

WPEC sub-group 31

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Title

“Meeting Nuclear Data Needs for Advanced Reactor Systems”

Justification for a Subgroup

The activities of WPEC Subgroup 26 have identified the nuclear data needs for Advanced Reactor Systems. The most important of the data needs identified by SG-26 will be entered into the NEA High Priority Request List (HPRL). Furthermore, because the SG-26 efforts have quantified these data needs and their impact on the selected nuclear systems, the identified primary nuclear data needs will be introduced into the HPRL as High Priority data needs. The identification of these priority data needs for Advanced Reactor Systems creates an important opportunity to utilize the collective knowledge of the international nuclear data measurement community to consider the appropriate resources to address and meet these priority needs.

Subgroup Monitor

A. Plompen, IRMM.

Subgroup Coordinator

H. Harada, JAEA

Subgroup Participants

R. Haight, LANL (ENDF); Y. Danon RPI (ENDF); M. Igashira, JAEA (JENDL); K. Shibata JAEA (JENDL); J. Katakura, JAEA (JENDL); A. Plompen, IRMM (JEFF); P. Rullhusen, IRMM (JEFF); A. Ignatyuk, IPPE (BROND); Y. Hongwei, CIAE (CENDL)

(Note: Above names are placeholders. The data projects will identify appropriate participants from their community of measurement experts.)

Definition of the project and proposed activities

It is proposed to create a new WPEC Subgroup on “Meeting Nuclear Data Needs for Advanced Reactor Systems.” This group will be comprised primarily of nuclear data measurement experts from each of the international data projects. The mandate for this new SG will be to:

- 1. Consider the scope of the priority nuclear data needs identified by SG-26*
- 2. Consider the practicality of meeting those data needs*
- 3. Identify the correct path: evaluation of existing measurement data vs. requirement of new measurement data*
- 4. Identify the optimal use of existing worldwide capabilities to meet these needs*
- 5. Identify gaps in existing worldwide capabilities to meet these needs*
- 6. Recommend collaborative path forward to meet these needs and to address gaps*

Relevance to Evaluated Data Files

Resource to advance quality of Evaluated Data Files to meet accuracy requirement of Advance Reactor Systems

Time-Schedule and Deliverables:

It is anticipated that measurement experts of this SG could complete and document the activities (mandate) 1-6 listed above within 1 year. WPEC should then consider the appropriate means of both:

- (a) utilizing their recommendations and*
- (b) enabling future recommendations, e.g., extension or linkage or incorporation within SG-C (HPRL).*

<u>Date</u>	<u>Deliverables</u>
• June, 2008	Review of SG Proposal by WPEC; initiate Subgroup activities
• January, 2009	Document SG conclusions regarding activities (mandate) 1-4 listed above
• June, 2009	Present Draft Report of Subgroup activities 1-6 listed above; WPEC consideration of potential implementation of SG recommendations and appropriate “extension” of SG