

Lessons Learned: Environmental Review of PSDARs and LTPs

Decommissioning Lessons Learned Workshop
May 2, 2023

PSDAR Environmental Review

- The regulation at 10 CFR 50.82(a)(4)(i) states, in part, that the post-shutdown decommissioning activities report (PSDAR) must contain a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements
- The regulation at 10 CFR 50.82(a)(6) states, in part, that licensees shall not perform any decommissioning activities that result in significant environmental impacts not previously reviewed

PSDAR Environmental Review

- NUREG-0586, “Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities,” (Decommissioning GEIS)
 - Identifies activities that can be bounded by the generic evaluations in the Decommissioning GEIS
 - Identifies activities that could exceed generic environmental impacts and require site-specific analysis:
 - Threatened and Endangered Species
 - Environmental Justice
 - Land use involving offsite areas to support decommissioning activities
 - Aquatic ecology for activities beyond the operational area
 - Terrestrial ecology for activities beyond the operational area
 - Cultural and Historical Resources for activities beyond the operational area

Common Areas for PSDAR RAIs

- Cultural, Historic, and Archeological Resources
 - Consideration of the facility itself being eligible for inclusion on the National Register of Historic Places
- Endangered Species Act (ESA)
 - Compliance with existing biological opinions during decommissioning
 - Consultations necessary to obtain take authorization under ESA Section 7

PSDAR Lessons Learned

- Licensees may review previous PSDAR RAIs to determine appropriate information and data to provide in initial submittals
- Contact and consult with the state historic preservation officer
- License renewal supplemental environmental impact statements do not reach conclusions with respect to generic decommissioning issues identified in the decommissioning GEIS

PSDAR Lessons Learned

- Licensees may request that NRC initiate ESA Section 7 consultation with the Services to address effects to listed species and critical habitats.
- This ensures that any take is authorized under a biological opinion.
- Most already-existing biological opinions for operating reactors do not address decommissioning impacts.
- Consultation may be appropriate to revise existing biological opinions to address decommissioning and remove or modify terms and conditions that no longer apply due to plant shut down.



License Termination Plan (LTP)

Environmental Review

- 10 CFR 50.82 (a)(9)(ii) – License Termination Plan must include a supplement to the environmental report, pursuant to § 51.53, describing any new information or significant environmental change associated with the licensee's proposed termination activities
- NUREG-0586, “Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities,” (Decommissioning GEIS)

LTP Environmental Review

Areas bounded by GEIS

- Land use (on-site)
- Water use and quality (Surface and Groundwater)
- Air quality
- Aquatic and Terrestrial Ecology
- Public and Occupational Health (Radiological)
- Socioeconomics
- Cultural and Historic Resources
- Aesthetics
- Noise
- Transportation

Areas requiring site specific analysis

- Off-site land use
- Ecological resources (activities beyond operational area)
- Cultural and Historic resources (activities beyond operational area)
- Threatened and Endangered Species
- Environmental Justice

LTP Lessons Learned

- Radiological and Non-radiological (solid and hazardous) waste
 - Impacts from disposal on the capacity of receiving waste management facilities
- Cumulative Impacts
- Characterization of affected environment
 - Provide most up-to-date information
 - Including most recent NEPA document (e.g. license renewal EIS)
- Consultation – Early engagement with State Historic Preservation Officer to support NHPA Section 106 review