

**Organisation for Economic Co-operation and Development
Nuclear Energy Agency
NEA headquarters, Issy-les-Moulineaux (France)**

**Summary record of the WPEC Subgroup C meeting
on the High Priority Request List (HPRL).**

Wednesday, 3 May 2006, 14.00-18.00

Participants:

A. Plompen (chair), A. Carlson, H. Henriksson (secretariat), A. Ignatyuk, R. Jacqmin, R. McKnight, G. Rimpault, M. Salvatores

Members of WPEC subgroup C:

USA: R. McKnight, D. Smith

Europe: G. Rimpault, A. Plompen

Japan: T. Fukahori, T. Iwasaki

Russia: A. Ignatyuk, G. Manturov

NEA: H. Henriksson

1. Welcome and practical matters

A. Plompen welcomed the participants.

2. Approval of the agenda

The agenda was approved after adding a presentation by M. Salvatores. He proposed to summarise the first meeting of WPEC Subgroup 26 on “Nuclear Data Needs for Advanced Reactor Systems”.

3. Approval of the summary record from the last meeting held in Antwerp, Belgium in April 2005.

The summary record from the previous meeting was approved. It was noted that fewer requests than expected have been submitted since the last meeting. All actions from the last meeting, except one, were fulfilled; A. Plompen had not contacted A. Koning about the existing Intermediate and High Energy Request List.

4. Summary of Subgroup 26 activities, M. Salvatores

Subgroup-C welcomed the attendance of M. Salvatores to the meeting. M. Salvatores reported from the Subgroup 26 meeting on Nuclear Data Needs for Advanced Reactor Systems. The subgroup is planning to make a first list of data needs available in December 2006 with possible additional needs to be included in the first half of 2007. It was clear from the results of the subgroup that certain data are needed for future reactor systems, independent of the actual uncertainties in present data.

M. Salvatores surveyed the present status of experimental facilities, such as the ones in Geel, and he was concerned about the criteria of choosing their experiments. A future

meeting in conjunction with WPEC Subgroup 26 and the HPRL project was suggested. This meeting can be held just prior to the next WPEC meeting.

5. Review of recent requests

The new requests entered since the last meeting were reviewed. The decision was to prepare three for the high priority request list, and one should be on the general request list. The requests discussed are summarised in Table 1 below.

A. Plompen had prepared a detailed review of the six requests and it was agreed that two requests should be resubmitted with more justification documentation before a new review will take place. These two requests are marked as pending in Table 1.

Table 1: Recent requests discussed during the meeting.

| Request | Isotope | Reaction | Field / Subfield |
|-------------------|--------------------------|-------------------------|------------------|
| 1 (General) | ^{28}Si | (n,np) SIG | Fusion |
| 2 (High Priority) | ^{16}O | 16 (n,a) SIG | Fission |
| 3 (High Priority) | ^{239}Pu | 239 (n,f) Prompt g-prod | Fission |
| 4 (High Priority) | ^{235}U | 235 (n,f) prompt g-prod | Fission |
| H419 (pending) | $^{\text{nat}}\text{HF}$ | 0 (n,g) SIG | Fission |
| H420 (pending) | ^{233}U | 233 (n,g) SIG | Fission |

6. Status of the HPRL web page

The HPRL web page was extensively updated since the last meeting. Requesters may now attach up to two justifying documents when submitting a new request. The web page will be modified according to the comments received and the decisions taken at this meeting. The modifications needed are summarised below:

- A change of 'Purpose' to 'Field', including the fields Fission, Fusion, Standards, Decay Data, ADS and Transmutation.
- A 'Subfield' is added that is extendible. This could include e.g. LWR, Generation-IV reactors, and so on.
- The importance flag from 0-9, should be discarded. It is not possible to give it an unambiguous meaning.
- More than one requester may be associated to a request.
- A request may be for more than one nuclide in case the origin and nature of the request are very similar for those nuclides and the expected follow-up activity would be of the same nature.

7. Outlook for new HPRL requests

The purpose of the request list was discussed. The conclusion was that the requests should cover improvements in the field of Nuclear Energy, which correspond to the mandate of WPEC, and the Nuclear Science Committee (NSC) of the NEA. It was discussed if the requests should be endorsed by the NSC annually as well, but the conclusion was to keep the decisions to the HPRL project.

A. Ignatyuk commented that the old list of requests contained important requests for reactors, but that many requests appeared in 'High Energy' and 'Fusion' domains and the list became too long.

R. McKnight mentioned that the interest for the request list in the US is very low. In the past, it did not serve its purpose as a means to rank the importance for certain experiments.

Other comments included the need to include Criticality Safety requests. There are many requests for these kinds of data, but they have not been well justified in the past.

A. Plompen pointed out that Japanese requests are needed as well. There seems to be a problem to get the proper justification documentation for the requests.

H. Henriksson mentioned that requests for improved decay data from WPEC Subgroup 25, coordinated by Y. Tadashi, are to be expected later this year.

8. Any other business

No other business was expressed.

9. Date and place for the next meeting

The next meeting of the WPEC subgroup C (HPRL) will be held in conjunction with the general WPEC meeting at the NEA headquarters 18-20 April 2007.

Summary of actions from this meeting:

- A. Plompen, to contact A. Koning about the existing Intermediate and High Energy Request List.
- The NEA secretariat, to update the HPRL web page according to the conclusions from the meeting
- A. Plompen and the NEA secretariat, to organise a meeting with the HPRL and Subgroup 26 in 2007.
- NEA secretariat, to communicate the outcome of the requests from Subgroup 25.

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**Proposed Agenda
of the WPEC Subgroup C meeting on the High Priority Request List (HPRL).**

Wednesday, 3 May 2006, 14.00-18.00

- 1. Welcome and practical matters**
- 2. Approval of the agenda**
- 3. Approval of the summary record from the last meeting held in Antwerp, Belgium in April 2005.**
- 4. Review of recent requests**
- 5. Status of the HPRL web page**
- 6. Outlook for new HPRL requests**
- 7. Any other business**
- 8. Date and place for the next meeting**