

**Table B-1: Emergency Response Organization (ERO) Staffing and Augmentation Plan**

**NOTES**

- The minimum number of personnel assigned ERO functions (minimum staffing) is dependent on specific licensee requirements and is as approved by the NRC for the site-specific emergency plan. Control of the site-specific emergency plan is regulated via 10 CFR 50.54(q).
- This table lists the basic functions needed to implement the typical emergency plan. It is intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan. The minimum on-shift staffing and ERO augmentation needs of a specific licensee should be described. The emergency plan should describe only one on-shift and ERO augmentation staffing plan.
- The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.
- The titles of the positions are as defined in the site-specific emergency plan.
- The locations of these positions are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan. Licensees may choose to have these positions, or functions, at other facilities and/or activated at different emergency classification levels (ECLs).
- Many of these functions may be assigned as additional duties, but the licensee is required to support the position that no credible accident scenario(s) can occur which would detract a given position from the performance of its assigned emergency response function(s).
- The development of on-shift and ERO staffing levels should be performance-based, as much as possible, as long as the capabilities of the listed functions are constantly maintained. Once developed, and approved by the NRC, changes to the on-shift and ERO staffing are evaluated and controlled in accordance with 10 CFR 50.54(q).
- The number of operations staff on-shift is controlled by the site-specific Technical Specifications or other licensing documents; however, the normal plant operating organization should be described in sufficient detail to determine if adding emergency response functions to existing operations staff creates situations where competing priorities could preclude timely emergency response action(s).
- The fire brigade is controlled by the site-specific Technical Specifications or other licensing documents; however, the normal plant fire brigade organization should be described in sufficient detail to determine if adding emergency response functions creates situations where competing priorities could preclude timely emergency response action(s).

Emergency Preparedness Function	On Shift	Technical Support Center (TSC)/ Operations Support Center (OSC)		Emergency Operations Facility (EOF)/ Joint Information Center (JIC)/ Joint Information System (JIS)
		Alert or Greater  Augment w/in 60-min <sup>1,2</sup>	Alert or Greater  Augment w/in 90-min <sup>1,2</sup>	Site Area Emergency (SAE) or Greater  Augment w/in 60-min <sup>3</sup>
<b>Command &amp; Control</b> <ul style="list-style-type: none"> <li>• Provide overall ERO command and control until relieved.</li> <li>• Approve emergency action level (EAL) and/or PAR classifications until relieved.</li> <li>• Authorize personnel dose extensions until relieved.</li> </ul>	Operations Shift Manager	Emergency Coordinator (1)	Not applicable	Emergency Director (1)
<b>Communications</b> <ul style="list-style-type: none"> <li>• Communicate EAL and PAR classifications to offsite agencies, including the NRC, until relieved.</li> </ul>	Communicator <sup>1</sup>	Communicators (TSC) (2)  <i>One communicator for the NRC and one communicator for offsite response agencies.</i>	As needed.  <i>One communicator staffed for NRC communications if needed.</i>	Communicator (1)
<b>Radiation Protection</b> <ul style="list-style-type: none"> <li>• Provide qualified health physics (HP) coverage for responders accessing potentially unknown radiological environments during emergency conditions.</li> <li>• Provide in-plant surveys, onsite surveys, and offsite surveys.</li> <li>• Support offsite field monitoring teams (FMTs)<sup>1</sup>.</li> <li>• Control dosimetry and access control.</li> </ul>	HP Personnel <sup>4</sup>	Additional HP Technicians <i>[In addition to personnel on-shift]</i> (OSC) (3)	Additional HP Technicians <i>[In addition to personnel on-shift and those responding within 60-minutes]</i> (OSC) (3)	Not applicable

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<b>Supervision of Radiation Protection</b> <ul style="list-style-type: none"> <li>Evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs, until relieved.</li> <li>Recommend onsite and offsite PARs to the applicable decision-maker, until relieved.</li> <li>Direct all radiation protection activities, including field team direction, until relieved.</li> <li>Provide relevant information to applicable communicators who are communicating offsite protective actions to offsite agencies, until relieved.</li> </ul>	Operations Shift Manager	Site Radiation Protection Coordinator (SRPC) (1) (TSC)	Not applicable	Radiation Protection Manager (1) (EOF)
<b>Dose Assessments/Projections</b> <ul style="list-style-type: none"> <li>Perform dose assessments/projections and provide input to applicable PAR decision-maker, until relieved.</li> </ul>	Dose Assessment/Projection Staff <sup>1</sup>	Dose Assessment/Projection Staff (1) (TSC)	Not applicable	Dose Assessment/Projection Staff (1) (EOF)

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<b>Emergency Classifications</b> <ul style="list-style-type: none"> <li>Evaluate plant conditions and recommend emergency classifications, until relieved.</li> </ul>	Emergency Classification Advisor <sup>1</sup>	Emergency Classification Advisor (1) (TSC)  <i>Licensees should consider having a liaison between Operations (Control Room) and the TSC to perform this function.</i>	Not applicable	Not applicable
<b>Engineering</b> <ul style="list-style-type: none"> <li>Provide engineering coverage related to the specific discipline of the assigned engineer, until relieved</li> </ul>	<b>Core/Thermal Hydraulics Engineer<sup>1</sup></b> <ul style="list-style-type: none"> <li>Evaluate reactor conditions.</li> </ul>	<b>TSC Engineering Staff</b> <ul style="list-style-type: none"> <li>(1) Electrical/Instrumentation and Control (I&amp;C): Provide engineering coverage for the ERO related to electrical or I&amp;C equipment.</li> <li>(1) Mechanical: Provide engineering coverage for the ERO related to mechanical equipment.</li> <li>(1) Core/Thermal Hydraulics: Evaluate reactor conditions.</li> </ul>	As needed	Not applicable

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Security	Security staffing is per the site Security Plan.	<b>Security Supervisor (TSC) (1)</b> <ul style="list-style-type: none"> <li>Coordinate security related activities and information with the Emergency Coordinator.</li> </ul>	Not applicable	Not applicable
Repair Team Activities	<b>Operations Staff</b> <ul style="list-style-type: none"> <li>Limited maintenance capability needed on-shift<sup>5</sup>. This is typically limited to minor electrical and/or mechanical work to restore power and/or emergency core cooling system (ECCS) flow, as well as possibly filling and venting instrumentation lines.</li> </ul>	<b>Maintenance Personnel (OSC) (1 electrician, 1 mechanic)</b> <ul style="list-style-type: none"> <li>(1) Electrician: Provide electrical support for ECCS equipment, event mitigation, and equipment repair.</li> <li>(1) Mechanic: Provide mechanical support for ECCS equipment, event mitigation, and equipment repair.</li> </ul>	<b>Maintenance Personnel (OSC)</b> <ul style="list-style-type: none"> <li>(1) I&amp;C Technician: Provide assistance with logic manipulation, support for event mitigation and equipment repair, and support of digital I&amp;C if applicable. Additional I&amp;C staff may be called out if needed.</li> <li>Electricians – As needed.</li> <li>Mechanics – As needed.</li> </ul>	Not applicable

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Supervision of Repair Team Activities	Repair Team Supervisor <sup>1</sup>	<b>Lead OSC Supervisor (1)</b> <ul style="list-style-type: none"> <li>Supervise OSC activities as directed by Emergency Coordinator.</li> </ul>	<b>OSC Supervisors</b> <ul style="list-style-type: none"> <li>(1) Electrical: Supervise OSC activities related to electrical equipment.</li> <li>(1) Mechanical: Supervise OSC activities related to mechanical equipment.</li> <li>(1) I&amp;C: Supervise OSC activities related to I&amp;C equipment. May be combined with Electrical Supervisor.</li> <li>(1) HP: Supervise OSC activities related to radiation protection.</li> </ul>	Not applicable

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FMTs	Not applicable	<b>Onsite FMT</b> <ul style="list-style-type: none"> <li>• (1) Radiation Monitor to assess environmental radiation/contamination and provide input to the SRPC. Also provide HP coverage for team.</li> <li>• (1) Driver to provide transportation, if applicable.</li> </ul> <b>Offsite FMT A</b> <ul style="list-style-type: none"> <li>• (1) Qualified individual to perform environmental radiation/contamination assessments and radioactive plume tracking. Communicate and coordinate with applicable ERO supervision. Responsible for the radiation protection of the field team.</li> <li>• (1) Driver to provide transportation, if applicable.</li> </ul>	<b>Offsite FMT B</b> <ul style="list-style-type: none"> <li>• (1) Qualified individual to perform environmental radiation/contamination assessments and radioactive plume tracking. Communicate and coordinate with applicable ERO supervision. Responsible for the radiation protection of the field team.</li> <li>• (1) Driver to provide transportation, if applicable.</li> </ul>	Not applicable

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<b>Media Information</b> <ul style="list-style-type: none"> <li>Manage and coordinate media information related to the event.</li> </ul>	Not applicable	JIC/JIS staff to address media inquiries <sup>6</sup>	Not applicable	Staff to perform JIC/JIS-related tasks.
<b>Information Technology (IT)</b> <ul style="list-style-type: none"> <li>If emergency plan functions rely on computer-based equipment, provide IT support.</li> </ul>	Not applicable	Not applicable	<b>IT Lead (TSC) (1)<sup>1</sup></b> <ul style="list-style-type: none"> <li>Qualified individual to ensure IT equipment is operable.</li> </ul>	<b>IT Lead (EOF/JIC/JIS) (1)<sup>1</sup></b> <ul style="list-style-type: none"> <li>Qualified individual to ensure IT equipment is operable.</li> </ul>

<sup>1</sup> Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E shift staffing evaluation must be performed to support assignment of multiple roles to individual responders on-shift. For augmented ERO positions, a similar approach is acceptable for evaluating whether personnel can adequately perform multiple functions without having competing priorities.

<sup>2</sup> Specified TSC/OSC personnel should be capable of performing their required functions within 60(90)-minutes of an Alert or higher EAL classification.

<sup>3</sup> Specified EOF/JIC/JIS personnel should be capable of performing their required functions within 60-minutes of a SAE or higher EAL classification.

<sup>4</sup> Two qualified HP personnel for a single unit site or one per unit for a multi-unit site.

<sup>5</sup> The ability to get ECCS equipment operational is the primary need while on-shift.

<sup>6</sup> May not be performed in the TSC/OSC, but needs to be established at this point.