

# GLOSSARY OF EP/COOP/IR TERMS

This glossary is divided into 3 sections:

1. Terms and acronyms used in the NRC emergency preparedness program
2. Terms and acronyms used in the NRC Continuity of Operations (COOP) program
3. Terms and acronyms used in the NRC Incident Response (IR) program

## Section 1 – Emergency preparedness terminology

**After Action Report / Improvement Plan (AAR/IP):** the main FEMA product of an exercise/drill evaluation and improvement planning process is the AAR/IP. The AAR/IP has two components: an AAR, which captures observations of an exercise and makes recommendations for post exercise improvements; and an IP, which identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion.

**Area Requiring Corrective Action (ARCA):** a FEMA observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety. Correction of ARCAs is verified before or during the next biennial exercise at that site.

**Congregate care center (CCC):** a facility for temporary housing, care, and feeding of evacuees.

**Deficiency:** a FEMA observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant. Deficiencies must be corrected within 120 days of the exercise.

**Disaster Initiated Review (DIR):** An assessment performed by FEMA following an electrical grid blackout, natural disasters, etc. which results in damage to the area around a licensed operating NPP, to an extent that FEMA seriously questions the continued adequacy of offsite emergency preparedness. The intent of a DIR is to reaffirm the radiological emergency preparedness capabilities of affected offsite jurisdictions located in the 10 mile EPZ, and is not intended to be a comprehensive review of offsite plans and preparedness. The NRC will consider information provided by FEMA in making decisions regarding the restart or continued operation of an affected NPP.

**Drill:** an event involving organizational responses to a simulated accident to develop, test, and monitor specialized emergency skills that constitute one or more components of emergency plans/procedures.

**Early phase:** (also referred to as the plume or emergency phase) the period at the beginning of a nuclear incident when immediate decisions for effective use of protective actions are required and must therefore usually be based primarily on the status of the nuclear power plant and the prognosis for

worsening conditions. This phase lasts hours to several days and ends when the radioactive release ends.

**Emergency Alert System (EAS):** a system of radio and television stations responsible for providing official government instructions to the public (formerly the Emergency Broadcast System).

**Emergency Operations Facility (EOF):** a facility that is the primary base of emergency operations for the Licensee in a radiological incident. An onsite operations facility provided by the NRC Licensee to facilitate the management of an overall emergency response. Utility and state officials, and a very limited number of Federal personnel may be accommodated.

**Emergency Operations Center (EOC):** a facility that is the primary base of emergency operations for an offsite response organization in a radiological emergency.

**Emergency Planning Zone (EPZ):** a geographic area surrounding a commercial nuclear power plant for which emergency planning is needed to ensure that prompt and effective actions can be taken by offsite response organizations to protect the public health and safety in the event of a radiological accident. The plume pathway EPZ is approximately 10 miles in radius, while the ingestion pathway EPZ has a radius of approximately 50 miles.

**Emergency Response Planning Area (ERPA):** a pre-designated geographic subdivision of the plume exposure pathway EPZ.

**Evacuation Time Estimate (ETE):** an estimate, contained in emergency plans/procedures, of the time that would be required to evacuate general and persons with disabilities and access/functional needs within the plume pathway emergency planning zone under emergency conditions.

**Extent of play:** the level of ORO play vs. simulation as coordinated by FEMA at an emergency response exercise. Each REP Demonstration Criterion contains a “default” extent of play that evaluators and response organizations use to define parameters for the expected performance under that criterion.

**Field Monitoring Team (FMT):** includes groups used to detect and monitor radiation in the environment (e.g., measuring the concentration of radiation in the air, water, vegetation, soil, etc.).

**Full participation exercise:** per 44 CFR 350.2(j), a joint exercise in which: (1) state, local, and tribal organizations, licensee emergency personnel, and other resources are engaged in sufficient numbers to verify the capability to respond to the actions required by the accident/incident scenario; (2) the integrated capability to adequately assess and respond to an accident at a commercial nuclear power plant is tested; and (3) the implementation of the observable portions of state, local, and tribal plans/procedures is tested.

**Full-Scale Exercise:** an exercise that engages both a licensee and all ORO entities in real-time hands-on response activities.

**Functional Exercise:** an exercise that sufficiently engages organizations to test their abilities to respond to the scenario, but participation is less than full-scale.

**Homeland Security Exercise Evaluation Program (HSEEP):** a capabilities- and performance-based exercise program that provides standardized policy, doctrine, and terminology for the design, development, conduct, and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs.

**Hostile action:** as defined in Nuclear Regulatory Commission Bulletin 2005-02, *Emergency Preparedness and Response Actions for Security-Based Events*, a hostile action is “an act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.”

**Incident Command Post (ICP):** the field location where the primary response functions are coordinated. The ICP may be co-located with other incident facilities.

**Incident Command System (ICS):** a standardized management tool for meeting the demands of small or large emergency or nonemergency situations.

**Intermediate phase:** the period beginning after the utility has verified that the release has been terminated. Reliable environmental measurements are available for use as a basis for decisions on additional protective actions. It extends until these additional protective actions are terminated. This phase may overlap the late phase and may last from weeks to many months. The intermediate phase encompasses REP post plume activities associated with both ingestion and relocation.

**Joint Information Center (JIC):** a central point of contact for all news media at the scene of the incident. News media representatives are kept informed of activities and events via public information officials from all participating Federal, state, and local agencies, which, ideally, are collocated at the JIC.

**Late phase:** the period beginning when recovery action designed to reduce radiation levels in the environment to acceptable levels for unrestricted use are commenced, and ending when all recovery actions have been completed. This period may extend from months to years. REP post-plume activities associated with return and recovery occur during the late phase.

**Monitoring and decontamination facility:** a temporary facility established outside the plume emergency planning zone for the purpose of monitoring and decontaminating emergency workers and their vehicles and equipment used in the plume and/or areas contaminated by the plume.

**National Atmospheric Release Advisory Center (NARAC):** a Department of Energy asset capable of providing a computer-generated model of the most probable path of the radioactive contamination released at a radiological accident site.

**National Incident Management System (NIMS):** a set of principles that provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.

**Notification of Unusual Event (NOUE):** licensee emergency classification level indicating that unusual events are in process or have occurred that indicate a potential degradation in the level of plant safety or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected, unless further degradation of safety systems occurs.

**Offsite Response Organization (ORO):** any state, local, and tribal government; supporting private industry and voluntary organizations; and Licensee offsite response organizations (that are formed when state, local, and tribal governments fail to participate in the REP Program) that are responsible for carrying out emergency functions during a radiological emergency.

**Operations Support Center (OSC):** an onsite assembly area separate from the control room and the TSC where licensee operations support personnel shall report in an emergency. There shall be direct communications between the OSC and the control room and between the OSC and the TSC so that the personnel reporting to the OSC can be assigned to duties in support of emergency operations.

**Out of sequence demonstration:** demonstration of criteria not conducted in conjunction with the scenario timeline. For the purposes of demonstrating required criteria, activities conducted during the exercise week may be considered in-sequence as negotiated as part of the Extent-of-Play Agreement.

**Partial Participation Exercise:** as set forth in 44 CFR 350.2(k), the engagement of state, local, and tribal personnel in an exercise sufficient to adequately test direction and control functions for protective action decision-making related to the emergency action levels and communication capabilities among affected offsite response organizations and the licensee.

**Persons with disabilities and access/functional needs (previously Special Needs Individuals):** individual(s) within a community that may have additional needs before, during, and after an incident in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. Individual(s) in need of additional response assistance may include those who have disabilities (sensory, motor skills, mental/emotional); who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited or no English-speaking proficiency; or who are transportation-disadvantaged.

**Post-emergency phase:** the Environmental Protection Agency term for the period beginning after the utility determines that the release has terminated, and the responsible offsite response organization determines that public safety is ensured by appropriate protective actions in accordance with applicable protective action guides and that valuable property has been protected. See also “post-plume phase.”

**Post-plume phase:** includes REP activities (ingestion, relocation, reentry, and return) that occur after a release has been terminated. These activities can be demonstrated in an exercise with the plume phase or separately.

**Precautionary protective actions:** any preventive or emergency protective actions implemented without the verification of radionuclide measurements by field monitoring or laboratory analysis.

**Preventive protective actions:** protective actions to prevent or reduce contamination of milk, food, and drinking water such as covering water sources and providing dairy cows with stored feed. Preventive protective actions also include washing, brushing, scrubbing, or peeling fruits and vegetables to remove surface contamination.

**Protective Action Decision (PAD):** measures taken in anticipation of, or in response to, a release of radioactive material to the environment. The purpose of PADs is to provide dose savings by avoiding or minimizing the radiation exposure received by individuals, thereby minimizing the health risks resulting from radiation exposure. Sheltering and evacuation are the two PADs relied upon for limiting the direct exposure of the general public within the plume exposure emergency planning zone. Preventive and emergency PADs are two categories of PADs relied upon for limiting exposure from contaminated food and water in the ingestion exposure emergency planning zone.

**Protective Action Guide (PAG):** projected dose to an individual in the general population that warrants the implementation of protective action. The Food and Drug Administration and Environmental Protection Agency have recommended specific protective action guides in terms of the level of projected dose that warrants the implementation of evacuation and sheltering, relocation, and limiting the use of contaminated food, water, or animal feed.

**Protective Action Recommendation (PAR):** advice to the state on emergency measures it should consider in determining action for the public to take to avoid or reduce their exposure to radiation.

**Radiological Assistance Program (RAP) team:** a team dispatched to the site of a radiological incident by the Department of Energy Regional Office responding to the incident.

**Radiological Emergency Preparedness (REP) Program:** the FEMA program that administers emergency preparedness for all commercial nuclear sites.

**Rapidly-escalating incident:** an incident that develops potential or actual severe core damage within a short time. Such an incident results in an initial declaration of or rapid escalation to a Site Area Emergency or General Emergency.

**Reception/relocation center (RC):** a pre-designated facility located outside the plume exposure pathway emergency planning zone (at a minimum 15 miles from the nuclear power plant) at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception/relocation center is also referred to as a registration center or public registration and decontamination center.

**Recovery:** the process of reducing radiation exposure rates and concentrations of radioactive material in the environment to acceptable levels for return by the general public for unconditional occupancy or use after the emergency phase of a radiological emergency.

**Reduction in Effectiveness (RIE):** a change to a licensee's emergency plan that results in the reducing the licensee's capability to perform an emergency planning function in the event of a radiological emergency. Licensees must obtain NRC review and approval before implementing such changes.

**Reentry:** the provisions for the return of the public after evacuation, when the radiation risk has been reduced to acceptable levels.

**Regional Radiological Assistance Committee (RAC):** a committee of representatives from a number of Federal agencies which have agreed to assist the FEMA Region in providing technical assistance to offsite response organizations and to evaluate radiological emergency response plans/procedures and exercises on the basis of their special authorities, missions, and expertise.

**Relocation:** the removal or continued exclusion of people (households) from contaminated areas to avoid chronic radiation exposure.

**Remedial exercise:** an exercise that tests deficiencies of a previous joint exercise that are considered significant enough to potentially impact the public health and safety. A remedial exercise is conducted within 120 days after the biennial REP exercise for the purpose of demonstrating remedial actions to correct one or more deficiencies.

**Restricted zone:** an area of controlled access from which the population has been evacuated, relocated or sheltered-in-place.

**Return:** reoccupation of areas cleared for unrestricted residence/use by previously evacuated or relocated populations.

**Shelter-In-Place:** a protective action that includes going indoors listening to an Emergency Alert System radio or television station, closing all windows and doors, closing exterior vents, and turning off heating and air conditioning equipment using outside air.

**Special facility:** includes schools, licensed daycare centers, hospitals, nursing homes, certain types of industrial plants that may require a lengthy shutdown period, etc., within the plume emergency planning zone that need to be considered separately from the general population when planning for an incident or accident at a nuclear power plant.

**Technical Support Center (TSC):** an onsite facility located close to the control room that shall provide plant management and technical support to the reactor operating personnel located in the control room during emergency conditions. It shall have technical data displays and plant records available to assist in the detailed analysis and diagnosis of abnormal plant conditions and any significant release of radioactivity to the environment. The TSC shall be the primary communications center for the plant during an emergency.

**Transient persons:** non-residents. Persons who do not permanently reside in the plume exposure pathway emergency planning zone, but may be present during an emergency.

## **Section 2 – Continuity of Operations Planning (COOP) Terminology**

**Continuity of Government Condition (COGCON) –** Four Continuity threat conditions may be declared by the White House: COGCON 4 – low probability COGCON 3 – elevated probability COGCON 2- high probability COGCON 1- very high threat level

**Continuity Status Report (CSR) –** COOP status reports sent during a COOP Event

**Emergency Relocation Group (ERG) –** A trained NRC contingent assigned to manage the emergency relocation of NRC mission essential functions.

**Devolution Emergency Response Group (DERG) –**A trained NRC contingent assigned to manage the devolution of NRC mission essential functions.

**Essential Functions –** NRC functions, including Mission Essential Functions, and including business functions such as payroll and other business processes.

**Mission Essential Functions (MEF) -** Those functions that must be maintained by the Agency, albeit at another location if necessary, during a COOP event.

**Primary Mission Essential Function (PMEF)–** NRC has only one PMEF, and that is the ability to respond on behalf of the federal government to a declared radiological or nuclear event.

**National Essential Functions (NEF) –**Essential functions necessary to keep the federal government operating to maintain essential functions. PMEFs must support an NEF.

### Section 3 – Incident Response Terminology

**Aerial Measuring System (AMS):** a Department of Energy asset consisting of an integrated remote-sensing capability for rapidly determining radiological and ecological conditions of large areas of the environment. In conjunction with modern laboratory and assessment techniques, state-of-the-art airborne equipment is used for extremely low-level gamma radiation detection, high-altitude photography, airborne gas and particulate sampling, and multi-spectral photography and scanning.

**Emergency Support Functions (ESFs)** – Per the National Response Framework, there are approximately 17 support functions that the Federal Government could provide to state and local governments in an emergency. The NRC would most likely support ESF # 12, Energy.

**Federal Radiological Monitoring and Assessment Center (FRMAC):** a center usually located at an airport near the scene of a radiological emergency from with the Department of Energy Offsite Technical Director conducts the National Response Framework response.

#### **Homeland Security Council (HSC) Policy Committees**

The HSC is the principal forum for consideration of homeland security policy issues requiring presidential decisions. The HSC ensures coordination of all homeland security-related activities among executive departments and agencies and promotes the effective development and implementation of homeland security policies.

**Homeland Security Council (HSC)/Principals Committee (PC).** The HSC/PC is the senior interagency forum under the HSC policy process. The Assistant to the President for Homeland Security and Counterterrorism (APHS-CT) chairs the HSC/PC, which is composed of various heads of departments and agencies throughout the Federal Government. Primary Rep – NRC Chairman

**Homeland Security Council (HSC)/Deputies Committee (DC).** The HSC/DC is the senior sub-Cabinet interagency forum for consideration of policy issues affecting homeland security. The HSC/DC ensures issues presented to the HSC/PC or the HSC have been properly analyzed and prepared for action. Primary Rep – EDO or DEDO

**Domestic Resilience Group (DRG) Interagency Policy Committee (IPC).** The DRG IPC is the main forum for interagency coordination of homeland security and preparedness policy. Primary rep – NSIR OD.

**Exercise and Evaluation Sub-Interagency Policy Committee (E&E Sub-IPC).** The HSC E&E Sub-IPC is the main day-to-day forum for interagency coordination of national exercise policy. Primary Rep – NSIR DPR Federal Interagency Coordinator.

**National Exercise Program (NEP)** – overarching program that guides the nations exercises and evaluation of progress towards achieving the National Preparedness Goal.

**National Response Framework (NRF)** –The document that outlines how the Federal government would organize and respond to a domestic emergency. There are several annexes to the NRF, including the Radiological and Nuclear Annex, which describes NRC responsibilities.

**Presidential Policy Directive 8 (PPD-8): *National Preparedness***: This directive is aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters. Directs the creation of the National Preparedness Goal and the 5 mission area frameworks (Prevention, Protection, Mitigation, Response, and Recovery).

**National Security Staff** – Principal White House staff that coordinates policy issues and interagency activities. Reports to the Assistant to the President for Homeland Security and Counterterrorism (APHS-CT). Part of the Executive Office of the President

**NORAD** - The North American Aerospace Defense Command (NORAD) is a United States and Canada bi-national organization charged with the missions of aerospace warning and aerospace control for North America.

**US NORTHCOM** - partners to conduct homeland defense, civil support and security cooperation to defend and secure the United States and its interests. This is the overarching command of US Forces state-side and a key partner to the NRC. NORTHCOM and NORAD are led by the same US commander.

**Incident Response Teams (IRTs) Teams include:**

**Regional Site Team**-A team of region based response and reactor safety experts to monitor licensee actions typically at the licensee's Emergency Operations Facility. The Site Team is headed by the Site Team Director.

**Regional Base Team** – A region based team of experts who monitor plant conditions from the regional Incident Response Center. The base team coordinates response activities with the HQ response teams, the Site Team, if dispatched, and with the affected State Emergency Operations Center.

**HQ Executive Team** – a senior team of 3-6 senior NRC decision makers, typically led by the Chairman, the EDO or a DEDO.

**HQ Reactor Safety Team (RST)**-A team of NRC reactor technology experts along with other NRC staff with specific expertise as needed (e.g. earthquake experts) to conduct an analysis of plant conditions and provide predictions of future plant actions as requested.

**HQ Liaison Team (LT)**- The LT manages external communications on behalf of the executive team, with the White House, Congress, other federal agencies, affected and unaffected States and the International community (Dept of State, IAEA, Canada and Mexico)

**HQ Protective Measures Team (PMT)** – A team of health physicists and others who work with federal and local agencies to help define the potential or actual radiological release and evaluate licensee protective action recommendations (PARs) made to the state government decision maker.

**HQ Safeguards Team (SGT)** –A team of DSO and DSP responders who provide an independent evaluation of security events at licensed facilities and help coordinate federal response as needed with security agencies such as the Secret Service, FBI, etc.

**HQ Fuel Cycle Safety Team (FCST)**-A team of NRC staff with expertise in fuel cycle facilities and processes regulated by the NRC.

**HQ Interagency Response Team (IRT)**- A specialized team of NRC responders sent to the NOC, the NRCC or other federal response center.

**HQ Corporate Support Response Team (CSRT)**-A new HQ team being formed to manage the support functions during an emergency (responder parking, pay issues, financial issues, medical evaluation issues, travel support, etc).

**HQ Executive Support Team (EST)**- A team to support the ET.

**Unified System for Information Exchange (USIE)**-A computer based information network owned by the International Atomic Energy Agency (IAEA) Incident and Emergency Centre (IEC). Used by the HOOs and the Liaison Team to provide and receive information through IAEA on nuclear and radiological events.

**Emergency Response Data System (ERDS)**-A system that provides licensee emergency data from their plant computer to be fed automatically to the NRC Operations Center to allow live monitoring of key safety parameters at the plant.

**Radiological Assessment System for Consequence Analysis (RASCAL)**- a dose assessment tool used by the PMT to analyze potential and actual radiological release consequences.

**National Warning System (NAWAS)**- A national warning hotline system connecting all federal agencies and every State emergency warning point.

**National Capitol Region (NCR)**- Washington DC and the surrounding Maryland and Virginia counties.

**National Incident Communications Conference Line (NICCL)**- Several bridge lines operated by DHS to coordinate emergency information among federal and other agencies to conduct incident response coordination.

**National Operations Center (NOC)**- A DHS facility staffed 24/7 to monitor emergency incidents. NRC would send 1-2 higher level staff people to the NOC.

**National Response Coordination Center (NRCC)**- A FEMA Operations Center developed to coordinate resource delivery and response operations among Federal agencies and affected state and local governments. NRC would send 1 person to the NRCC to coordinate with the DOE and other federal agencies.

**Situation Report (SITREP)**-A DHS standard report, normally prepared by each responding agency every 12 hours, describing the emergency situation and specific response actions being taken.