

INITIAL REPORT 10CFR PART 21 REPORT OF A POTENTIAL SAFETY HAZARD

1. ISSUED TO:

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<u>P. J. Hoffmann</u>	VP Engineering
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Date:	<u>July 19, 1995</u>
File No.:	<u>F-36674A/B/C/D</u>
Serial No.:	<u>T-36674A/B/C/D</u>
Type:	<u>GS2N</u>
Ref.:	<u>N/A</u>
Part No.:	<u>75233A06</u>
Dwg. No./	<u>75233A</u>
Rev. Level:	<u>D</u>

PREPARED BY: Richard Kling
 TITLE: Supv. N/N Prod. Eng.
 PART NAME: Nut-Lock-Flex Loc Reg. Height

DESCRIPTION OF DEFECT:

The possibility of the regular height flex loc nut part number
75233A06 not fully engaging the locking feature of threads.
See attachment #1

2. ENGINEERING EVALUATION & RECOMMENDATION:

See attached page

Evaluation/Recommendation Prepared By: _____ Title: _____ Date: _____
 Approved by Mgr.-Navy/Nuclear Product Engineering: _____ Date: _____

3. DISPOSITION, CHECK ONE

- Yes, this constitutes a safety hazard and requires that a report be prepared (Form NN-0002)
 No, this does not constitute a safety hazard and does not require any further reporting

Disposition by D-R President: *Jennings J. Williams* Date: 26 Jul 95

RETURN TO MGR.-NAVY & NUCLEAR PRODUCT ENGINEERING

2. ENGINEERING EVALUATION & RECOMMENDATION:

To provide 100% assurance that the locking portion of a nut would be fully engaged with threads of the mating linkage pin would require nut FLEXLOC (thin) DRESSER-RAND part number 75232A06 as shown on attachment #2. The regular series FLEXLOC nut does not provide full thread engagement of the locking feature, based on nominal part dimensions as shown on attachment # 1.

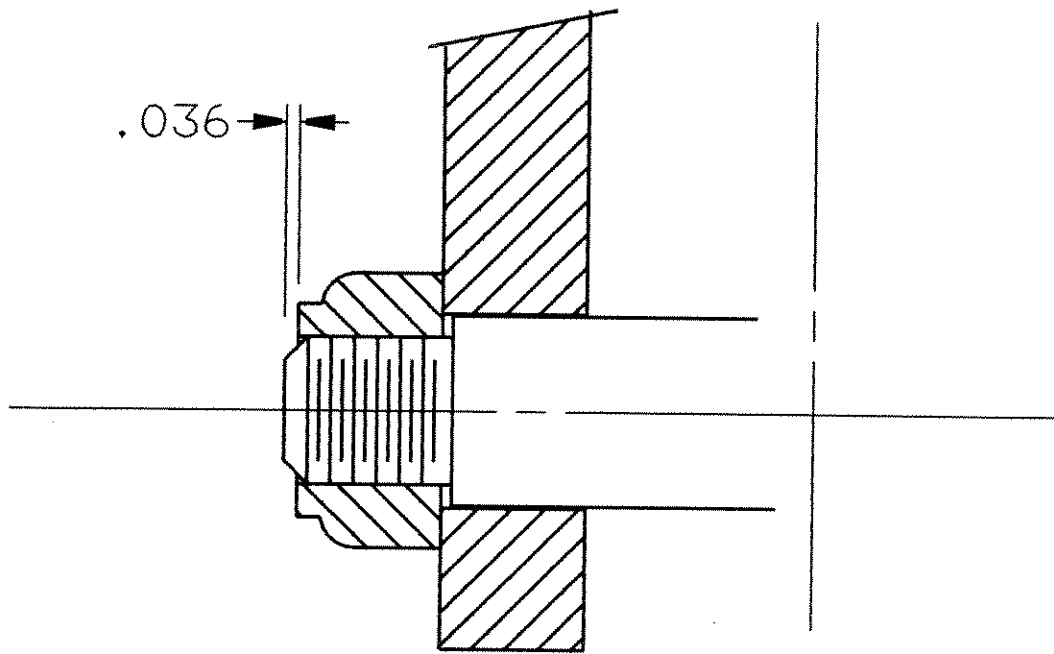
During a seismic event or adverse vibration condition the locking force could be questionable. With the thinner nut DRESSER-RAND part number 75232A06 would provide a better design because of the greater assurance of full locking feature engagement by meeting the design requirements for the above conditions.

Based on the information above, Product engineering has the following recommendations.

1. This defect does constitute a safety hazard and requires that a report be prepared.
2. Review the Terry nuclear bill of materials that call out either of these nuts and evaluate the individual applications.
3. All nuclear customers should be made aware of this potential defect.

Evaluation/Recommendation Prepared by: *Richard King* Title: Product Eng. Date: 7-20-95

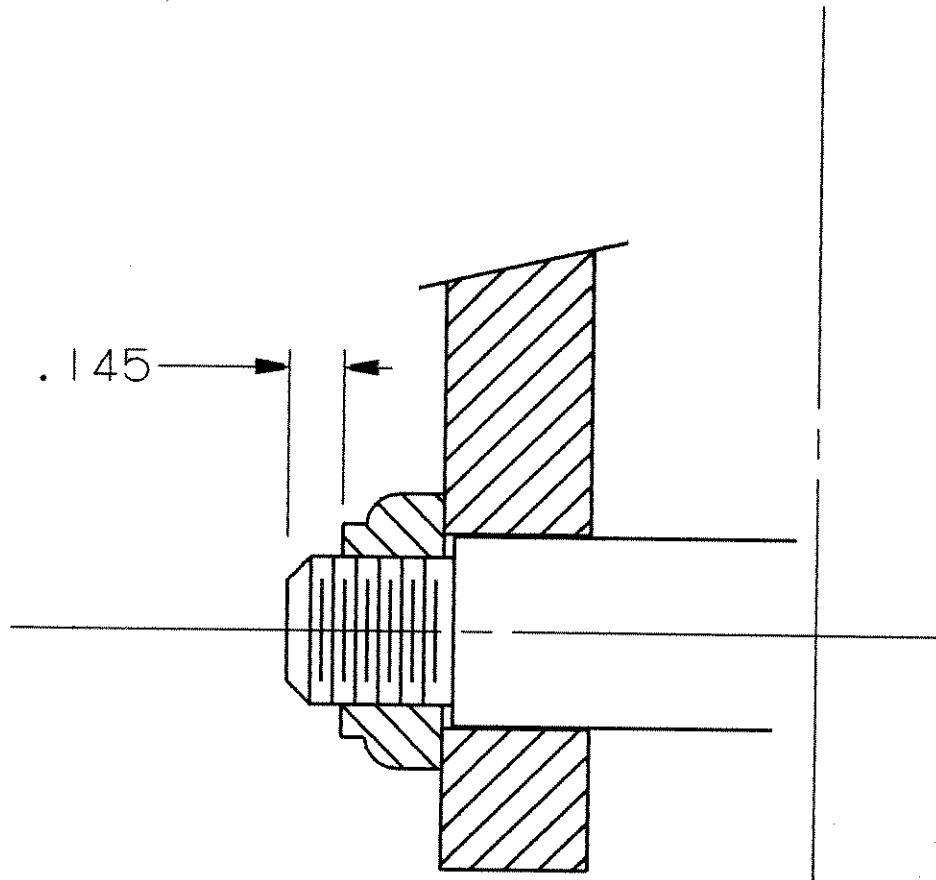
Approved by Mgr.-Navy/Nuclear Product Engineering: *AM Loughlin* Date: 7-25-95



REGULAR NUT

DRESSER-RAND P/N 75233A06
SPS-FLEXLOC NO. 21FA616

SCALE 2:1



THIN NUT

DRESSER-RAND P/N 75232A06
SPS-FLEXLOC NO. 21FK616

SCALE 2:1

DRESSER RAND

Steam Turbine, Motor & Generator Division
Wellsville, NY

Inter-Office Correspondence

To: Peter Salvatore

Copy: H. Paris
D. Weimer
P. Hoffman
J. Gegus

Date: August 24, 1995

From: Ed Grandusky

Subject: 10 CFR Part 21 Report #39

Text: The final report for the Initial Part 21 issued on July 19 is attached. A copy of this report has been sent to the NRC as required. All Nuclear Power plants using Terry Turbines should be sent a service bulletin, as soon as possible, instructing them to inspect all applications of Flexloc locknuts as outlined in this report. Product Engineering will be available, if needed, to assist your department in issuing this bulletin.


Ed Grandusky
Nuclear Product Engineer

8/24/95

FINAL REPORT 10CFR PART 21
REPORTING OF DEFECTS AND NON-COMPLIANCE

PREPARED BY: Ed Grandusky
TITLE: Nuclear Product Engr.
DATED: 8/24/95
TIME: 4:30 AM/PM

File No.: F-36674 A/B/C/D
Serial No.: T-36674 A/B/C/D
Type: GS-2N
Ref.: N/A
D-R Part No.: 75233A06
D-R Dwg. No./ 75233A
Rev. Level: D

PART NAME: Nut, Lock-Flexloc Reg Hgt.

1. Description of Defect or Non-Compliance:

Regular locknut, SPS-Flexloc no. 21FA616, D-R p/n 75233A06 may be installed on governor valve linkages where the thinner locknut, SPS-Flexloc no. 21FK616, D-R p/n 75232A06 is required.

See Attachment, Pg. _____ as required

2. Safety Hazard Created or Non-Compliance:

Inadequate thread engagement in the thicker locknut may result in linkage separation if the nut loosens from vibration and spins off. This will result in loss of turbine control capability.

See Attachment, Pg. _____ as required

3. Number and Location of all such components which contain this defect or fail to comply with 10CFR21:

One confirmed misapplication at Calverts Cliffs.

See Attachment, Pg. _____ as required

4. Corrective Action by the following individual Ed Grandusky By Date 9-15-95

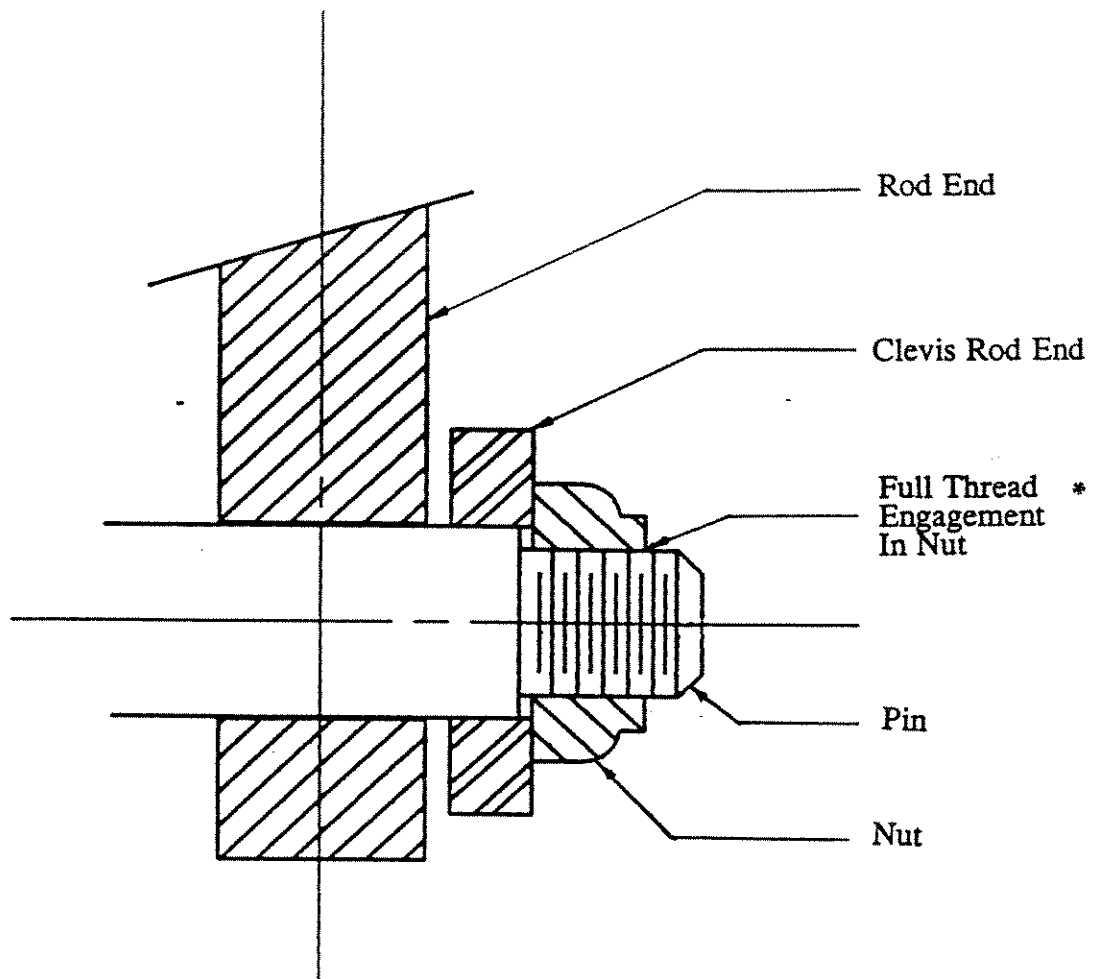
All applications of thick nut p/n 75233A06 on control linkages will be reviewed to insure there application is correct.

See Attachment, Pg. _____ as required

5. Advice to Customer related to defect or non-compliance:

Inspect all applications of locknuts on the control linkage for full thread engagement in locknut.

See Attachment, Pg. 2 as required



*** All threads in the locknut must be engaged by the threads on the pin. Amount of exposed threads will vary with application.**

TYPICAL ASSEMBLY