

Development and Submittal of PDEP and EAL Scheme Change License Amendment Requests

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NSIR/DPR-ISG-02, Attachment 1

- Provides an acceptable method for the review of Permanently Defueled Emergency Plans.
- Developed from the applicable evaluation criteria in Section II to NUREG-0654/FEMA-REP-1 (Revision 1), based on the exemptions from 10 CFR 50.47(b) and Appendix E to Part 50 outlined in Table 1, “Exemptions for Consideration.”

Review of PDEP Submissions

COMPARISON OF NUREG 0654 , Rev. 1 EVALUATION CRITERIA

Operating Plant	Decommissioning Plant
PS "A" Criteria (9): A.1a. – A.1.e.; A.2.a., b.; A.3.; A.4.	PS "A" Criteria (4): A.1.b., d., e.; A4.
PS "B" Criteria (13): B.1. – B.7; B.7.a. – d.; B.8.; B.9.	PS "B" Criteria (5): B.1.; B.2; B.4.; B.5.; B.9.
PS "C" Criteria (6): C.1.a. – C.1.c.; C.2.b.; C.3; C.4.	PS "C" Criteria (1): C.4.
PS "D" Criteria (2): D.1.; D.2	PS "D" Criteria (2): D.1.; D.2.
PS "E" Criteria (20): E.1. – E.4.; E.4.a. – E.4.n.; E.6.; E.7.	PS "E" Criteria (8): E.1; E.2; E.4.a., b., c., k., m., n.
PS "F" Criteria (8): F.1.a. – F.1.f.; F.2.; F.3.	PS "F" Criteria (6): F1. a., b., e., f.; F.2.; F.3.
PS "G" Criteria (7): G.1.; G.2.; G.3.a.; G.4.a. – G.4.c.; G.5.	PS "G" Criteria (5): G.3.a.; G.4., a., b., c.
PS "H" Criteria (17): H.1. – H.5.; H.5.a. – H.5.d.; H.6.a. – H.6.c.; H.7. – H.12.	PS "H" Criteria (6): H.2.; H.4.; H.5.; H.6.; H.10.a.; H.10.b.

Review of PDEP Submissions

COMPARISON OF NUREG 0654 , Rev. 1 EVALUATION CRITERIA

Operating Plant	Decommissioning Plant
PS "I" Criteria (11): I.1.. 1.1.; I.3.a., b.; I.4. – I.10; I.11	PS "I" Criteria (2): I.1; 1.2.
PS "J" Criteria (17): J.1.a. – d.; J.2. – J.5; J.6.a. – c.; J.7.; J.8; J.10.a. – c.; J.10.m.	PS "J" Criteria (8): J.1.a. –d.; J.2. – 3.; J.5. – 6.
PS "K" Criteria (16): K.1.a. – g.; K.2. K.3.a. – b.; K.5.a. – b.; K.6.a. – c.; K.7.	PS "K" Criteria (12): K.1.a. – f.; K.2; K.3.a. – b.; K.5.a. – b; K.6.
PS "L" Criteria (3): L.1.; L.2; L.4.	PS "L" Criteria (3): L.1.; L.2; L.4.
PS "M" Criteria (4): M.1. – M.4.	PS "M" Criteria (2): M.1.; M.2.
PS "N" Criteria (16): N.1.a. – b.; N.2.a. – N.2.d.; N.2.e. (2); N.3.a. – f.; N.4.; N.5.	PS "N" Criteria (14): N.1.a. – b.; N.2.a. – c., e.; N.3.a. – f.; N.4.; N.5.
PS "O" Criteria (15): O.1.; O.1.a.; O.2. – 3.; O.4.a. – j.; O.5.	PS "O" Criteria (3): O.1.a.; O.3.; O.5
PS "P" Criteria (10): P.1. – 10.	PS "P" Criteria (8): P.1. – 5.; P.7 – 8; P.10.
Total Criteria: 174	Total Criteria: 89

Key Criteria

- *Planning Standard A:*
 - Concept of operations
 - Title of individual in charge
 - 24-hour emergency response capability
- *Planning Standard B:*
 - On-shift staff
 - Individual responsible for initiating emergency actions and functional responsibilities
 - Table B-1SD: major functional area/tasks; title; numbers of staff (on-shift/2 hour augmentation)
 - Offsite support (law enforcement, fire, medical)

Key Criteria

- *Planning Standard C:*
 - Designated assistance
 - Letters of agreements, where necessary
- *Planning Standard D:*
 - Emergency classification and EAL scheme\
 - Initiating conditions for all postulated accidents
- *Planning Standard E:*
 - Notification (organizations and personnel)
 - Contents of emergency messages with OROs

Key Criteria

- *Planning Standard F:*
 - Primary and backup communications, including medical support
 - Periodic testing of communications
- *Planning Standard G:*
 - Point of contact for information (emergency)
 - Designated spokesperson; timely exchange of information; rumor control

Key Criteria

- *Planning Standard H:*
 - Designated emergency facility
 - On-site monitoring systems (meteorological, fire, radiological)
 - Inspect, inventory and operationally check emergency equipment/instruments
 - Emergency kits by general category
- *Planning Standard I:*
 - Plant system/effluent parameter values characteristic of a spectrum of off-normal conditions and accidents
 - Continuing assessment throughout the course of an accident, to include radiation monitors

Key Criteria

- *Planning Standard J:*
 - Means and time required to warn or advise onsite individuals
 - Evacuation routes and transportation for onsite individuals and radiological monitoring of people evacuated from the site
 - Accountability within 60 minutes
 - Make provisions for individual respiratory protection; and use of protective clothing

Key Criteria

- *Planning Standard K:*
 - Onsite exposure guidelines consistent with EPA PAGs
 - Onsite radiation protection program
 - Capability to determine the doses received by emergency personnel involved in any nuclear accident
 - Action levels for determining the need for decontamination/contamination control measures

Key Criteria

- *Planning Standard L:*
 - Hospital and medical services, including transportation arrangements
 - Onsite first aid capability
- *Planning Standard M:*
 - General plans and procedures for reentry and recovery
 - Position/title, authority and responsibilities of individuals who will fill key positions in the recovery organization

Key Criteria

- *Planning Standard N:*
 - Conducting exercises and drills (medical, fire, communications, health physics)
 - Means for evaluating observer and participant comments on areas needing improvement
 - Management control used to ensure that corrective actions are implemented
- *Planning Standard O:*
 - Initial and annual training of appropriate individuals (to include first aid teams)

Key Criteria

- Planning Standard P:
 - Individual with the overall authority and responsibility for radiological emergency response planning, to include designating an Emergency Planning Coordinator
 - Update plan and agreements, as needed (forwarded to all organizations and appropriate individuals)

PDEPs – Final Thoughts

After approval of the exemption request, the licensee may determine that adoption of a PDEP does not constitute a reduction in effectiveness to the emergency plan per 10 CFR 50.54(q) because of the change in the licensing basis for the plant, and as such, the licensee may opt to implement the change without prior NRC approval.

Emergency Action Levels (EALs)

- Changes to EALs to reflect the permanently shut down and defueled condition of the reactor, should be considered a scheme change per Section IV.B.2 of Appendix E to 10 CFR Part 50.
- NEI 99-01, Revision 6, “Development of Emergency Action Levels for Non-Passive Reactor”
 - Appendix C, “Permanently Defueled Station ICs/EALs”

EAL Applicability

- Two Emergency Classification Levels – Unusual Event and Alert
- Initiating Conditions for entry into each of the two ECLs are specified for:
 - Abnormal Radiological Levels/Radiological Effluent
 - Hazards and Other Conditions Affecting Plant Safety
 - System Malfunction, based on the permanently shutdown and defueled status of the facility with fuel stored onsite in a SFP
- Specific EAL threshold values for each IC

“PD” Initiating Condition Matrix

UNUSUAL EVENT	ALERT
PD-AU1 Release of gaseous or liquid radioactivity greater than 2 times the (site-specific effluent release controlling document) limits for 60 minutes or longer.	PD-AA1 Release of gaseous or liquid radioactivity resulting in offsite dose greater than 10 mrem TEDE or 50 mrem thyroid CDE.
PD-AU2 UNPLANNED rise in plant radiation levels.	PD-AA2 UNPLANNED rise in plant radiation levels that impedes plant access required to maintain spent fuel integrity.
PD-SU1 UNPLANNED spent fuel pool temperature rise.	
PD-HU1 Confirmed SECURITY CONDITION or threat.	PD-HA1 HOSTILE ACTION within the OWNER CONTROLLED AREA or airborne attack threat within 30 minutes.
PD-HU2 Hazardous event affecting SAFETY SYSTEM equipment necessary for spent fuel cooling.	
PD-HU3 Other conditions exist which in the judgment of the Emergency Director warrant declaration of a (NO)UE.	PD-HA3 Other conditions exist which in the judgment of the Emergency Director warrant declaration of an Alert.

CLI-16-12

Commission Memorandum and Order: Appeal to Commission by State of Vermont of the ASLB's denial of a request for hearing in the license amendment proceeding and reconsideration of Commission's approval of the Staff's recommendation to grant Entergy related exemption request.

Commission Findings

- Affirmed ASLB's denial of VT's hearing request (ADAMS ML16175A294).
- Sustained Commission approval of the Staff's recommendation to grant the exemption request (SRM to SECY-14-0125).
- However, concluded that matters related to the exemption request could be challenged in the license amendment proceeding