

# Need for the Covariance Committee

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*CSEWG-2007*

# Organizational Structure of CSEWG

- CSEWG Executive Committee (policy issues)
- Standing CSEWG Committees:
  - Evaluation (coordinate evaluation efforts)
  - Data Validation (integral testing of eval's)
  - Formats and Processing (numerical issues)
  - Measurements (keep abreast of ND expt's)
  - Covariance (evaluated ND uncertainties)

# Why is This New Committee Needed?

- The growing importance of nuclear data uncertainties for applications demands action
- ENDF/B-VII.0 covariances are very limited so many more must be provided for next release
- Further methods developmental work is needed to assure the future production of consistent and reliable evaluated uncertainty information
- Challenges to the existing ENDF formats and error file processing will have to be addressed
- Quality control for covariances is a concern

# Why not a Job for Eval'n Committee?

- Traditionally, the Evaluation Committee has been overworked – it does not need still another task on its plate in the years ahead
- The need for further technical work in the area of covariances requires a designated committee to organize this activity
- The Covariance Committee will provide a separate quality control role in CSEWG with the intent of complementing the role provided by the Data Validation Committee

# Interaction with Other Committees

- Evaluation: Address content issues related to evaluated libraries in area of covariances
- Formats and Processing: Provide technical support to achieve an adequate and “file-efficient” representation of covariances
- Data Validation: Seek consistency between covariance information and C/E testing
- Measurements: Join in an effort to promote better documentation of experimental errors in publications as well as in EXFOR system

# Covariance Committee Sessions

- Wednesday afternoon (CSEWG/USNDP):
  - Six formal presentations dealing with Crit Safety low-fidelity project, Subgroup 26, covariance work in Japan, KALMAN, and the Covariance Web Interface
- Thursday morning (CSEWG)
  - Open discussions on how to best organize the Covariance Committee, on contemporary needs for covariances, format issues, covariance visualization, ... (informal with all CSEWG members participating)

# A Final Thought

“It’s a little bit silly to describe uncertainties too exactly.”

A quote from Prof. Frances E. Low  
Institute Professor and Provost, MIT  
(b. 1922 ... d. 2007)