC) has two similar Subcommittees on Standards and Discrepancies with reviewing responsibilities similar to those of the two INDC Subcommittees . These Subcommittees of INDC and NEANDC cooperate in establishing and updating a common file of review reports. In many cases, these reports contain detailed estimates of data uncertainties.

Whenever a request for a quantity under review appears in WRENDA, the review is mentioned in a status comment. Exceptions to this are requests for fission product and transactinium isotope nuclear data. These data are under continuous review by INDC, but requests for these data are so numerous that it has been decided to omit repetitious references to such review from the actual request list.

The reports of the Standards and Discrepancies Subcommittees of the INDC will continue to be sent to all WRENDA Requestors in order to provide them with a continuous up-to-date review of their requests.

The next issue of the WRENDA request list is planned to be published in 1987. Requests for the latest information on quantities under review should be sent to

> Dr. J.J. Schmidt INDC Scientific Secretary Nuclear Data Section International Atomic Energy Agency P.O. Box 100 A-1400 Vienna, Austria

QUANTITY	Revie INDC	wed by: NEANDC
H(n,n) cross section	x	x
⁵ Li(n,t) cross section	x	x
$^{10}B(n,\alpha)$ cross section	×	x
C(n,n) cross section	x	X
¹⁹⁷ Au(n, _Y) cross section	х	x
²³⁵ U(n,f) cross section	x	x
²³⁵ U fission fragment anisotropies	x	-
²³⁸ U(n,f) cross section	x	x
²⁷ Al(n,a) cross section	x	x
252 _{Cf nu-bar}	x	x
²⁵² Cf fission neutron spectrum	x	x
Thermal parameters for ²³³ U, ²³⁵ U, ²³⁹ Pu, ²⁴¹ Pu	x	x
(°T, °S, °A, °f, °r, °, °, 't) Actinide half-lives for 233 U, 234 U, 235 U, 238 U, 237 Np, 238 Pu, 239 Pu, 240 Pu, 241 Pu, 242 Pu, 244 Pu, 252 Cf	x	x
²³² Th(n,f) cross section	-	x
232 Th(n, $_{\gamma}$) cross section	-	x
²³³ U(n,f) cross section	-	x
236 U(n, _Y) fast capture cross section	х	-
²³⁷ Np nu-bar	x	-
²³⁷ Np(n,2n) cross section	x	x
²³⁷ Np(n,f) cross section	-	x
²³⁵ U, ²³⁹ Pu resonance parameters	x	x
238U(n, _Y) cross section	x	x
²³⁸ U(n,n ¹) cross section	x	x
²³⁸ U resonance parameters.	x	-
²³⁹ Pu(n,f) cross section	x	x

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	Revie	wed 5y: NEANDC
- Your The Part of		
²³⁹ Pu decay power	x	x
²⁴¹ Am fission resonance integral	x	x
²⁴³ Am fission resonance integral	x	-
²⁴³ Am capture resonance integral	-	x
93No(n,n ¹) 93 mNo cross section	x	x
103Rh(n,n ¹) ^{103m} Rh cross section	x	x
109 Ag(n, _Y) cross section	-	x
Cr, Fe, Ni capture cross section	x	x
Cr, Ni total and inelastic scattering cross section	x	x
⁹¹ Zr, ⁹⁵ Zr resonance parameters	x	x
²³ Na, ^r y 2.85 keV resonance	-	x
Energy spectrum of fission neutrons of 235 U, 238 U and 239 Pu	x	-
Fission product nuclear data	x	x
Transactinium isotope nuclear data (TND)	x	x
Reactor dosimetry cross sections	x	x
Discrepancies and gaps in major CPND for fusion,	x	-
(D,T), (T,T), etc.		
Delayed neutron emitters: 232_{Th} , 233_{U} , 235_{U} , 239_{Pu} , 240_{Pu} , 241_{Pu}	x	-

APPENDIX B

LIST OF COUNTRY CODES

ARG	ARGENTINA
AUL	AUSTRALIA
AUS	AUSTRIA
BAN	BANGLA DESH
BLG	BELGIUM
BUL	BULGARIA
BZL	BRAZIL
CAN	CANADA
CCP	SOVIET UNION
DDR	GERMAN DEMUCRATIC REPUBLIC
DEN	DENMARK
EUR	COMMISSION OF THE EUROPEAN COMMUNITIES
FR	FRANCE
GER	FEDERAL REPUBLIC OF GERMANY
HUN	HUNGARY
IND	INDIA
ISL	ISRAEL
ITY	ITALY
JAP	JAPAN
NED	NE THERL ANDS
NOR	NORWAY
POL	POLAND
RUM	ROMANIA
SAF	REPUBLIC OF SOUTH AFRICA
SF	FINLAND
SWD	SWEDEN
SWT	SWITZERLAND
τυκ	TURKEY
UK	UNITED KINGDOM
UND	UNITED NATIONS ORGANIZATION
USA	UNITED STATES
YUG	YUGOSLAVIA
ZZZ	INTERNATIONAL ORGANIZATION

APPENDIX C

LIST OF LABORATORY CODES

ABD	US ARMY ABERDEEN RESEARCH AND DEVEL. CENT., ABERDEEN, MD.	USA
AE	AKTIEBOLAGET ATOMENERGI, STUDSVIK	SWD
AI	ATOMICS INTERNATIONAL, CANGGA PARK, CALIFORNIA	USA
AKA	ASEA-ATOM, VAESTERAS	SWD
ALD	UK AWRE, ALDERMASTON	Uκ
ALK	ALKEM GMBH, LEOPOLDSHAFEN	GER
ANC	AEROJET NUCLEAR CORP., IDAHO FALLS, IDAHO	USA
ANL	ARGENNE NATIONAL LABERATORY, LEMONT, ILLINGIS	USA
ARI	AFROSPACE RES. ABS. WRIGHT-PATTERSON AIR-FORCE BASE, OHIO	USA
	AUSTRALIAN AFC RESEARCH ESTABLISHMENT. LUCAS HEIGHTS	AUI
AUB	AUBURN UNIVERSITY. ALABAMA	1154
		BAN
BET	WESTINGHOUSE, BETTIS ATOMIC DOWED LAR., DITTSRUDGH, DA.	USA
arp	UNIVERSITY OF BIDNINGHAM, ENGLAND	
	BROCKHAVEN NATIONALLA RADATORY, UDTON, NEW YOR	
	BATTELLE NORTHWEST LABORATORY DICHLAND WASHINGTON	LICA
	CONTRICT NURTHWEST EADURATURE, RICHEAND, WASHINGTON	U SA
	COMISION NACIONAL DE ENERGIA ATUMICA, DULUGNA	50
SRC	CEN DRUTERE LE CHATEL	FR.
BRK	UNIVERSITY OF CALIFORNIA, LAWRENCE DERRELET LAB. BERRELET	USA
800	INSTITUTE FUR ATUMIC PHYSICS, BUCHAREST	RUM
CAD	CADARACHE, BLUCHES-DU-RHUNE	FR
CBE	COMBUSTION ENGINEERING, WINDSOR, CUNNECTICUT	USA
CCP	SOVIET UNION	ССР
CNA	CEKMECE NUCLEAR RESEARCH CENTER, ISTANBUL	TUK
COL	COLUMBIA UNIVERSITY, NEW YORK CITY, NEW YORK	USA
CRC	CHALK RIVER NUCLEAR LAEORATORIES, ONTARIO	CAN
CSE	CASE INSTITUTE OF TECHNOLOGY, CLEVELAND, DHID	USA
CUL	CULHAM LABORATORY, UNITED KINGDOM	υĸ
DEB	ATOMMAG KUTATO INTEZET, DEBRECEN	HUN
JKE	DUKE UNIVERSITY, DURHAM, NORTH CAROLINA	USA
DCE	US DEPARTMENT OF ENERGY, WASHINGTON, D.C.	USA
DUB	JOINT INSTITUTE FOR NUCLEAR RESEARCH, DUBNA	zzz
FAR	CEA FONTENAY-AUX-ROSES, SEINE	FR
FE	FUJI ELECTRIC	JAP
FEI	FIZIKO-ENERGETICHESKIJ INSTITUT, OBNINSK	ССР
FOA	RESEARCH INSTITUTE OF NATIONAL DEFENSE, STOCKHOLM	SWD
FRK	J.W.GOETHE UNIVERSITY, FRANKFURT	GER
GA	GENERAL ATOMIC. SAN DIEGO. CALIFORNIA	USA
GAC	INSTITUTE FOR GED- AND ANALYTIC CHEMISTRY, MOSCOW	CCP
GEB	GENERAL ELECTRIC, BRDG, SUNNYVALE, CALIF.	USA
GEL ,	B.C.M.N. EURATOM, GEEL	EUR
GEV	GENERAL ELECTFIC CD., VALLECITOS, CALIF.	USA
GIT	GEORGIA INSTITUTE OF TECHNULOGY, ATLANTA, GEORGIA	USA
GRE	CEA AND UNIVERSITY, GRENDBLE	FR
GRT	GULE RADIATION TECHNOLOGY. SAN DIEGO. CALLEDRNIA	USA
нам	INSTITUT FUED EXCEPTIMENTAL DHYSTK, HAMBURG	GED
нар	IK ATOMIC ENERGY RESEARCH ESTARI ISHMENT, HARWELL	
HED	HANFORD ENGINEEDING DEVELOPMENT LAB., DICHLAND, WASH.	USA
HEA	TECHNION HAIFA	1 51
	UNIVERSITY OF HEISINKI	136
		36
HOK		JAP
	TARYARU UNJYERDIITA CAMORIUGEA MADD	USA
	INTERNALIUNAL ATUMIC ENERGY AGENCY / VIENNA	UNU
110	INSTITUT FIZIKI AN UKKAINSKUI SSR, KIEV	
1 1 I T 1 I	ILLINUIS INSTITUTE OF TECHNOLOGY, CHICAGO, ILLINOIS	USA
111	INSTITUT JADERNYKH ISSLEDUVANIJ, KIEV	CCP
TKI	INTELCUM RADIATIUN TECHNULUGY, SAN DIEGO, CALIF.	USA
JAE	JAPAN AILMIC ENERGY RESEARCH INSTITUTE, TOKAI	JAP
JAP	JAP AN	JAP
JUL	KERNFORSCHUNGSANLAGE, JUELICH	GER

LIST OF LABORATORY CODES

KAL	KALPAKKUM REACTOR RESEARCH CENTRE, KALPAKKAM, TAMILNADU	I ND
KAP	KNOLLS ATOMIC POWER LABORATORY, SCHENECTADY, NEW YORK	USA
KFK	KERNFORSCHUNGSZENTRUM, KARLSRUHE	GER
KGU	GOSUDARSTVENNYJ UNIVERSITY, KIEV	ССР
KKU	KINKI UNIVERSITY ATOMIC ENERGY RESEARCH INSTITUTE	JAP
KOS	KOSSUTH UNIVERSITY, DEBRECEN	HUN
кто	KYOTO UNIVERSITY	JAP
KTY	UNIVERSITY OF KENTUCKY, LEXINGTON, KENTUCKY	USA
KUR	LAVA KURCHATOV ATOMIC ENERGY INST. MOSCOW	CCP
KYU	KYUSHU UNIVERSITY, EUKUOKA	
I AS	AND ALAMES SCIENTIFIC LABORATORY, NEW MEYICO	USA
	LNIVERSITY OF LODZ LODZ	201
	UNIVERSITY OF LODZ, LODZ	
	LAWRENCE LIVERMURE LABURAJURT, LIVERMURE, CALIFURNIA	USA
	LUWELL ICLANULUGICAL INSTITUTE, LUWELL, MASS.	USA
мар	MITSUBISHI A.P.I., INC.	JAP
мсм	MCMASTER UNIVERSITY, HAMILTON, ONTARIO	CAN
MDD	MCDONNELL DOUGLAS ASTRONAUTICS COMPANY	USA
MGT	MICHIGAN TECHNOLOGICAL UNIVERSITY	USA
MHG	UNIVERSITY OF MICHIGAN	USA
MIT	MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS.	USA
MND	MOUND LABORATORY, MIAMISBURG, OHIO	USA
MOL	C.E.N., MOL	ΒLG
MTR	IDAHO NUCLEAR CORP., IDAHO FALLS, IDAHO	USA
MUA	MUSLIM UNIVERSITY, ALIGARH	I ND
MUN	TECH. HGCHSCHULE, MUENCHEN	GER
NAG	UNIVERSITY OF NAGOYA	JAP
NBS	NATIONAL BUREAU DE STANDARDS, WASHINGTON, D.C.	USA
NDC	NEA NUCLEAR DATA COMPILATION CENTER, SACLAY, ERANCE	777
NEL	U.S. ARMY NUCLEAR EFFECTS LABORATORY, ABERDEEN, MARYLAND	USA
NELI	UNIVERSITY DE NEUCHATEL	SWT
NET		
NIC	NUCLEAR FOLL INDUSTRIES	
NIG	NATIONAL INSTITUTE OF RADIOLOGICAL SCIENCES CHIDA	
ND:	NATIONAL INSTITUTE OF RADIOLUGICAL SCIENCES, CHIDA	JAP
NPL	NATIONAL PHISICAL CAEURAIJRI, TEDUINGIUN	
NRD	U.S. NAVAL RADIULUGICAL DEFENSE LAB., SAN FRANCISCU	USA
NYU	NEW YURK UNIVERSITY, NEW YURK CITY	USA
OHU	UHIU UNIVERSITY, ATHENS, JHIU	USA
ORE	UNIVERSITY OF DREGON, EUGENE, DREGON	USA
URL	UAK RIDGE NATIONAL LABURATORY, TENNESSEE	USA
USA	OSAKA UNIV.,CSAKA	JAP
OSL	UNIVERSITY OF OSLO	NOR
PAD	UNIVERSITY OF PADUA	ΙTΥ
PAR	UNIVERSITY OF PARIS (INCL.ORSAY) PARIS	FR
PEL	AE EOARD, PELINDABA, PRETORIA	SAF
PNC	POWER REACTOR AND NUCLEAR FUEL DEV. CORP.	JAP
PTN	PRINCETON UNIVERSITY, PRINCETON, N.J.	USA
RAM	ATOMIC ENERGY CENTRE, RAMNA, DACCA	BAN
RCN	REACTOR CENTRUM NEDERLAND, PETTEN	NED
REH	REHOVOTH LAB., ISRAEL AEC.	ISL
RI	KHLOPIN RADIUM INSTITUTE, LENINGRAD	CCP
RIS	RISC, ROSKILDE	DEN
RL	RICH AND OPERATIONS OFFICE, RICHLAND, WASHINGTON	USA
RDS	ROSSENDORE BEI DRESDEN	200
RPI	RENNSELAER POLYTECHNIC INSTITUTE, TROY, NEW YORK	1154
RUM	REMANIA	
SAC	C.E.N. SACLAY, GIE-SLP-YVETTE	F 2
	CILING ATOMIC ENERGY INDUCTOIES OF TO TORYO	
	SCIENTIFIC ADDUICATIONS INC. LA SOURA CALIFORNIA	م بدر محرب
JAL	JULINITIC APPLICATIONS INC., LA JULLA, CALIFURNIA	U SA
5A5	UNIV. UF SASKALCHEWAN, SASKATUUN	CAN
SGA	UESI.SIUDIENGES.F.ATUMENERGIE, VIENNA	AUS

LIST OF LABORATORY CODES

SOR	SOREQ RESEARCH CENTER, YAVNE	I SL
SRE	SIEMENS REAKTCRENTWICKLUNG, ERLANGEN	GER
SRL	SAVANNAH RIVER LABORATORIES, AIKEN, S.C.	USA
SUN	SOUTHERN UNIVERSITIES NUCLEAR INST., FAURE, CAPE PROV.	SAF
SWD	SWEDEN	SWD
THD	TECH. HOCHSCHULE, DARMSTADT	GER
TIT	TOKYO INSTITUTE OF TECHNOLOGY	J AP
TNC	TEXAS NUCLEAR CORPORATION, AUSTIN, TEXAS	USA
ток	UNIVERSITY OF TOKYO	JAP
TOS	TOSHIBA RESEARCH AND DEVELOPMENT CENTER	JAP
TRM	BHABHA ATOMIC RESEARCH CENTRE, TROMBAY	I ND
TUD	DRESDEN, TECHNICAL UNIVERSITY AT DRESDEN AND PIRNA	DDR
UK	UNITED KINGDOM	UΚ
UKW	WINDSCALE REACTOR DEVELOPMENT LABS ., UKAEA	UK
UMK	UNION MINIERE DU HAUT KATANGA, BRUSSELS	BLG
UPP	UNIVERSITY OF UPPSALA	S ₩D
USA	UNITED STATES OF AMERICA	USA
USP	UNIVERSITY OF SAO PAULO, SAO PAULO	BZL
VDN	CENTRAL BUREAU DER V.D.E.N., ARNHEM	NED
WEW	WESTINGHOUSE ADVANCED REACTOR DIVISION, PITTSBURG, PA.	USA
WIN	UK ATOMIC ENERGY ESTABLISHMENT, WINFRITH	UΚ
₩IS	UNIVERSITY OF WISCONSON, MADISON, WISCONSON	USA
WMU	WESTERN MICHIGAN UNIVERSITY	USA
WUR	EIDG. INSTITUT FUER REAKTORFORSCHJNG, WUERENLINGEN	SWT
WWA	WARSAW UNIVERSITY	POL
YAL	YALE UNIVERSITY, NEW HAVEN, CONNECTICUT	USA
YDK	RIKKYO UNIVERSITY, YCKOSUKA	JAP

.

APPENDIX D

NAMES AND ADDRESSES OF REQUESTORS

ASANO. N. SUMITOMG ATOMIC ENERGY INDUSTRIES. LTD. 2-6-1 KAJICHO. CHIYODAKU Tokyo 101 JAPAN BARNES, W. RESEARCH AND DEVELOPMENT DEPT. BRITISH NUCLEAR FUELS LTD. WINDSCALE AND CALDER WORKS SELLAFIELD SEASCALE CUMBERLAND CA20 1PG U.K. BARTINE. D. OAK RIDGE NATIONAL LABERATORY P.O. BOX X DAK RIDGE, TENNESSEE 37830 U.S.A. BERK. S.E. J.S. DEPT. OF ENERGY OFFICE OF FUSION ENERGY DIVISION OF DEVELOPMENT AND TECHNOLOGY WASHINGTON. JC 20545 U.S.A. BEYNON. T.D. UNIVERSITY OF BIRMINGHAM P.D. BOX 363 BIRMINGHAM, B15 2TT UNITED KINGDOM BOWMAN. C.D. PD00-434 LOS ALAMOS NATIONAL LABORATORY P.J. SOX 1663 LOS ALAMOS. NM 87545 U. S. A BROCKMAN, H. INSTITUT FUER REAKTORENTWICKLUNG KERNFORSCHUNGSANLAGE JUELICH GMBH POSTFACH 365 D-517 JUELICH FEDERAL REPUBLIC OF GERMANY BUTLER, J. REACTOR SHIELDING GROUP AT OMIC ENERGY ESTABLISHMENT WINFRITH, OCRCHESTER, CORSET UNITED KINGDOM CAMPBELL. C.G. HEAD, FAST REACTOR PHYSICS DIVISION BUILDING A.32 ATOMIC ENERGY ESTABLISHMENT WINFRITH, DORCHESTER, DORSET UNITED KINGDOM CARLSON. A.D. NATIONAL BUREAU OF STANDARDS RADIATION PHYSICS BUILDING WASHINGTON. J.C. 20234 U. S. A

CARTER, L.L. HANFORD ENGINEER ING DEVELOPEMENT LABORA TORY P.D. 80X 1970 RICHLAND, WASHINGTON 99352 U. S. A. CASWELL. R.S. NATIONAL BUREAU CE STANDARDS CENTER FOR RADIATION RESEARCH NEUTRON STANDARDS SECTION WASHINGTON. D.C. 20234 U.S.A. COCEVA, C. CENTRO DI CALCOLO DEL C.N.E.N. VIA MAZZINI 2 I-40138 BOLOGNA ITALY CDWAN, C.L. GENERAL ELECTRIC COMPANY, ARSD P.O. BOX 5020 310 DEGUIGNE DRIVE SUNNYVALE, CA 94086 U. S. A DAHLBERG. R.H. GENERAL ATOMIC P.G. BOX 81608 SAN DIEGO. CALIFERNIA 92138 U. S. A. DARVAS. J. INSTITUT FUER REAKTORENTWICKLUNG KERNFORSCHUNGSANLAGE JUELICH POSTFACH 365 D-517 JUELICH FEDERAL REPUBLIC OF GERMANY DEL. D.E. BETTIS ATOMIC POWER LABORARDRY BUX 79 WEST MIFFLIN, PA 15122 U.S.A. DELEEUW-GIERTS, G. Centre d'etude de l'energie nucleaire 8-2400 MOL BELGIUM DE RAEDT, CH. CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE C.F.N./S.C.K. BOERETANG 200 8-2400 MGL BELGIUM DIVADEENAM. M. NATIONAL NUCLEAR DATA CENTER BROOKHAVEN NATIONAL LABORATORY UPTON. NY 11973

U.S.A.

DONCALS. R.A. #ESTINGHOUSE ELECTRIC CORPORATION ADVANCED REACTOR DIVISION WALTZ MILL SITE P.O. BOX 158 MADISON, PA 15063 U. S. A. DORAN. D.G. IRRADIATION EFFECTS MSIN/W/A-57 HANFURD ENGINEERING DEVELOPMENT LABORATORY P.O. BOX 1970 RICHLAND, WASHINGTON 99352 U.S.A. DRIEMEYER D.E. MCDONNELL DOUGLAS ASTRONAUTICS COMPANY ST. LOUIS DIVISION 80X 516 ST. LOUIS. MD 63166 U.S.A. DUCHEMIN. B. CENTRE D'ETUDES NUCLEAIRES DE SACLAY 8.P. NO. 2 F-91190 GIF SUR YVETTE FRANCE EISENHAUER. C. NATIONAL BUREAU OF STANDARDS WASHINGTON, D.C. 20234 U.S.A. ELKERT. J. AS EA-ATOM 30 X 53 5-721 04 VAESTERAS 1 SWEDEN ENGHOLM. B. GENERAL ATCHIC P.J. BOX 81608 SAN DIEGO, CALIFORNIA 92138 U.S.A. EABRY. A. CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE 8-2400 MOL BELGIUM FEINER, F. KNOLLS ATOMIC POWER LABORATORY P.C. BOX 1072 SCHENECTADY, N.Y. 12301 U.S.A. FELL. J. ATOMIC ENERGY ESTABLISHMENT WINFRITH, DORCHESTER, CORSET UNITED KINGDOM

FORT. E. CENTRE D'ETUDES NUCLEAIRES DE CADARACHE 8. P. NO 1 F-13115 ST. PAUL LEZ DURANCE FRANCE FROEHNER. F. INSTITUT FUER NEUTRONENPHYSIK UND REAKTORTECHNIK KERNFORSCHUNGSZENTRUM KARLSRUHE POSTFACH 3640 D-7500 KARLSRUHE FEDERAL REPUBLIC OF GERMANY FU. C. OAK RIDGE NATIONAL LABORARORY NEUTRON PHYSICS DIVISION P.C. BOX X OAK RIDGE. TN 37830 U.S.A. GARG. S.B. EXPER. REACTOR PHYSICS SECTION ENGINEERING HALL NO.1 B.A.R.C., TROMBAY BOMBAY 400 085 INDIA GERWIN. H. INSTITUT FUER REAKTORENTWICKLUNG KERNFORSCHUNGSANLAGE JUELICH GMBH POSTFACH 365 D-517 JUELICH FEDERAL REPUBLIC OF GERMANY GILLIAM. D.M.. NATIONAL BUREAU OF STANDARDS WASHINGTON. D.C. 20234 U.S.A. GOEL, B. INSTITUT FUER NEUTRONENPHYSIK UND REAKTORTECHNIK KERNFORSCHUNGSZENTRUM KARLSRUHE POSTFACH 3640 D-7500 KARLSRUHE FEDERAL REPUBLIC OF GERMANY GOLOVIN, I.N. I.V. KURCHATOV INSTITUTE OF ATOMIC ENERGY MOSCOW D-182 U. S. S. R. GREEN. L. JESTINGHOUSE ELECTRIC CORPORATION ADVANCED REACTOR DIVISION WALTZ MILL SITE P.O. BOX 158 MADISON. PA 15663 U.S.A.

HALE. G.M. LOS ALAMOS NATIONAL LABORATORY P.D. 90X 1663 LUS ALAMOS. NM 37545 U.S.A. HANCOX R. 0.5 CULHAM LABORATORY UNITED KINGDOM ATOMIC ENERGY AUTHORITY ABINGDON. OXEN. CX14 3CB UNITED KINGDOM HEGEDUES. F. EIDG. INSTITUT FUER REAKTORFORSCHUNG CH-5303 WUERENLINGEN SWITZERLAND HEMMIG. P.B. U.S DEPARTMENT OF ENERGY DIVISION OF REACTOR RESEARCH AND TECHNOLOGY WA SHINGTON. DC 20545 U.S.A. HOEJERUP, C.F. REACTOR PHYSICS DEPARTMENT RESEARCH ESTABLISHMENT RISOE DK-4000 ROSKILDE DENMARK HOJUYAMA, T. MITSUBISHI A.P.I., INC. 1-297 KITABUKURO-CHO GMIYA-SHI. SAITAMA-KEN 330 JAPAN IIDA. H. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAL RESEARCH ESTABLISHMENT TOKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11 JAPAN IIJIMA. S. NIPPON ATOMIC INDUSTRY GROUP SUEH IR O-CHO KAWASAKI-SHI, KANAGAWA-KEN 210 JAPAN IOKI. K. MITSUBISHI A.P.I.. INC. 1-297 KITABUKURD-CHO OMIYA-SHI, SAITAMA-KEN 330 JAPAN ISHIZUKU. T. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TCKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11

JAPAN

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SHIN, K. DEPARTMENT OF NUCLEAR ENGINNEERING KYOTO UNIVERSITY YOSHIDAHONCHO, SAKYO-KU KYOTO 606 JAPAN

SHINDO, R. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAI RESEARCH ESTABLISHMENT TOKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11 JAPAN

SKVORTSOV, S.A. I.V. KURCHATOV INSTITUTE OF ATOMIC ENERGY MOSCOW D-182 U.S.S.R.

SMITH. A.B. ARGONNE NATIONAL LABORATORY APPLIED PHYSICS DIVISION 9700 SDUTH CASS AVENUE ARGONNE. IL 60439 U.S.A.

STEWART, L. LCS ALAMOS NATIONAL LABORATORY P.O. BGX 1663 LOS ALAMOS, NM 87545 U.S.A.

SUZUKI, T. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAI RESEARCH ESTABLISHMENT TOKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11 JAPAN

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TAKAHASHI, A. DEPARTMENT OF PHYSICS DSAKA UNIVERSITY MACHIKANEYAMA-CHC, TOYGNAKA-SHI USAKA-FU 560 JAPAN TANAKA, K. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAI RESEARCH ESTABLISHMENT TOKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11 JAPAN TASAKA. K. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAL RESEARCH ESTABLISHMENT TOKAI-MURA, NAKA-GUN IBARAKI-KEN 319-11 JAPAN TELLIER, H. CENTRE D'ETUDES NUCLEAIRES DE SACLAY 8.P. NO 2 F-91190 GIF SUR YVETTE FR ANCE TOURWE. H. C.E.N./S.C.K. BOERETANG 200 8-2400 MOL BELGIUM TSUCHIHASHI. K. JAPAN ATOMIC ENERGY RESEARCH INSTITUTE TOKAI-MURA. NAKA-GUN IBARAKI-KEN 319-11 JAPAN USACHEV, L.N. INSTITUTE FOR PHYSICS AND ENERGETICS OBNINSK. KALUGA REGION U.S.S.R. WALKER. W.H. REACTOR PHYSICS BRANCH CHALK RIVER NUCLEAR LABORATORIES ATOMIC ENERGY OF CANADA LIMITED CHALK RIVER, GNTARIO CANADA WALTON. R.8. LOS ALAMOS NATIONAL LABORATORY P.O. BOX 1663 LOS ALAMOS. NM 37545 U.S.A. WELLER. F. INSTITUT FUER NEUTRONENPHYSIK UND REAKTORTECHNIK KERNFORSCHUNGSZENTRUN KARLSRUHE POSTFACH 3640 D-7500 KARLSRUHE FEDERAL REPUBLIC OF GERMANY WESTON, L.W. OAK RIDGE NATIONAL LABORATORY P.O. BOX X UAK RIDGE. TN 37930 U.S.A.

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WHITTAKER, A.
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     DEPARTMENT, 8524
   BRITISH NUCLEAR FUELS LIMITED
   WINDSCALES AND CALDER WORKS
   SELLAFIELD, SEASCALE
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YOUNG, P.G.
   LOS ALAMOS NATIONAL LABORATORY
   P.O. BOX 1663
   LOS ALAMOS, NM 87545
   U.S.A.
YUMOTO, R.
   PLUTONIUM FUEL DIVISION, TOKAI WORKS,
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ACTINIUM	AC	89	HAFNIUM	HF	72	POTASSIUM	к	19
ALUMINUM	AL	13	HAHNIUM	НА	105	PRASEDDYMIUM	PR	59
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GALLIUM	GA	31	PLATINUM	PT	78	YTTRIUM	Y	39
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GOLD	AU	79	POLONIUM	PO	84	ZIRCONIUM	ZR	40