



December 19, 1978
L-78-391

Mr. C. E. Murphy, Chief
Reactor Construction and Engineering Support Branch
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. Murphy:

Re: RII:RWW
50-389/78-10

Florida Power & Light Company has reviewed the subject inspection report and its response is contained in Attachment A. There is no proprietary information contained in the report.

Very truly yours,

Robert E. Uhrig
Vice President

REU:LLL:cf

Attachment

cc: Mr. James P. O'Reilly
Office of Inspection and Enforcement
Harold F. Reis, Esquire

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ATTACHMENT A

RESPONSE TO RII:RWW, 50-389/78-10

Finding 1: 2 Inch Target Rock Safety Injection Valve Deficiency

The RII inspector noted that both CE and the RII had informed FPL of an excessive pressure drop with the subject valves, and that FPL appeared to incorrectly evaluate the incident as non-reportable, contrary to CE's conclusion that it indeed was reportable under 10 CFR 50.55(e).

Response:

We wish to note that 10 CFR 50.55(e) clearly states that the holder of the construction permit is responsible for the determination of whether a construction incident is reportable, and not the NSSS vendor. FPL has used the assistance of a number of parties, including CE, in its determination of the reportability of this item, but by no means does the opinion of an outside organization bind us to its conclusion.

It appears that the major difference between RII and FPL, regarding the reportability of this item, lies in the interpretation of the phrase in 10 CFR 50.55(e)(ii), "a significant deficiency in final design." (Emphasis added.) FPL's review of this problem concluded that the issue was a valid safety-related defect, but not a significant one; therefore, no reporting was required. This judgement is based on the fact that (1) the valves were not to be installed for sometime, (2) the problem was identified through normal QA channels (via CE), and (3) the repair was minor and easily performed without extensive evaluation or redesign. Based upon the above, FPL must take exception to the findings noted by the inspector.

It is FPL's opinion that problems such as the above, identified and resolved through routine channels, are normal repair items typically encountered on a construction site. Due to the fact that safety-related equipment was involved, FPL invoked the evaluation procedures and maintained records of the resolution to ensure proper handling of the issue and compliance with the appropriate QA procedures.

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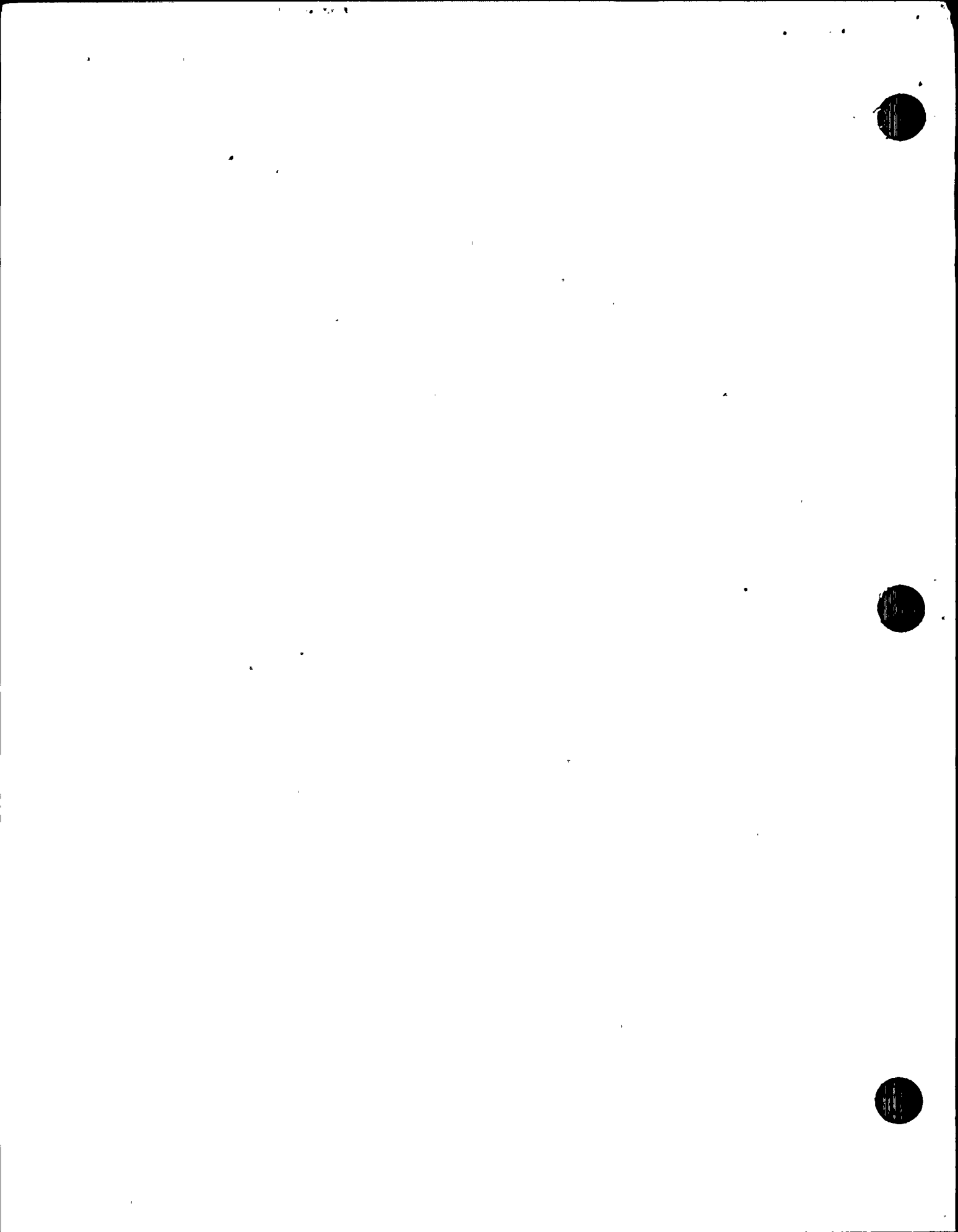
Finding 2: Ingersoll-Rand (I-R) Low Pressure Safety (LPSI) and Containment Spray Pump (CSP) Deficiency

The RII inspector noted that FPL knew of a problem with an impeller locking nut assembly working loose at one of its other plants (Turkey Point) in November 1975 and was informed by RII on August 23, 1978 of the potential deficiency as well. The inspector further states that despite "knowledge of this potential significant deficiency in final design" FPL failed to report the matter to the NRC in accordance with 10 CFR 50.55(e).

Response 2:

This issue arose from FPL's concern over a maintenance item. The Turkey Point problem was resolved by tack-welding the nut tight, and in 1975 FPL requested assurance from I-R that this or some other satisfactory method of securing the locknuts for pumps to be supplied for St. Lucie Unit 2 would be provided. At this time the pumps were not yet manufactured. We are attaching copies of our correspondence on this matter, which were not available to the inspector, which we believe will further clarify the issue. Our opinion on the significance of this item is the same as that for the finding above. This is a minor item, picked up by FPL's normal QA and preventative maintenance program and is non-reportable. Further, a deficiency either in final design or construction, has not been identified with the pumps supplied for Unit 2. Based upon the above, FPL must take exception to the finding noted by the inspector.

FPL believes that utilities which use the experiences of other units to uncover and correct problems before they develop, as happened in these instances, should be commended, and not found to be in blanket non-compliance with NRC reporting procedures. Should RII disagree with our interpretation of "significant", we suggest that further discussion to clarify the issue may be appropriate.





November 21, 1975

EBASCO SERVICES, INC.
Two Rector Street
New York, New York 10006

COMBUSTION ENGINEERING
P. O. Box 500
Windsor, CT 06095

Attention: Mr. L. Tsakiris,
Project Manager

Attention: Mr. A. S. Jameson,
Project Manager

ST. LUCIE PLANT
UNIT #1 - 1974 - 890 MW INSTALLATION
UNIT #2 - 1979 - 890 MW EXTENSION
ST. LUCIE UNIT #2
PSL 2 LPSI AND CONTAINMENT SPRAY PUMPS
FILES: CE-950-0775 AND NY-422527
FLO-566, FF-860

Gentlemen:

FPL's Turkey Point nuclear units we use pumps for Residual Heat Removal service which are of the same brand (I-R) and similar in design to PSL 2 LPSI and containment spray pumps. During disassembly of the Turkey Point pumps for seal maintenance it was observed on more than one occasion that the impeller locking nut assembly had worked loose. FPL tack-welded the locknut assemblies to preclude the possibility of loosening.

Indications from the local I-R representative are that the impeller locknut assemblies to be used at PSL 2 are the same as those furnished at Turkey Point. Please obtain assurance from I-R that they will provide locknuts secured by tack-welding or some other satisfactory method. Also since there was considerable difficulty experienced with gasket leakage at Turkey Point please obtain from I-R assurance that we will not have this problem at St. Lucie 2.

Yours very truly,

C. S. Kent
Project Manager

RLS/mrb

See Attachment

Handwritten notes in a circle: 2-76-54, 2-5-76, 1

Handwritten notes in a circle: L-CE-1326, 4-1-76

Handwritten stamp: 79011810

Handwritten notes at bottom right: S. J. ...

Handwritten signature: Chross

Mr. A. S. Jameson
P. Two
November 21, 1975

RE: FLO-566, FF-860

cc: Mr. C. B. Amos
Mr. Lou Borchardt
Mr. G. E. Crowell
Mr. R. A. DeLorenzo
Mr. J. D. Distel
Mr. J. M. Fisher
Mr. O. R. Gray
Mr. K. N. Harris
Mr. R. W. Kammann
Mr. J. L. Legier
Mr. G. N. Lemmon
Mr. J. E. Ramondo
Mr. W. H. Rogers, Jr.
Mr. A. D. Schmdit
Mr. D. J. Stephens
Dr. R. E. Uhrig
Mr. J. E. Vessely
Mr. C. E. Waddell
Mr. L. J. Weber
Mr. N. T. Weems



April 6, 1976

L-CE-1328

St. Lucie Plant
Unit No. 2 - 1978-890 MW Extension

Mr. C. S. Kent
Engineering Project Manager
Florida Power & Light Co.
P. O. Box 3100
Miami, Florida 33101

SUBJECT: LPSI PUMPS

Dear Mr. Kent:

FP&L letter FF-860 of November 21, 1975 advised C-E that you had experienced on the Turkey Point plant loosening of the impeller locknut assembly on the Ingersoll-Rand residual heat removal pumps and gasket leakage, and requested assurance from the manufacturer that these same problems would not occur with Unit 2 LPSI and containment spray pumps.

We have taken up this matter with Ingersoll-Rand, the supplier of the LPSI pumps in the C-E scope, and they have responded to the concern about the locknut assembly (but not the gasket leakage problem); two (2) copies of the Ingersoll-Rand letter of March 23, 1976 are attached for your information. We will go back to Ingersoll-Rand to determine what remedy they propose to eliminate the gasket leakage problem that you have faced on the Turkey Point pumps and will let you know their response to this other concern as soon as we receive it.

Very truly yours,

A. S. Jameson
Project Manager

ASJ/es
Enclosures (2)

- cc: T. O. Mathisen w/1
- L. Tsakiris
- J. D. Distel
- E. Z. Zuckman
- J. R. Santosuosso
- J. R. Eansen
- R. A. DeLorenzo
- L. Leskovjan
- W. H. Rogers, Jr.

- K. Harris
- G. Crowell
- C. W. Dakin
- B. J. Escue
- J. R. Ginder
- R. W. Kammann
- S. W. Seabury
- C. E. Waddell
- E. H. Smith

79011807019

F. P. & L. CO - PWR. PLT. ENG'S			
DATE RECEIVED		APR 9 1976	
PROJ. MGR.	ASST. PROJ. MGR.	DESIGN	CONSTRUCTION
INSPECTION	MAINTENANCE	OPERATION	TRAINING
SALES	MARKETING	GENERAL	ADMINISTRATIVE
RESEARCH	DEVELOPMENT	TESTING	QUALITY CONTROL
LEGAL	FINANCIAL	PLANNING	COMPUTER FILES
SECURITY	ENVIRONMENTAL	SAFETY	LOSS PREVENTION
FILE #:			



BRADY



A.S.J. MAK 20 1976

Ingersoll-Rand Company

Established 1871

PHILLIPSDURG, N. J. 08865

Combustion Engineering, Inc.
1000 Prospect Hill Road
Windsor, CT 06095

23 MR 76

Attention: Mr. A. S. Jameson
Project Manager

Subject: Florida Power & Light
St. Lucie Unit #2
C.E. P.O. 9500775
LPSI Pumps
I-R Ref: 001-36382

Reference: (A) C.E. letter L-PCE-408 dated 19 DE 75.

Gentlemen:

In response to Ref. (A) on shaft/impeller locking nuts, I-R has investigated several occurrences in which the locking nuts loosened and found that the causes were either improper installation after maintenance or operation of the unit in wrong rotation while installing motor leads.

To assure that the locking nuts are properly applied, we are expanding the installation/assembly instructions to clarify this operation. In addition, we are also investigating other methods of positively locking the nuts to the shaft to prevent loosening. We anticipate that this method will be finalized in time to be implemented on the present contract. On the units in the field it is acceptable to tack weld the two nuts together after they are properly installed. Proper installation should be to torque the jam nut into place then while holding the jam nut to prevent rotation torque the cap nut into place.

We apologize for such a late response but as indicated above, we were unaware of any serious problems prior to your letter.

If there are any questions, please feel free to contact this office or our Hartford branch office.

Very truly yours,

INGERSOLL-RAND COMPANY

M. S. DeNardo
Cameron Nuclear Pump Section

C/2 Combustion Engineering
Attn: W. C. Standin
R. J. Landrigan

C/2 I-R Hartford, C. Brickley (1)

C/2 I-R Boston, A. A. Roe (1)

COPY

EBASCO SERVICES
INFORMATION

February 3, 1976
SL-2-76-54
File: NY-422527

Mr C S Kent
Engineering Project Manager
Florida Power & Light Company
P O Box 013100
Miami, Florida 33101

Dear Mr Kent:

Re: ST LUCIE PLANT
1979 - 890 MW (c) EXTENSION - UNIT NO. 2
CONTAINMENT SPRAY PUMPS

Reference: FP&L Letter FLO-566 dated November 21, 1975

F.P. & L. CO. 1 PWR. PLT. ENG'G

DATE RECEIVED FEB 6 1976

ROGERS		VAN TATE	
NEAL		DIEHL	
KENT		SIZO	
BRAN		PARST	
FRIES		GILBERT	
FLUGGER		VORAN	
CHRISTIAN		MILYAN	
BROUWST		CHP ENGR FILED	
LE BLEU		CENTRAL FILED	
		DDG. CTL FILED	

REF: 1975

Pursuant to your request we have been advised by Ingersoll-Rand (in their letter of January 26, 1976, a copy attached) that as a result of the measures undertaken the problem of loosening of the Impeller nuts and gasket leakage as experienced on RHR Pumps at Turkey Point Station will not be repeated on St Lucie Unit No. 2 Containment Spray Pumps.

- 1) Presently I/R is investigating the use of other methods to ensure that the Impeller locknut does not loosen itself. However, as a minimum the locknuts will be shop-tack welded.
- 11) The problem of gasket leakage has been resolved by utilizing an EPT 'O' ring in lieu of a flat fiber washer between the shaft and shaft sleeve.

I/R has also given assurance that any modifications made in future to improve the design of these type of pumps will also be used in the design of St Lucie No. 2 Containment Spray Pumps.

COPY

EBASCO SERVICES

INCORPORATED
- 2 -

February 3, 1976
SL-2-76-54

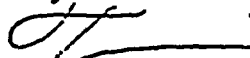
C S Kent

We hope the above information will answer all your questions. Should you desire any further clarification please advise by February 20, 1976.

Very truly yours,

F J Sweeney, Jr
Chief Mechanical-Nuclear Engineer.

By:



T O Mathisen
Supervising Engineer

JDD/mtt

Attachment

IH:lh

cc: W H Rogers, Jr (2)

R E Uhrig
C B Amos
A D Schmidt
H D Mantz
K N Harris
O R Gray
R A DeLorenzo
J E Vessely
G Crowell
L Dorhardt
L Tsakiris
D J Stephens
J E Ramondo
J D Distel
G N Lemmon