



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 4, 2016

Dear Colleagues:

SUBJECT: COOPERATIVE SEVERE ACCIDENT RESEARCH PROGRAM (CSARP),  
MELCOR CODE ASSESSMENT PROGRAM TECHNICAL REVIEW MEETINGS  
(MCAP), MELCOR USER WORKSHOP, AND INTERNATIONAL MACCS USER  
GROUP (IMUG) MEETING

The next Cooperative Severe Accident Research Program (CSARP) technical review meeting, MELCOR Code Assessment Program (MCAP) meeting, MELCOR User Workshop, and International MACCS User Group (IMUG) meeting will be held in September 2016 at the Residence Inn Bethesda in Bethesda, Maryland. The dates for the four meetings are as follows:

- MELCOR Special Topic Workshop: September 12, 2016
- CSARP Technical Review Meeting: September 13-15, 2016
- MCAP Meeting: September 15-16, 2016
- IMUG Meeting: September 15-16, 2016

A preliminary program plan for the CSARP and MCAP meetings is enclosed. We are sending this preliminary announcement and the program plan to you as the principal CSARP representative of your country, and asking you to send us titles and authorship information for technical presentations that your organization as well as other organizations in your country, plan to make at any of these meetings. A response from you on or before June 30, 2016, will be appreciated. This will help us develop a preliminary agenda for the meetings in a timely manner. A preliminary agenda for the MELCOR workshop is attached.

The IMUG program plan is enclosed. The meeting is a forum for the exchange of information and research experience among users of the MELCOR Accident Consequence Code System (MACCS) code. Topics for presentation are expected to cover the full spectrum of nuclear accident consequence analysis (atmospheric transport, protective actions, health effects, economic consequences). Topics are not limited to just the MACCS code; presentations are welcome for work using other nuclear accident consequence codes.

A block of rooms at a special conference and per diem rate (\$222/night plus applicable taxes) has been set aside at the Residence Inn Bethesda, 7335 Wisconsin Avenue, Bethesda, Maryland. The cutoff date for room reservation is August 12, 2016. Reservations can be made directly with reservations at 1-301-718-0200 (hotel directly), 1-800-331-3131 (toll free) using a credit card, or on-line (arrival/departure dates may be changed) at <http://www.marriott.com/meeting-event-hotels/group-corporate-travel/groupCorp.mi?resLinkData=CSARP%20MCAP/MELCOR%20Meeting%20%5Ewasbr%60SA%20NSANA%60222%60USD%60false%603%609/10/16%609/18/16%608/12/16&app=resvlink&stopmobi=yes> using code SNLSNLB (1 king bed). If using a fax to make reservation, please use 1-301-718-0679 number (attention: Reservation) and clearly print your credit card number and expiration date. Guests should identify themselves as part of the CSARP MCAP MELCOR IMUG

Meeting 2016 Room Block. There is no cancellation penalty if the reservation is canceled before 6:00 p.m. on the first night of stay. Otherwise, there will be a penalty of one night's room rate plus applicable tax. The special room rate is valid from Saturday, September 10, 2016 through Sunday, September 18, 2016. The hotel parking rates are \$20 overnight per day and \$15 daily rate per day. The web site for the hotel is: <http://www.marriott.com/hotels/travel/wasbr-residence-inn-bethesda-downtown/>. Other area hotels where reservation can be made directly by the guests are listed below. These hotels offer U.S. government rates but not special conference rates.

- American Inn of Bethesda (1-301-656-9300/1-800-323-7081)
- Bethesda Court Hotel (1-301-656-2100/1-800-874-0050)
- Doubletree Bethesda Hotel (1-301-652-2000/1-800-222-8733)
- Hilton Garden Inn Bethesda (1-301-654-8111/1-877-702-9444)
- Hyatt Regency Bethesda (1-301-657-1234/1-800-233-1234)

For up to date information and to register for the meetings, please go to <http://melcor.sandia.gov/register>. **NOTE:** You may need to use a different browser such as Firefox if you have trouble loading the page with your version of Internet Explorer. At the conference we will make the presentations available for download. In order for us to be able to do that, we ask that you send electronic copies of your presentation materials (viewgraphs) in portable document file (pdf) format to Sandia National Laboratories (attention: Ms. Sonya Mahler at [smahler@sandia.gov](mailto:smahler@sandia.gov), tel. 1-505-844-8033 by no later than August 22, 2016.

As in previous years, we plan to organize a group dinner one evening during the CSARP meeting. Information about the group dinner and other social events in the area will be available at the registration desk. Also, note that Sandia will be providing administrative and coordination support for the CSARP, MCAP, and IMUG meetings, and the MELCOR workshop. For assistance in related matters, please contact Ms. Sonya Mahler.

We look forward to seeing you at the meetings.

Sincerely,



Richard Lee, Chief  
Fuel & Source Term Code Development Branch  
Division of Systems Analysis  
Office of Nuclear Regulatory Research



Patricia Santiago, Chief  
Accident Analysis Branch  
Division of Systems Analysis  
Office of Nuclear Regulatory Research

**Cooperative Severe Accident Research Program (CSARP)  
Technical Review Meeting  
MELCOR Code Assessment Program (MCAP) Meeting  
September 13-16, 2016  
Preliminary Program Plan**

Tuesday, September 13

CSARP Registration  
Introduction/Opening Remarks  
Overview Session  
Technical Session 1 – Severe Accident Research Programs  
Technical Session 2 – Severe Accident Research Activities

Wednesday, September 14

Technical Session 3 – Severe Accident Research: Codes & Experiments  
Technical Session 4 – Severe Accident Management

Thursday, September 15 (AM)

Technical Session 5 – Reactor and Spent Fuel Pool Analysis  
Partners' Meeting  
CSARP Meeting Adjournment

Thursday, September 15 (PM)

MCAP Registration  
Introduction/Opening Remarks  
Technical Session 1 – MELCOR Applications and Assessment I

Friday, September 16

Technical Session 2 – MELCOR Applications and Assessment II  
MCAP Meeting Adjournment

Enclosure

**MELCOR User's Workshop**  
**September 12, 2016**  
**Preliminary Agenda**

- 1 Workshop Introductions & Overview (30 min) .....(SNL)  
*Review of the MELCOR code development and introduction of workshop.*
- 2 MELCOR overview (30 min).....(SNL)  
*Very general overview of MELCOR code and discussion of how data utilities are used.*
- 3 Data & Control Utilities (90 min) .....(SNL)  
*Discussion of MELCOR tabular functions, control functions, and EDF utility.*
- 4 Recent Control Function Enhancements (60 min) .....(SNL)  
*Use of vector control functions, vector arguments, and user-defined functions.*
- 5 Practical CF Modeling (90 min) .....(SNL)  
*Practical examples of CF modeling in a plant application and the use of SNAP in visualizing control functions.*
- 6 New MELCOR models -1 (45 min).....(SNL)  
*Use of the new homologous pump model and second lower head (core catcher) with working examples and exercises.*
- 7 New MELCOR Models – 2 (45 min) .....(SNL)  
*Working with the radiation enclosure model, Zukauskas HTC, multi-rod model with working examples and exercises.*
- 8 Workshop Wrap-up (30 min) .....(SNL)  
*Workshop Q/A, presentation of certificates, workshop evaluations.*

Enclosure

**International MACCS User Group (IMUG) Meeting  
September 15-16, 2016  
Preliminary Program Plan**

Thursday, September 15

- IMUG Registration
- Introduction/Opening Remarks
- Technical Session 1 – MACCS Code Enhancements
- Technical Session 2 – Atmospheric Transport and Dispersion
- Technical Session 3 – Current NRC Severe Accident Consequence Analyses

Friday, September 16

- Technical Session 4 – International Severe Accident Modeling Analyses
- Technical Session 5 – Alternative Economic Consequences Model
- Technical Session 6 – MACCS V3.10 Demonstration
- Questions