

Letter from DRDT to Participants

The Division of Reactor Development and Technology has studied the problems involved in the evaluation and processing of nuclear data for use in reactor calculations, and has outlined a plan for the development of the necessary methods and for obtaining data for immediate use in reactor calculations. The details of this plan are given in the enclosed memorandum. In essence, there is the long range goal of developing automated methods for processing nuclear data, and a short range goal of providing reactor designers with a reference set of data they can use for current projects. It is in this latter activity that we solicit your cooperation.

The Division is sponsoring a cooperative evaluation effort aimed at providing the reactor designer with a good set of evaluated nuclear data by the fall of 1966. To accomplish this task, it is necessary to limit the scope of the work and to have the full cooperation and support of all cross section evaluators. The choice of materials to be considered this year will be governed by the needs of the reactor designers. The emphasis will not be on obtaining complete new evaluated sets, but rather on selecting the best pieces of the many existing evaluated sets and combining them into a self-consistent set. These data will be supplied to the reactor designer in a standard format. Standard processing codes will also be supplied so that the data can be easily obtained in the proper form for use in reactor design codes. It is apparent that the widespread use of a reference set of data and standard processing codes will permit more meaningful comparisons of reactor types, as well as reducing unnecessary duplication of data evaluation and code development efforts.

The cooperative evaluation effort will involve all groups primarily interested in the design of nuclear reactors. The effort will be focused in the Cross Section Evaluation Center (CSEC) at Brookhaven National Laboratory. A working group will be selected to organize and carry out the effort. This group will consist of one representative from each reactor installation plus representatives from the AEC, Advisory Committee on Reactor Physics (ACRP), and the CSEC.

We, of course, need the full cooperation of your organization in this effort. Specifically, we request that you:

1. Designate one individual from your organization to serve on the working group. His responsibilities will be to attend one or more meetings at BNL, be aware of the specific evaluation talent available within your organization, obtain the evaluated data assigned to him by the working group and transmit this data to BNL. On a longer range basis, he will (through the working group) serve in an advisory capacity to the CSEC and keep them advised on evaluation efforts within your organization.

2. Provide evaluated data and evaluation services to the working group.
3. Submit a list of isotopes which are of prime importance to your organization. Energy ranges and reaction types should be given, as well as an indication of priority.

The working group will hold its first meeting at BNL on June 9-10, 1966. It is important that you designate your representatives in this group and submit your list of isotopes by May 23, 1966, if the time schedule is to be maintained. This information should be sent to Dr. Sol Pearlstein, Cross Section Evaluation Center, Brookhaven National Laboratory, Upton, New York, and a copy sent to me.

We expect that your effort in this project may amount to several man-months of an experienced evaluator's time along with required clerical and computer backup. We are not at present in a position to provide additional funding for this effort.

You are authorized to divert existing evaluation or data surveillance activities supported by the Division to the extent required to support the cooperative evaluation effort this year.

I again urge your full cooperation and support of this effort.

Milton Shaw