

ARGONNE NATIONAL LABORATORY

Decision and Information Sciences Division
Emergency Preparedness Group

Special Controller/Evaluator Training Improves Outcomes of Emergency Preparedness Exercises

Challenge: Well-conducted exercises are an important part of emergency preparedness for government and private facilities: they test the effectiveness of response plans, demonstrate the readiness of personnel and resources, and identify weaknesses and problems. To obtain these results, exercises must be well managed by controllers and documented by evaluators.

If controllers do not clearly communicate the exercise situations, participants may respond inappropriately. And If controllers allow participants to stray from the planned scenario, exercises may not meet objectives.

If evaluators do not correctly interpret and document the exercise, conclusions may be based on subjective impressions rather than on objective facts. In addition, real problems may remain unidentified and unsolved.

The U.S. Department of Energy (DOE), which must ensure good emergency preparedness for all its sites, faced these difficulties. At many of its exercises, controllers and evaluators did not understand their roles, and the outcomes of the exercises were less successful than they should have been.

Solution: To address this need, Argonne National Laboratory developed an intensive training program for exercise evaluators and controllers. The two-and-a-half-day course gives them practical experience so they can carry out their roles and produce important exercise results — maintaining and improving emergency preparedness while ensuring the safety of the participants and the public.



Since exercises must always be conducted and evaluated in a safe and productive manner, no matter which DOE facility is holding them, the Argonne course focuses on these broadly applicable aspects of exercise control and evaluation.



Advantages: The training course has produced a common foundation in exercise control and evaluation among DOE sites, leading to:

- More uniform nationwide emergency preparedness among the sites;
- Access to a pool of trained controllers and evaluators; and
- More consistent adherence to DOE nationwide exercise guidance.

While focusing on DOE exercise guidance, the course draws on exercise control and evaluation methods that are common to many agencies and emergency preparedness programs.

Technical Concept: The 10-unit course includes both traditional lecture/discussion and experiential learning activities. Videotaped segments of actual DOE exercises present students with realistic situations, which they use in discussion and problem-solving.

Experiential learning equips students to solve problems they will face in a real exercise. Students demonstrate their understanding and skill through workbook exercises, discussion of “you make the call” controller scenarios, and preparation of written evaluator reports. DOE certifies students after completing the course and registers them in a database of trained controllers and evaluators.

Status: The course has been taught 15 times over several years and fine-tuned through the instructors’ experiences and students’ feedback. The course prepares the students for participation in the Controller/Evaluator Practicum developed and conducted by Argonne, a hands-on, exercise-driven training experience for controllers and evaluators. The course was also adapted to interactive television delivery for satellite broadcast to controller and evaluator trainees.

Future Plans: The course will remain a baseline, initial training course easily adaptable to the needs of any government or private organization.

| Phase | Activity |
|-------------------------------|---|
| <i>Before</i> exercise period | - Plan exercise - Train controllers & evaluators |
| <i>During</i> exercise period | - Brief controllers & evaluators - Conduct exercise - Document exercise results |
| <i>After</i> exercise period | - Develop exercise report - Identify exercise issues - Track corrective actions |

Preliminary training of evaluators and controllers improves the outcome of emergency preparedness exercises.

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