

Meeting on the OECD-NEA High Priority Nuclear Data Request List

Donald L. Smith

Argonne National Laboratory

Overview

- Meeting was convened to find ways to improve criteria and procedures associated with OECD-NEA High Priority Nuclear Data Request List
- Decision to hold this meeting was made at the May 2003 WPEC meeting
- Attendance was by invitation from OECD-NEA
- This meeting focused on structural and procedural issues, not on the specific content of request list

Vital Statistics

- Venue: NEA Headquarters in Paris, France
- Dates: 9-10 October 2003
- Attendees:
 - Don Smith (ANL, USA)
 - Dick McKnight (ANL, USA)
 - Claes Nordborg (NEA)
 - Tokio Fukahori (JAERI, Japan)
 - Hideki Takano (JAERI, Japan)
 - Arjan Koning (NRG Petten, Netherlands)
 - Gerald Rimpault (CEA, France)
 - Gennadie Manturov (IPPE, Russia)

Major Topics Discussed

- Deficiencies in current NEA HPRL content and procedures
- Japanese experience with and revisions to NEA HPRL
- Criteria for inclusion of requests in NEA list
- Criteria for elimination of requests from the NEA list
- Review procedures for handling old and new requests
- Formats for request lists and request solicitation forms
- Website design and content issues
- Organization, responsibilities, and working procedures of Subgroup C (WPEC subcommittee that oversees NEA list)
- Community outreach and feedback mechanisms
- Schedule for implementing request list improvements

Conclusions from Meeting (1)

- The current NEA list is far too large
- Criteria for inclusion and retention of requests need to be elevated in order for the list to gain respect of community
- A two-tier request list system should be established:
Ordinary requests and high priority requests (distinguished by severity of criteria for inclusion)
- High priority requests must be justified by detailed quantitative results from sensitivity studies (or equivalent) and the impact of improvements must be clearly defined
- High priority requests generally must be associated with one or more ongoing applications projects and there must be a reasonable feasibility for improvements to be made

Conclusions from Meeting (2)

- All existing requests must be reviewed and they will be included in one or other of the two request lists only if they satisfy the newly established criteria
- Each request must be “owned” and NEA must be able to communicate with the requester on status of the request
- A list of satisfied requests should be maintained as proof of the practical value of the request list concept
- Subgroup C needs to be restructured to include two (2) representatives from each data project and coverage of data sub-disciplines and experiment and evaluation experience.
- Website structure and content will be tailored to the new criteria for the lists

Conclusions from Meeting (3)

- Subgroup C will meet once annually (on the occasion of the WPEC meeting) and conduct the remainder of its business via e-mail, etc
- Each request will be reviewed annually
- Responsibility for the content of the request lists will reside in Subgroup C with advice and consent from WPEC
- A roster of “experts” (measurers, evaluators, etc.) will be maintained for technical consultation in deciding upon inclusion or elimination of requests
- Extensive use will be made of the Web for posting the various lists, for soliciting new requests, for defining criteria for inclusion and retention of requests, and for soliciting community feedback

Information Needed for Request (1)

- Isotope
- Reaction/process
- Quantity
- Energy range
- Angle/secondary energy
- Requested accuracy (covariances?)
- Application areas
- Project (if applicable)
- Justification documentation
- Impact

Information Needed for Request (2)

- Requestor
- Country
- Date of request
- Feedback/comments
- Status (present accuracy, ongoing activities)
- Subgroup C assessment of request

Key point: much greater detail and documenting evidence will be demanded for a request to be treated as “high priority” compared to the information required an ordinary request

Implementation Schedule

- Prior to the end of 2003:
 - Preliminary screening of some of the existing requests
 - Decisions on inclusion and elimination criteria
 - Staffing of Subgroup C
- Prior to the May 2004 WPEC Meeting:
 - Review of existing list by Subgroup C and decisions concerning the fate of all these pre-existing requests
 - Posting of the new Website along with surviving requests
 - Solicitation of potential “high priority request” candidates