

50.90 License Amendment Request EAL Changes



Dominion[®]



Scope

**50.90 License Amendment Request
EAL Changes
For Fuel Clad Degradation/Barrier Loss
MPS / NAPS / SPS**

Background

**Proposed Methodology for
Determining “RCS Sampling
Detector Response Results”**

Methodology Change

**50.54(q) Screening Results – NRC
Prior Review Required**

Proposed EAL Changes

**“RCS Sampling at 1 Foot”
(Fuel Clad Degradation)**

**“RCS Sampling at 1 Foot
(Fuel Clad Barrier Loss)**

Time Component Included for Decay

Proposed Threshold Tables

Fuel Clad Degradation Threshold

Fuel Clad Barrier Loss Threshold

MPS

Time After Shutdown (hrs)	mR/hr/ml
≤ 1	0.76
> 1 to 2	0.66
> 2 to 4	0.54
> 4 to 8	0.40
> 8 to 24	0.21

Time After Shutdown (hrs)	mR/hr/ml
≤ 1	17.0
> 1 to 2	12.7
> 2 to 4	8.5
> 4 to 8	5.4
> 8 to 24	2.2

NAPS

Time After Shutdown (hrs)	1 ml sample (mR/hr)	120 ml sample (mR/hr)
≤ 1	0.76	91
> 1 to 2	0.66	80
> 2 to 4	0.54	65
> 4 to 8	0.40	48
> 8 to 24	0.21	25

Time After Shutdown (hrs)	1 ml Sample (mR/hr)	120 ml Sample (mR/hr)
≤ 1	17.0	2040
> 1 to 2	12.7	1524
> 2 to 4	8.5	1020
> 4 to 8	5.4	648
> 8 to 24	2.2	264

SPS

Time After Shutdown (hrs)	1 ml sample (mR/hr)	20 ml sample (mR/hr)	250 ml sample (mR/hr)
≤ 1	0.15	3.0	38
> 1 to 2	0.13	2.6	33
> 2 to 4	0.10	2.0	25
> 4 to 8	0.10	1.4	18
> 8 to 24	0.10	0.8	10

Time After Shutdown (hrs)	1 ml sample (mR/hr)	20 ml sample (mR/hr)	250 ml sample (mR/hr)
≤ 1	17.0	340	4250
> 1 to 2	12.7	254	3175
> 2 to 4	8.5	170	2125
> 4 to 8	5.4	108	1350
> 8 to 24	2.2	44	550

Submittal Content / Schedule

Submit LAR in November 2015

Content to include:

- **EAL red-line**
- **Clean mark-ups**
- **EAL Comparison**
- **Summary of Deviations**

Request a Twelve Month Review