

Georgia Power Company  
40 Inverness Center Parkway  
Post Office Box 1295  
Birmingham, Alabama 35201  
Telephone 205 877-7122

C. K. McCoy  
Vice President, Nuclear  
Vogtle Project



Georgia Power  
the southern electric system

May 20, 1994

LCV-0339

Docket Nos.: 50-424,  
50-425

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT  
RECLASSIFICATION OF SNUBBER INSPECTION TYPES

By letter MSV-01134 dated October 1, 1992, Georgia Power Company (GPC) notified the NRC that snubber functional testing of the four types of snubbers at the Vogtle Electric Generating Plant, Units 1 and 2 (VEGP-1 and 2) would be performed in accordance with Technical Specification 4.7.8e.1. Specifically, the four types of snubbers were defined as the following:

- Inspection Type I: Pacific-Scientific (Models PSA-1/4 through PSA-100),
- Inspection Type II: Anchor/Darling (Models AD-40 through AD-500),
- Inspection Type III: Anchor/Darling (Models AD-1600 through AD-12500), and
- Inspection Type IV: Paul-Munroe (Large Bore Hydraulics 1000K).

Because there are design differences in the various models of Pacific-Scientific (PSA) mechanical snubbers, GPC has reevaluated its position regarding grouping and functional testing of Inspection Type I snubbers. As a result, it is the intention of GPC to reclassify the current Inspection Type I snubbers into three inspection types. A discussion of the design differences between the various models of PSA mechanical snubbers is enclosed. Current snubber Inspection Types II, III, and IV would also be reclassified and would entail a change in snubber inspection type number only. After reclassification, the new snubber inspection types would be identified as follows:

- Inspection Type I: Pacific-Scientific (Models PSA-1/4 and PSA-1/2),

010126

9406020320 940520  
PDR ADDCK 05000424  
Q PDR

ACD

Inspection Type II: Pacific-Scientific (Models PSA-1, PSA-3, and PSA-10),

Inspection Type III: Pacific-Scientific (Models PSA-35 and PSA-100),

Inspection Type IV: Anchor/Darling (Models AD-40 through AD-500),

Inspection Type V: Anchor/Darling (Models AD-1600 through AD-12500), and

Inspection Type VI: Paul-Munroe (Large-Bore Hydraulics 1000K).

Once the reclassification of the snubber inspection types is implemented, functional testing will be performed within the respective design type. For example, if a PSA Model PSA-1/4 mechanical snubber was functionally tested and failed, only PSA Model PSA-1/4 or PSA-1/2 mechanical snubbers would be included in the sample expansion since they are of the same design. Given the example cited, no other models of PSA snubbers would be included in the sample expansion since they are of a different design *unless* an engineering evaluation determines the failure was generic to all models of PSA mechanical snubbers, or snubbers subject to a common transient.

After reclassification of snubber inspection types, the initial functional test scope of PSA snubbers remains virtually unchanged when compared to the initial functional test scope before reclassification except there will be a slight increase in the number of PSA mechanical snubbers functionally tested for VEGP-2, i.e., after reclassification, 13 snubbers will be functionally tested vice 11 snubbers before reclassification. The initial functional test scopes for the small-bore and large-bore AD mechanical snubbers (newly reclassified snubber Inspection Types IV and V) and the Paul-Munroe large-bore hydraulic snubbers (newly reclassified snubber Inspection Type VI) remain unchanged since only the snubber inspection type number will be changed.

Technical Specifications will not be affected by the reclassification of the snubber inspection types into the six snubber inspection types identified above.

Except for the reclassification of the snubbers into the six snubber inspection types discussed above, functional testing of the snubbers at VEGP-1 and 2 will continue to be performed during future maintenance/refueling outages in accordance with the functional test plan described in Technical Specification 4.7.8e.1 unless the NRC is notified otherwise.

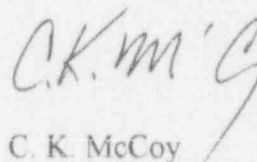
U. S. Nuclear Regulatory Commission  
LCV-0339  
Page Three

The NRC is hereby notified that it is the intention of GPC to reclassify the snubber inspection types as discussed above and to implement the subject change beginning with the fifth maintenance/refueling outage at VEGP-1 which is currently scheduled to begin in September 1994. Should the NRC not agree with this course of action, it is requested that this office be notified of any disallowance by August 15, 1994, in order to help preclude any possible impact on outage planning.

By copy of this letter, the NRC Region II Administrator is being provided notification of our intent to reclassify the snubber inspection types. Further, the NRC Region II Administrator is notified that the functional test plans for the various inspection types remain unchanged from that previously identified in GPC letter MSV-01134 dated October 1, 1992, even though the snubber inspection types are being reclassified.

Should there be any questions in this regard, please contact this office at your earliest convenience.

Sincerely,

  
C. K. McCoy

CKM/JAE/jae

Enclosure: Design Differences in PSA Mechanical Snubbers

xc: Georgia Power Company  
Mr. J. B. Beasley, Jr.  
Mr. S. H. Chesnut  
Mr. M. Sheibani  
NORMS

U. S. Nuclear Regulatory Commission  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. D. S. Hood, Licensing Project Manager, NRR  
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

## ENCLOSURE

### DESIGN DIFFERENCES IN PACIFIC-SCIENTIFIC MECHANICAL SNUBBERS

Pacific-Scientific (PSA) mechanical shock arrestors (snubbers) are acceleration-limiting devices. This acceleration-limiting feature is accomplished similarly for all sizes of PSA mechanical snubbers. The PSA product line of mechanical snubbers includes Models PSA-1/4, -1/2, -1, -3, -10, -35, and -100. The rated load capacity for the foregoing list of snubbers is 350 pounds, 650 pounds, 1500 pounds, 6000 pounds, 15000 pounds, 50000 pounds, and 120000 pounds, respectively. The restricting function of the arrestor is achieved by translating linear motion of telescoping components into rotary motion of an inertia mass. However, there are subtle but distinctive design differences in the manner in which this occurs in PSA snubbers according to their design load (capacity).

Two PSA model snubbers, the PSA-1/4 and the PSA-1/2, utilize a torque-carrier with screw-shaft rod, connected to a dual-rod with helical (threaded) cam-bearing assembly that is mounted to an inertia mass and coupled to the torque-carrier by means of a clutch-spring (see Figure 1, attached). The principle difference in the design and function of these two models of PSA snubbers and the other models of PSA snubbers is that the PSA-1/4 and PSA-1/2 snubbers use a dual-rod helical (threaded) cam-bearing that travels along a small diameter torque-carrier rod instead of a recirculating ball-bearing screw assembly traveling along a large-diameter precision ball-screw shaft.

The remaining models of PSA mechanical snubbers, the PSA-1, -3, -10, -35, and -100, employ a recirculating ball-bearing screw assembly that travels along a ball-screw shaft when activated (see Figures 2 and 3, attached). However, the PSA-35 and PSA-100 models of snubbers are designed with the recirculating ball assembly coupled to a planetary gear system. The torque-carrier assembly engages the planetary gears by means of a pinion gear. The use of this gearing system is the principle difference between the PSA-35 and PSA-100 models of snubbers and the remainder of the PSA mechanical snubber product line.

Based on the foregoing, it can be stated there are three distinct designs utilized in PSA mechanical snubbers.

# PSA-1/4 AND 1/2 SNUBBERS

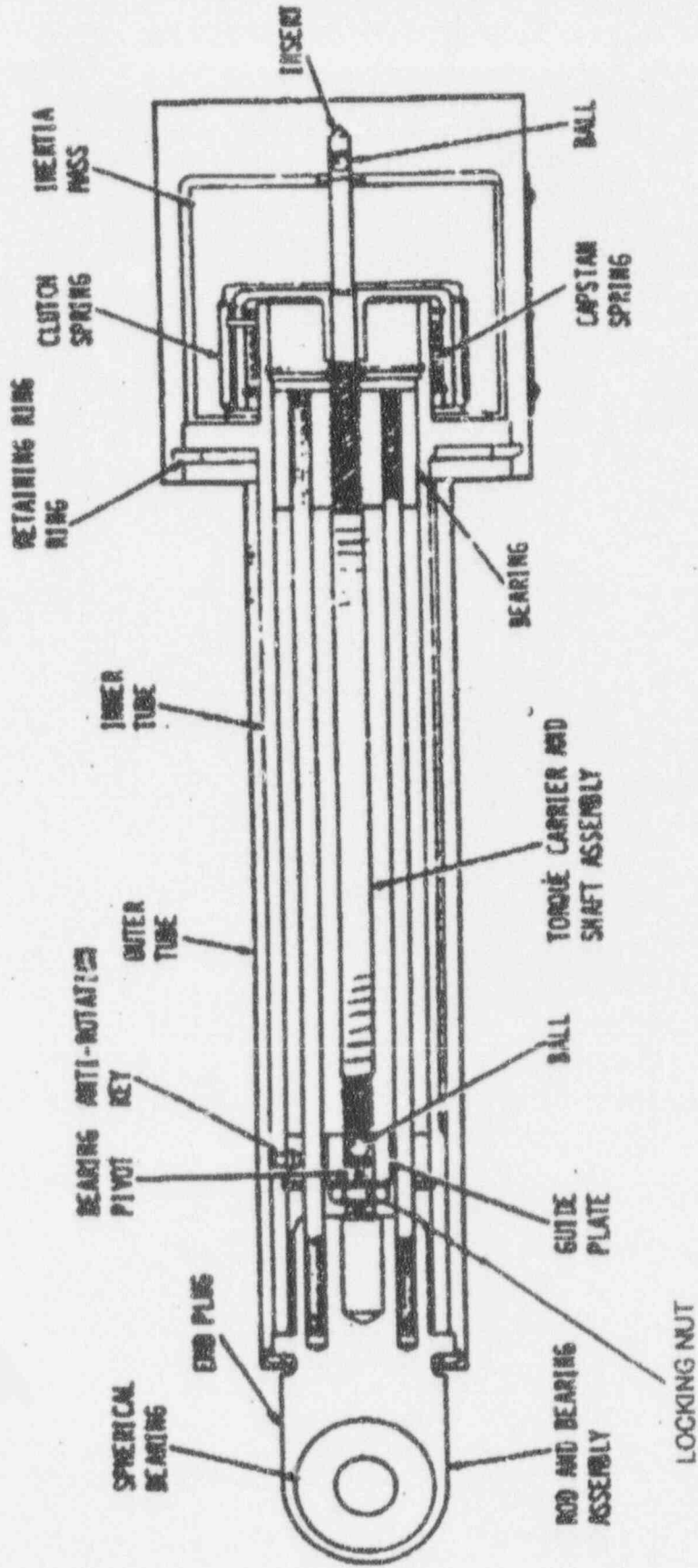


FIGURE 1

# PSA-1, 3 AND 10 SNUBBERS

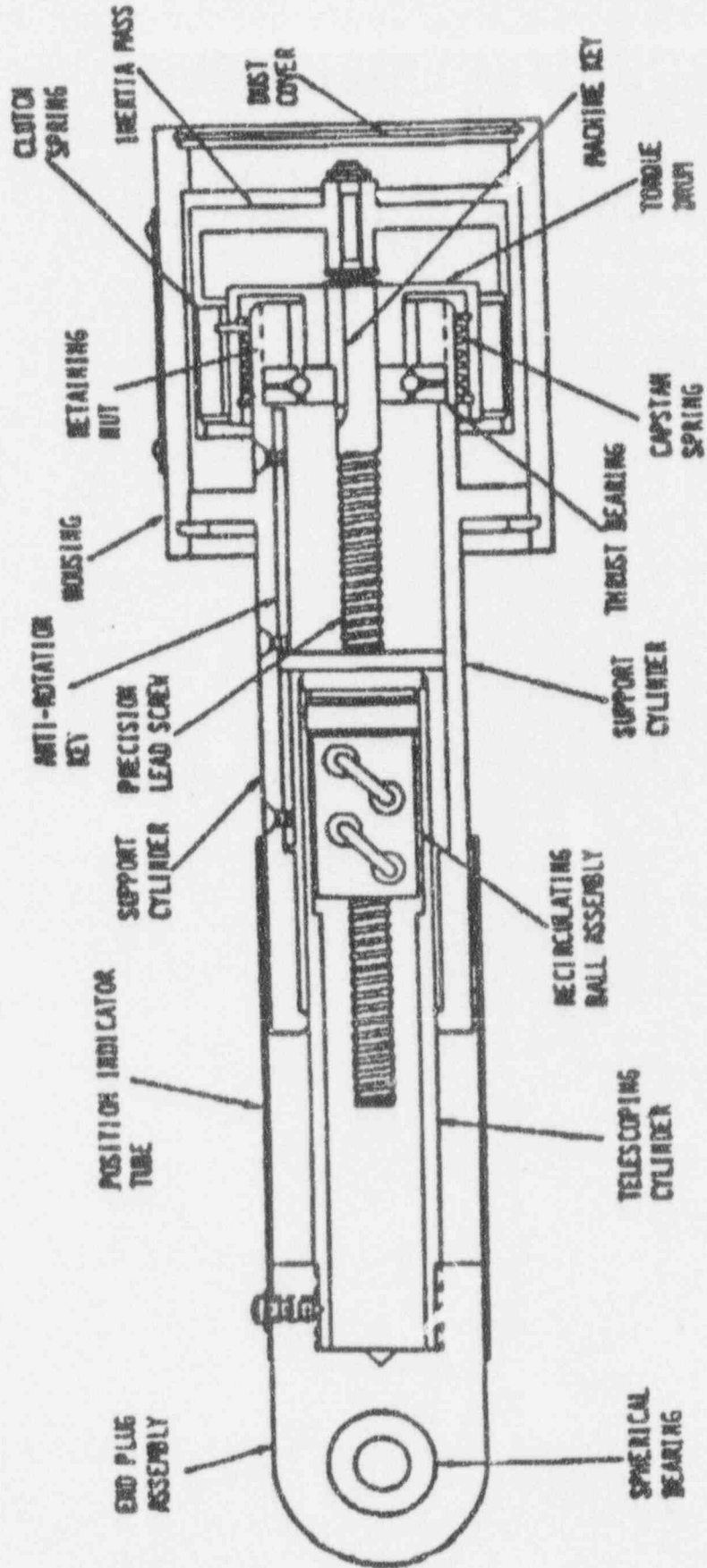


FIGURE 2

# PSA-35 AND 100 SNUBBERS

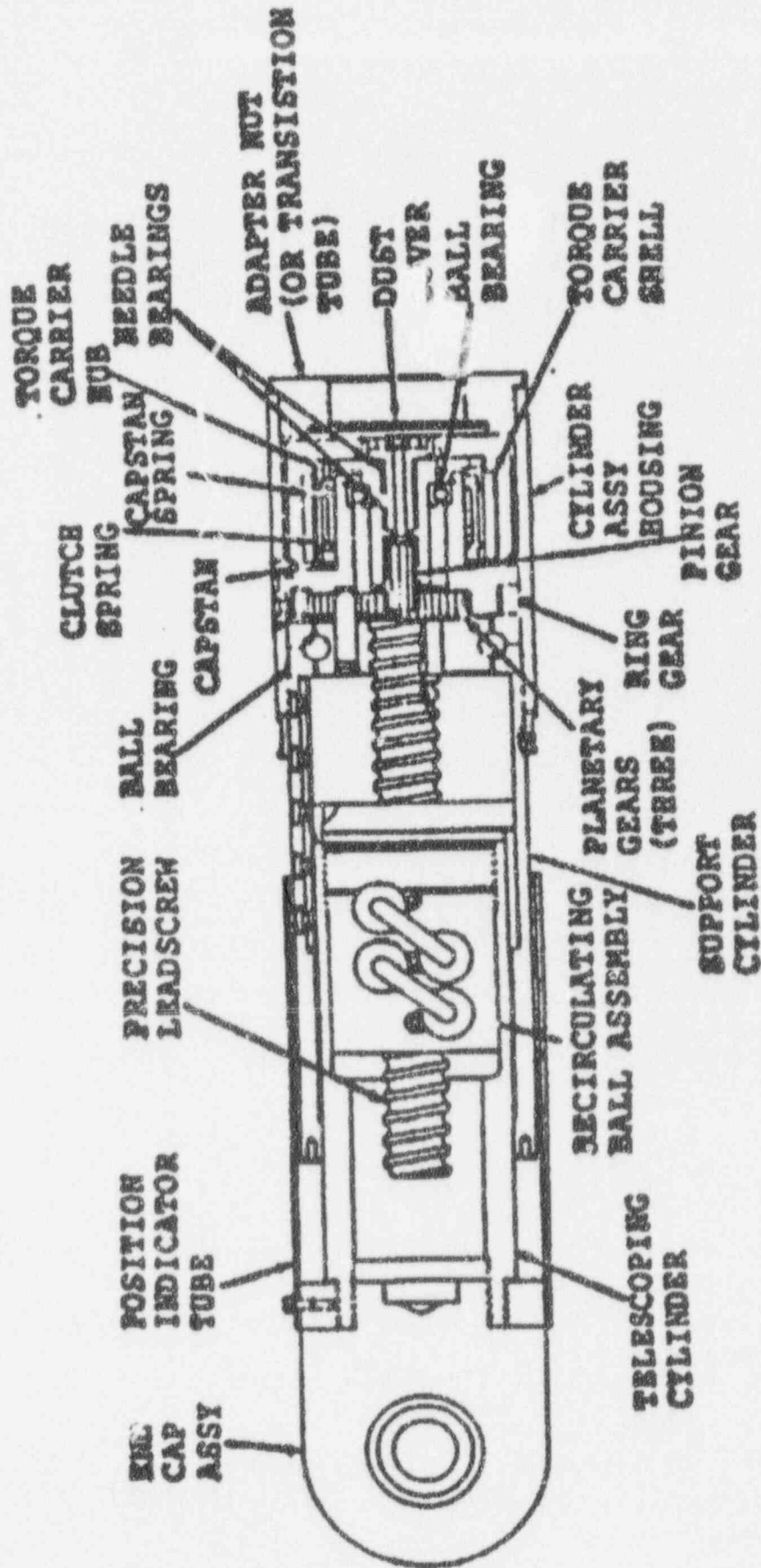


FIGURE 3