

**CHARTER OF THE
DEPARTMENT OF ENERGY
NONDESTRUCTIVE ASSAY TECHNICAL SUPPORT GROUP**

I. BACKGROUND

On October 24, 2007, the Department of Energy (DOE) accepted Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2007-1, *Safety-Related In Situ Nondestructive Assay of Radioactive Materials*. In DOE's Implementation Plan for the Recommendation, DOE stated:

To assist in the Implementation Plan an NDA Technical Support Group of subject matter experts (SMEs) will be established. This support group will consist of Federal employees from Headquarters and Field Elements and DOE management and operating contractors who have expertise in NDA holdup measurement. The support group will assist the Department in the specific areas of concern highlighted in Recommendation 2007-1.

The original Technical Support Group (TSG) was formed on 31 Jul 2008 in response to DNFSB Recommendation 2007-1 and was comprised of personnel from DOE staff and contractors. TSG Work Instructions are attached as Appendix A. The TSG Membership Policy is attached as Appendix B.

II. MISSION

The primary function of the TSG is to provide operational and technical expertise to the Department of Energy through the Nuclear Criticality Safety Program Manager. The TSG provides advice and technical support to meet the needs of the DOE complex in in situ nondestructive assay, supporting all the unique programmatic needs of EM and NNSA sites. Specific TSG functions include the following:

- Programmatic input regarding the development and implementation of an effective NDA holdup measurement program;
- SMEs to assist in conducting periodic evaluations to ensure that NDA holdup measurement programs are using appropriate technology, consensus standards and processes;
- Conduct triennial reviews of the need for new NDA holdup measurement technology and the status of ongoing NDA-related research and development programs with the first review to be completed by May 2015.
- A mechanism to identify and address major NDA holdup measurement issues that have crosscutting impacts across the DOE complex or within a site;
- A forum for sharing lessons-learned, ideas and proven processes or programs to both DOE and contractor management; and
- A forum for ensuring that advances in DOE and consensus standards are made when appropriate.

III. OPERATION OF THE TSG

A. Organization

The Nuclear Criticality Safety Program Manager appoints a TSG Program Manager who resides within NNSA.

The Chair of the TSG is appointed by the TSG Program Manager. The Chair serves a 3-year term, renewable for an additional 3-year term via mutual agreement between TSG Chair and TSG Program Manager. Extensions beyond six years must be approved by Nuclear Criticality Safety Program Manager as well as mutual agreement between TSG Chair and TSG Program Manager. The Chair is responsible for coordinating the activities of the TSG with the TSG Program Manager and for reporting TSG activities to the TSG Program Manager.

The Deputy-Chair of the TSG is nominated by the membership of the TSG and appointed by the TSG Program Manager. The Deputy-Chair serves a 3-year term, which can be renewed indefinitely via mutual agreement between TSG Program Manager, Chair, and Deputy-Chair. The Deputy-Chair is responsible for assisting the Chair in the completion of TSG activities and performing the duties of the Chair when the Chair is absent.

The TSG Chair may appoint subcommittees from the TSG membership to review, report, or act on any matter of concern that comes before the TSG.

To supplement the expertise of the TSG members, the TSG Chair, with the approval of the TSG Program Manager, may request other qualified individuals to provide the TSG with technical expertise on an as-needed basis to support TSG activities. The Chair and Deputy Chair shall evaluate the membership of the TSG on a periodic basis to ensure that all members are actively participating as needed and that the makeup of the team is appropriate and adequate.

B. Meetings

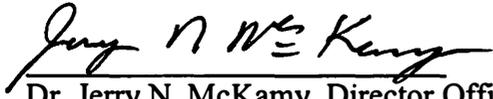
The Chair shall call TSG meetings as needed with the concurrence of the TSG Program Manager. The presence of the Chair or Deputy-Chair standing in for the Chair is mandatory at TSG meetings. The TSG meets regularly via teleconferences arranged by the TSG Chair and/or by subcommittees appointed by the TSG Chair.

C. Scope of Activities

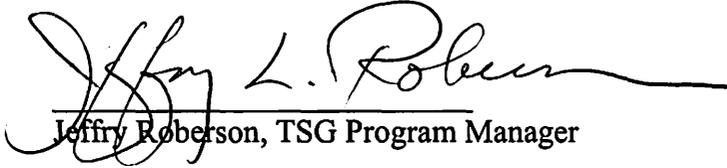
The TSG provides technical support to the TSG Program Manager for the performance of activities supporting the NDA program. The TSG also provides technical support to DOE to strengthen oversight and application of NDA measurements in support of criticality safety.

The TSG will in general, provide programmatic input regarding the development and implementation of effective NDA programs at DOE sites, provide SMEs to assist in conducting assessments, identify and address NDA holdup measurement issues of importance, share lessons-learned, ideas and proven processes or programs, and provide a forum for developing DOE and consensus standards for NDA measurement where appropriate.

APPROVED:



Dr. Jerry N. McKamy, Director Office of Facility Operations,
NA-162, DOE Nuclear Criticality Safety Program Manager



Jeffrey Roberson, TSG Program Manager

APPENDIX A

TSG WORK INSTRUCTIONS

This set of work instructions is provided by the TSG Program Manager to set performance expectations for the TSG. The TSG Program Manager may modify the TSG Work Instructions as necessary. Revisions to these work instructions shall be distributed promptly to the TSG through the Chair or Deputy-Chair.

TSG Meetings

An agenda for each TSG meeting shall be issued by the Chair or Deputy-Chair in advance of a scheduled meeting and distributed to the members of the TSG and the NDA program manager together with any materials needed for review of the agenda items.

The Chair or Deputy-Chair will document outcomes of agenda item discussion in a manner acceptable to the TSG Program Manager.

Discussion documentation will be distributed to the TSG, the TSG Program Manager, and Nuclear Criticality Safety Program Manager by the Chair or Deputy-Chair..

TSG Reports

The results of any evaluation, review, technical-assist visit or similar activity by the TSG shall be transmitted to the TSG Program Manager in a formal report. These reports shall represent the consensus position of the TSG members.

All formal written correspondence on behalf of, or representing the TSG individually or collectively, must be reviewed and approved by the TSG Program Manager prior to distribution.

In the event of serious disagreement with the content of any report, TSG members either individually or with other members, may submit a minority report to the TSG Program Manager. The TSG Program Manager will take action as needed to resolve the issues raised and will inform the authors of the resolution.

TSG Communications

TSG members, as part of their duties with the TSG may answer any informal inquiry from any Departmental element or the Defense Nuclear Facilities Safety Board or its Staff. The TSG Program Manager should be kept informed of all such communication.

All invitations to external agencies (i.e.; DNFSB, DNFSB Staff, NRC, etc.) to attend TSG meetings or activities shall be made by the TSG Program Manager.

Issues internal to the TSG must be kept within the TSG until an official consensus position has been reached and the NDA program manager grants approval to release or discuss the information with non-TSG members.

Discussion topics that the TSG believes should be vetted with any Departmental element or the DNFSB or its staff must be provided to the TSG Program Manager who will make the arrangements through appropriate channels. TSG members are not authorized to unilaterally engage external agencies on TSG matters in their capacity as TSG members.

Consequences of Noncompliance

Noncompliance with the requirements of this Appendix may result in dismissal from the TSG.

APPENDIX B

TSG MEMBERSHIP POLICY

Composition of the TSG

The membership of the TSG shall be limited to 8-members and no less than 5. Members may receive funding support from the Nuclear Criticality Safety Program Manager as appropriate to their specific tasks and roles on the TSG. The TSG should, to the extent possible, include extensive expertise and experience in facility uranium and plutonium NDA measurements. Members should represent: a reasonable cross section of the major user sites (LANL, SRS, Y-12, etc.), provide NDA related expertise in the topical areas of training, equipment, directives, R&D, quality assurance, and oversight, and reflect the needs of criticality safety, operations, and nuclear materials control and accountability. The TSG may form unofficial subcommittees, working groups or mentoring relationships comprised of non-TSG members as needed with approval of TSG Chair and TSG Program Manager. However, these ad-hoc participants are not voting members of the TSG nor are they funded directly by the Nuclear Criticality Safety Program Manager unless explicitly directed. All TSG members are appointed and serve with the approval of the TSG Program Manager.

TSG Member Qualifications

The following are minimum qualification requirements for membership in the TSG.

1. At least 8 years experience in the fields of NDA and/or Criticality Safety.
2. Hold an advanced degree in a technical discipline. Additional professional experience may substitute for an advanced degree.
3. Demonstrated leadership and expertise in nondestructive assay. This is typically achieved through a combination of factors including; participation in national standards committees or working groups, technical publications, management experience, etc.
4. Hold appropriate security clearances.
5. Once appointed to the TSG, membership is maintained by participation in TSG meetings and activities. The TSG Program Manager assesses the participation level of individual members and recommends retention or dismissal.

Selection of New Members (unanticipated vacancy)

When an unanticipated vacancy occurs in the TSG, a new member is nominated and appointed via the following process.

1. The chair solicits nominees from the TSG members and NDA professionals at large.
2. The Chair and Deputy-Chair evaluate all nominees and recommend a single candidate to the TSG Program Manager for concurrence. If the TSG Program Manager rejects candidate, the Chair and Deputy-Chair will submit another recommendation until concurrence is obtained.

3. The TSG votes to confirm the candidate selected under step 2 above. A 2/3 majority of votes will result in appointment.
4. In the event of a less than 2/3 majority vote, the TSG Program Manager will appoint candidate or revoke previous concurrence. In the event of revoked concurrence steps #2 – #4 would be repeated.

Succession Planning (anticipated vacancy)

Succession planning shall be conducted when deemed necessary. The following process should be used by the TSG when a member anticipates leaving the TSG and the TSG Program Manager requests a member be added to the TSG or the number of TSG members would be less than the minimum of five.

1. The TSG Chair shall provide to the TSG Program Manager the name of the leaving member and the approximate date of resignation.
2. A succession candidate shall be identified using the protocol for selection of new members.
3. A successor should be appointed one-year prior to the resigning member leaving if the number of current TSG members is five or less. Steps four and five below are not required if the current TSG membership is six or more.
4. During the overlap period, the Nuclear Criticality Safety Program Manager shall provide support for the TSG member and for his successor as necessary. Normally, the successor should be appointed to the TSG within one year of their official appointment as a TSG successor.
5. The successor should attend as many TSG meetings and activities as possible during the transition period. A successor candidate may vote on issues before the TSG.
6. The successor is appointed as an official member of the TSG by the TSG Program Manager on a date agreed to by the TSG Chair. Outgoing members shall become Emeritus Members of the TSG.
7. Emeritus Members are encouraged to continue to participate in TSG activities but will not receive financial support from the Nuclear Criticality Safety Program Manager. Funding may be provided to Emeritus Members for specific technical activities at the discretion of the TSG Program Manager.

APPENDIX C

TSG MEMBERSHIP

David S. Bracken, Ph.D., TSG Chair
Idaho National Laboratory

Frank W. Lamb, TSG Deputy Chair
Frank Lamb NDA Consulting

Jeff Chapman
Oak Ridge National Laboratory

David L. Dolin
Savannah River Nuclear Solutions

Cynthia Gunn
Y-12 National Security Complex

Angela L. Lousteau
Oak Ridge National Laboratory

Glenn L. Pfennigwerth
Y-12 National Security Complex

Thomas Sampson
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