



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

See

OCT 8 1980

Docket Nos.: 50-369
and 50-370

Duke Power Company
ATTN: Mr. William O. Parker, Jr.
Vice President - Steam Production
Post Office Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Parker:

Subject: UHI Holddown Assembly Springs
(McGuire Nuclear Station, Units 1 and 2)

We have recently learned of the detection of some cracked and broken holddown assembly springs in a foreign UHI plant. Since this matter may effect the McGuire plant, we request that you provide us with the information described in the attachment. This matter was previously discussed with your staff in mid-September.

In order to promptly conclude this review matter, we request that you provide the information no later October 15, 1980.

Sincerely,

for *R. L. Tedesco*
Robert L. Tedesco, Assistant Director
for Licensing
Division of Licensing

Attachment:
Holddown Assembly Springs
Question

cc: See next page

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Region IV Office
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Mr. Tom Donat
Resident Inspector McGuire NPS
c/o USNRC
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Holddown Assembly Spring Question

We have learned that during the first cycle refueling of a foreign UHI reactor, visual inspections of the fuel assemblies revealed several damaged coil springs in the holddown assemblies used to retain non-fuel bearing components; viz., burnable poisons, neutron sources, and plugging devices. It is our understanding that this holddown assembly spring design is unique to Upper Head Injection plants and that McGuire has springs that are identical to those that were damaged in the foreign UHI plant. Therefore, if you intend to operate McGuire with those springs, please provide us with your assessment of (a) the potential for broken springs and (b) the consequences of operation with broken springs. In your analysis of potential consequences you should include, but not necessarily be limited to, addressing the following effects:

1. Loose parts being released to the system.
2. Vibratory wear resulting from un-restrained components.
3. Other failures resulting from vibration (burnable poison rods, etc.)
4. Loss of spring load resulting in axial displacement of core components that could affect (a) change in thimble by-pass flows (b) change in pressure drop, (c) axial repositioning of burnable poisons, and (d) reduction in UHI inlet flow area.

Your assessment should either provide the rationale for your conclusion that operation with the current spring design does not constitute a "substantial safety hazard" (10 CFR 21) or violation of "specified acceptable fuel design limits" (10 CFR 50, appendix A, General Design Criteria 10), or if the springs are to be replaced with other springs of different design, you should describe the differences and discuss the adequacy of the substitutes.