

LaSalle County Station Unit 2 Spent Fuel Storage Racks

November 10, 2010

SFP Management Strategy

Proposed Actions

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Proposed Actions

- ✓ Categorize Unit 2 locations into three groups
 - UNUSABLE (>52.27% Degradation)
 - RESTRICTED (>29.97% Degradation)
 - UNRESTRICTED (<29.97% Degradation)
- ✓ Fuel will have >27.5% margin to allowable degradation limit
- ✓ No fuel can be stored in UNUSABLE locations
- ✓ Low reactivity fuel (Cycle 1 and GE14) can be stored in RESTRICTED locations
- ✓ All fuel can be stored in UNRESTRICTED locations
- ✓ Criteria is applied to cells on each side of the panel in question
- ✓ Continue use of RACKLIFE Version 2.0

Discharged Fuel at LaSalle

Fuel Type in SFP	Maximum Allowable Panel Thickness Reduction	Resultant In-Rack K_{eff}
Cycle 1 GE (8x8) (Maximum 2.32 wt% enrichment)	96.9%	0.9500
GE14 (10x10)	79.8%	0.9499
ATRIUM-9B (9x9)	68.1%	0.9500
Legacy (Cycle 2+) GE (8x8)	65.3%	0.9499
ATRIUM-10(XM) (10x10)	57.5%	0.9499

Impact of Proposed Actions

- ✓ July 1, 2011, projection with three racks complete
 - 1017 UNUSABLE locations
 - 1138 RESTRICTED locations
 - 2104 assemblies on-site meet the low reactivity definition for storage in RESTRICTED locations
- ✓ Approximately 2000 moves are required to reconfigure SFP to new criteria

Proposed Insert Implementation Schedule

- ✓ Required to perform Spring 2011 refueling outage (L2R13)
 - NRC issues license amendment prior to L2R13
 - Install inserts in three most-degraded racks
 - 626 inserts required for three racks
 - Recover 408 cell locations
- ✓ Pool reconfiguration will be complete within 120 days following L2R13
- ✓ Dry cask campaign is moving forward in parallel with insert installation activities
 - Gain 68 operable locations per cask
 - Anticipate three casks loaded prior to L2R13

Proposed Insert Implementation Required Resources

- ✓ Target completion of three racks before L2R13
 - Dedicated Reactor Services crew for pool configuration and insert installation
 - Scope includes additional rechanneling and movement of blade guides and fuel to facilitate insert installation
- ✓ Projected to complete insert installation in all racks by December 31, 2014

NRC Feedback

Next Steps

Ken Nicely
Licensing

Next Steps

- ✓ Incorporate NRC feedback
- ✓ Submit supplement to license amendment request to document proposed actions (planned November 19, 2010)
- ✓ Actions will be proposed as license conditions associated with the amendment
 - Categorize locations into three groups
 - Reconfigure SFP to new criteria within 120 days following L2R13
 - Complete insert installation in all racks by December 31, 2014