



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

February 20, 1981

ALL POWER REACTOR LICENSEES AND LICENSE APPLICANTS (Generic Letter 81-11)

By letter dated November 13, 1980 you were forwarded a copy of NUREG-0619, "BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking" (November 1980). An error has been found in footnote 2 to Table 2 on page 18 of NUREG-0619. Because of the deletion of leak-testing requirements, footnote 2 should now read: "To be performed even if UT results are satisfactory." Please make the change in your copy of the NUREG.

Also, comments received from GE and others since the publication of NUREG-0619 note the difficulty in meeting the requirements for a low flow controller as described in Section 4.2 on page 16 of the NUREG. The comments specifically address the requirement for a controller having the six characteristics stated in Section 3.4.4.3 of the GE report NEDE-21821-A (BWR Feedwater Nozzle/Sparger Final Report, February 1980). They note that an existing controller may not meet the six characteristics, yet the feedwater system may in fact meet the criterion of the crack growth analysis from which the characteristics were derived (assurance of crack growth to no greater than one inch in forty years).

They also note that strict adherence to the defined characteristics could obviate the beneficial aspects of another recommended change, reactor water cleanup (RWCU) system rerouting to all feedwater lines, by increasing reactor vessel water level to the extent that discharging of the relatively hot RWCU water is necessary.

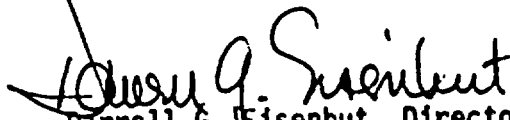
We concur in the assessment and will accept continued use of an existing controller (or a controller modified to meet the basis stated above but not possessing all six characteristics of NEDE-21821-A) based upon a plant-specific fracture mechanics analysis or application of the analysis already existing in NEDE-21821-A Section 4. In order to be considered acceptable, this analysis must show that stresses from conservative controller temperature and flow profiles, when added to those resulting from the other crack growth phenomena, such as startup and shutdown cycles, do not result in the growth of a crack to greater than one inch during the forty year life of the plant. The analysis should be submitted as part of the reports required by NUREG-0619.

February 21, 1981

Licensees or applicants not desiring to perform such an analysis must meet the stated requirements of Section 4.2 of NUREG-0619, i.e., the installation of a low flow controller having the six characteristics stated in NEDE-21821-A.

In answer to a question that has been raised, NUREG-0619 was forwarded to PWR licensees and applicants for their information only, in consideration of the fact that the PWR steam generator feedwater line cracking has been attributed to the same phenomenon of thermal fatigue as existed in the BWR feedwater nozzles. No response from PWR licensees and applicants is required.

Sincerely,

  
Darrell G. Eisenhut, Director  
Division of Licensing

cc: Service Lists

FEB 27 1981

PLANTS UNDER CP REVIEW

1. Pilgrim 2	50-471
2. Perkins 1/2/3	50-488, 489, 490
3. Allens Creek 1	50-466
4. Pebble Springs 1/2	50-514, 515
5. Clinch River	50-537
6. Black Fox 1/2	50-556, 557
7. Skagit 1/2	50-522, 523

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PLANTS UNDER CONSTRUCTION

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2.	Beaver Valley 2	50-412
3.	St. Lucie 2	50-389
4.	Vogtle 1/2	50-424, 425
5.	River Bend 1/2	50-458, 459
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7.	Forked River	50-363
8.	Nine Mile Point 2	50-410
9.	Millstone 3	50-423
10.	Bailly 2	50-367
11.	Limerick 1/2	50-352, 353
12.	Hope Creek 1/2	50-354, 355
13.	Seabrook 1/2	50-443, 444
14.		
15.	Hartsville 1/2/3/4	50-518, 519, 520, 521
16.	Phipps Bend 1/2	50-553, 554
17.	Yellow Creek 1/2	50-566, 567
18.	WPPSS 1, 3/4/5	50-460, 508, 513, 509
19.	Harris 1/2/3/4	50-400, 401, 402, 403
20.	FNP	50-437

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OPERATING PLANTS

1.	Sequoyah 1	50-327
2.	Salem 2	50-311
3.	McGuire 1	50-369
4.	Farley 2	50-364

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PLANTS UNDER OL REVIEW

1.	Clinton 1/2	50-461/462
2.	Byron 1/2	50-454, 455
3.	Braidwood 1/2	50-456/457
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5.	Midland 1/2	50-329, 330
6.	McGuire 2	50- 370
7.	So. Texas 1/2	50-498, 499
8.	Shoreham	50-322
9.	Waterford	50-382
10.	Grand Gulf 1/2	50-416/417
11.	Diablo Canyon 1/2	50-275, 323
12.	Susquehana 1/2	50-387, 388
13.	St. Lucie 2	50-389
14.	Summer 1	50-395
15.	San Onofre 2/3	50-361, 362
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18.	Sequoyah 2	50- 328
19.	Comanche Peak 1/2	50-445, 446
20.		
21.	WPPSS-2	50-397
22.	Fermi 2	50-341
23.	Zimmer 1	50-358
24.	Perry 1/2	50-440, 441
25.	Palo Verde	50-528, 529, 530
26.	Catawba	50-413, 414
27.	Marble Hill	50-546, 547
28.	Wolf Creek	50-482
29.	Callaway	50-483, 486