



ecology and environment, inc.

Emergency Preparedness Services for the Nuclear Industry

For over 30 years, E & E has prepared emergency preparedness and response plans, planned and implemented emergency response exercises and workshops, and participated in public outreach efforts on readiness/response for chemical, biological, radiological, nuclear, and explosive (CBRNE) events. E & E also has responded to over 8,000 environmental events worldwide including man-made and natural disasters involving floods, earthquakes, chemical and oil spills, hurricanes, outbreaks, and other public health emergencies. Based on our experience in responding to actual incidents, we are able to help clients anticipate their vulnerabilities and update and improve their emergency plans in very practical ways.

The nuclear industry has worked hard to develop emergency and contingency plans that cover the range of maximum credible accidents at their facilities. However, as a result of the events that took place in Japan in March 2011, and the emotional trauma associated with nuclear incidents, virtually every nuclear plant emergency plan will be subject to intense scrutiny by industry, government, and the public. E & E has staff experienced and trained in emergency preparedness and management, hazard mitigation procedures, business continuity, urban and land use planning, and public outreach and education.

EMERGENCY PREPAREDNESS SERVICES		
<ul style="list-style-type: none"> • Emergency Preparedness and Response Plans • Exercise Development and Facilitation/Training • Evacuation Plans and Evacuation Time Estimates • Public Outreach and Education 	<ul style="list-style-type: none"> • Offsite Agency Coordination • Logistics Plans and Systems • Regional Contingency Plans • Business Continuity Plans • Hospital Emergency Response Plans 	<ul style="list-style-type: none"> • School Crisis Plans • Mass Care and Shelter Plans • Needs and Gap Assessments • Upgrades to Existing Plans • Web-based Data Management Services

Emergency Preparedness and Response Plans

E & E staff members have been involved in the development of emergency preparedness and response plans, including evacuation plans, warning/notification systems, and emergency communication systems for US nuclear power facilities, states, and surrounding communities. Development of such plans included periodic reviews of facilities' emergency management programs to determine deficiencies and weaknesses identified in drills, audits, and US Nuclear Regulatory Commission (NRC) inspections. All emergency plans have been developed in accordance with Nuclear Regulatory Commission Guidelines, Regulatory Guide 3.67, Standard Format and Contents for Emergency Plans for Fuel Cycle and Materials Facilities; and NUREG-0654, FEMA REP-1 Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

Emergency Response Exercise Development and Facilitation/Training

The ultimate goal of an emergency response exercise is to ensure the continued growth of a robust capability to plan for, prepare for, and respond to emergency incidents/accidents among all levels of government and private sector stakeholders. As part of the emergency planning process, E & E has supported and tested clients' response capabilities through tabletop, functional, and full-scale exercises. E & E has designed and supported



Emergency Preparedness Services for the Nuclear Industry *(Continued)*

exercises with incident scenarios along transportation corridors, inside facilities, and involving terrorist situations, to name a few. Our support includes developing training exercises and drill scenarios, developing playbooks, and providing exercise directors, evaluators, and controllers.

E & E provided independent review and assessment of the Emergency Plans for the State of Illinois, which currently has 11 operating nuclear power plants; participated in the second congressionally mandated “Top Officials” (TOPOFF 2) radiological dispersal device counterterrorism exercise in Seattle, Washington; and prepared evacuation, sheltering, and mass care plans for various communities in multiple U. S. states. E & E staff also developed emergency management and response plans and exercises for multiple utilities at nuclear plants around the country, including: Millstone, Calvert Cliffs, Brunswick, Harris, Robinson Pilgrim, Indian Point, River Bend, Nine Mile, and Palo Verde.

Evacuation Time Estimates

Supporting E & E’s staff of emergency management professionals is the evacuation and traffic management expertise of Kimley-Horn and Associates, Inc. (KHA). Together we bring a wide range of evacuation planning and transportation experience necessary to accurately estimate travel times over a diverse roadway network, better predict normal and adverse conditions, and best gauge the most efficient routes for multiple population centers. As a team, we developed the State of Nevada’s Evacuation, Sheltering and Mass Care Plan, which included evacuation strategies and concepts of operations, traffic management and evacuation time estimates, and considerations for special needs populations and care and shelter of animals. KHA also developed the evacuation strategy and time estimates for the 10-mile emergency planning zone around the Comanche Peak Nuclear Power Plant.

Public Outreach and Education

E & E has extensive experience with design and management of public outreach and public awareness programs and has pioneered many of the techniques and methods used by government and industry today. Our public participation experts have addressed every conceivable public awareness scenario ranging from a potential nuclear incident to the permitting of a new power plant. For example, at the Indian Point Nuclear Power Plant near Albany, New York, E & E’s comprehensive, three-year, public involvement effort focused on the population residing in the surrounding 10-mile emergency planning zone surrounding the plant. The goals of the program were to identify public concerns, improve public understanding of emergency response planning, and enhance the effectiveness of the current public information and education program. To achieve these goals, E & E:

- Developed strategies to improve the effectiveness of public information and education efforts
- Coordinated with four counties and updated the emergency planning guide
- Conducted a quarterly media campaign to coincide with siren testing
- Held public meetings and workshops to enhance the public’s understanding of emergency actions

For more information on E & E’s Emergency Planning Services for the Nuclear Industry, please contact:

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