

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8803170090 DOC. DATE: 88/02/19 NOTARIZED: NO DOCKET #
 FACIL: 50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co. 05000325
 50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co. 05000385
 AUTH. NAME AUTHOR AFFILIATION
 COLLINS, D. M. Region 2, Ofc of the Director
 RECIP. NAME RECIPIENT AFFILIATION
 WOODY, C. D. Florida Power & Light Co.

SUBJECT: Ack receipt of 880111 analytical results of spiked liquid samples as part of NRC Confirmatory Measurements Program. Comparison of results to known values & acceptance criteria for comparisons encl for info.

DISTRIBUTION CODE: IE06D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: Environ & Radiological (50 DKT)-Insp Rept/Notice of Violation Respons

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-2 LA	1 0	PD2-2 PD	1 1
	TOURIGNY, E	1 1		
INTERNAL:	ACRS	2 2	AEOD/DOA	1 1
	AEOD/DSP	1 1	NMSS/LLOB 5E4	1 1
	NMSS/SJOB 4E4	1 1	NRR/DLPQ/PEB11B	1 1
	NRR/DOEA/EAB11E	1 1	NRR/DREP/EPB10D	1 1
	NRR/DREP/RPB10A	2 2	NRR/PMAS/ILRB12	1 1
	OGC 15-B-18	1 1	REG FILE 02	1 1
	RES	1 1	RES/DRPS DIR	1 1
	RGN2 FILE 01	1 1	RGN2/DRSS/EPRPB	1 1
	RGN4 MURRAY, B	1 1		
EXTERNAL:	LPDR	1 1	NRC PDR	1 1
	NSIC	1 1		

Official

1 9 1988

Florida Power and Light Company
ATTN: Mr. C. O. Woody
Group Vice President
Nuclear Energy Department
P. O. Box 14000
Juno Beach, FL 33408

Gentlemen:

SUBJECT: DOCKET NOS. 50-335 AND 50-389, CONFIRMATORY MEASUREMENT RESULTS,
SUPPLEMENT TO INSPECTION REPORT NOS. 50-335/87-24 AND 50-389/87-23

As part of the NRC Confirmatory Measurements Program, spiked liquid samples were sent on November 5, 1987, to your St. Lucie facility for selected radiochemical analyses. We are in receipt of your analytical results transmitted to us by your letter dated January 11, 1988, and subsequent to verification of your values as per our conversation by telephone on February 12, 1988, the following comparison of your results to the known values are presented in Enclosure 1 for your information. The acceptance criteria for the comparisons are listed in Enclosure 2.

In our review of these data all comparative results were in agreement. These data should be reviewed in greater detail by your cognizant staff members for any significant trends in the data among successive years in which samples have been analyzed by your facility.

These results and any results from previous years pertaining to these analyses will be discussed at future NRC inspections.

Sincerely,

ORIGINAL SIGNED BY
DOUGLAS M. COLLINS

Douglas M. Collins, Chief
Emergency Preparedness and
Radiological Protection Branch
Division of Radiation Safety
and Safeguards

Enclosures:

- 1. Confirmatory Measurement Comparisons
- 2. Criteria for Comparing Analytical Measurements

cc w/encls:

- K. N. Harris, Vice President
St. Lucie Nuclear Plant
- J. G. Boissy, Plant Manager
- J. B. Harper, Site QA Superintendent

bcc w/encls: (See Page 2)

8803170090 880219
PDR ADDCK 05000335
Q PDR

11
IEOL

bcc w/encl:
NRC Resident Inspector
DRS Technical Assistant
State of Florida
Document Control Desk

RII
WJG
WGloersen
2/17/88

RII
JK
JKahle
2/17/88

RII
JC
JCr1enjak
2/17/88

ENCLOSURE 1

Confirmatory Measurement Comparisons of H-3, Fe-55, and Sr-90 Analyses
for St. Lucie Nuclear Plant, November 5, 1987

<u>Isotope</u>	<u>Licensee (uCi/ml)</u>	<u>NRC (uCi/ml)</u>	<u>Resolution</u>	<u>Ratio (Licensee/NRC)</u>	<u>Comparison</u>
H-3	2.04 E-5	2.28 ± 0.05 E-5	46	0.89	Agreement
Fe-55	1.60 E-5	1.39 ± 0.03 E-5	46	1.15	Agreement
Sr-90	2.43 E-6	2.82 ± 0.11 E-6	26	0.86	Agreement

Note: Due to the extended decay time for the isotope Sr-89, the analytical results were not compared.

ENCLOSURE 2

Criteria for Comparing Analytical Measurements

This enclosure provides criteria for comparing results of capability tests and verification measurements. The criteria are based on an empirical relationship which combines prior experience and the accuracy needs of this program.

In this criteria, the judgement limits denoting agreement or disagreement between licensee and NRC results are variable. This variability is a function of the NRC's value relative to its associated uncertainty. As the ratio of the NRC value to its associated uncertainty, referred to in this program as "Resolution"¹ increases, the range of acceptable differences between the NRC and licensee values should be more restrictive. Conversely, poorer agreement between NRC and licensee values must be considered acceptable as the resolution decreases.

For comparison purposes, a ratio² of the licensee value to the NRC value for each individual nuclide is computed. This ratio is then evaluated for agreement based on the calculated resolution. The corresponding resolution and calculated ratios which denote agreement are listed in Table 1 below. Values outside of the agreement ratios for a selected nuclide are considered in disagreement.

$$^1 \text{ Resolution} = \frac{\text{NRC Reference Value for a Particular Nuclide}}{\text{Associated Uncertainty for the Value}}$$

$$^2 \text{ Comparison Ratio} = \frac{\text{Licensee Value}}{\text{NRC Reference Value}}$$

TABLE 1

Confirmatory Measurements Acceptance Criteria
Resolutions vs. Comparison Ratio

<u>Resolution</u>	<u>Comparison Ratio for Agreement</u>
< 4	0.4 - 2.5
4 - 7	0.5 - 2.0
8 - 15	0.6 - 1.66
16 - 30	0.75 - 1.33
51 - 200	0.80 - 1.25
>200	0.85 - 1.18

DISTRIBUTION

Do not File w/o encl.
PD22 Reading w/o encl.
D. Miller w/encl.
E. Tourigny w/encl.

February 12, 1988

DOCKET NO(S). 50-335 and 50-389

Mr. C. O. Woddy
Executive Vice President
Florida Power and Light Company
Post Office Box 14000
Juno Beach, Florida 33408

SUBJECT:

ST. LUCIE UNITS 1 AND 2

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated _____.
- Draft/Final Environmental Statement, dated _____.
- Notice of Availability of Draft/Final Environmental Statement, dated _____.
- Safety Evaluation Report, or Supplement No. _____ dated _____.
- Environmental Assessment and Finding of No Significant Impact, dated _____.
- Notice of Consideration of Issuance of Facility Operating License or Amendment to Facility Operating License, dated _____.
- Bi-Weekly Notice; Applications and Amendments to Operating Licenses Involving No Significant Hazards Considerations, dated 1/27/88 [see page(s)] _____.
- Exemption, dated _____.
- Construction Permit No. CPPR-_____, Amendment No. _____ dated _____.
- Facility Operating License No. _____, Amendment No. _____ dated _____.
- Order Extending Construction Completion Date, dated _____.
- Monthly Operating Report for _____ transmitted by letter dated _____.
- Annual/Semi-Annual Report- _____
_____ transmitted by letter dated _____.

Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosures:
As stated

cc: See next page

OFFICE	LA PD22						
SURNAME	D. Miller						
DATE	2/16/88						

