



Florida Power & Light Company, 6501 S. Ocean Drive, Jensen Beach, FL 34957

June 4, 2010

L-2010-116
10 CFR 50.90

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

Re: St. Lucie Plant Unit 1
Docket No. 50-335
Transmittal of Meteorological Data CD
Supporting License Amendment Request for Extended Power Uprate

In response to a NRC request, Florida Power & Light (FPL) formally transmits the St. Lucie Unit 1 meteorological input and output data for PAVAN and ARCON96. These data were used to calculate atmospheric dispersion factors in support of calculated doses reported in Licensing Report (LR) Section 2.9.2 of the License Amendment Request (LAR) for Extended Power Uprate (EPU). This information supplements the St. Lucie Unit 1 EPU LAR previously submitted to the NRC by FPL letter L-2010-078, dated April 16, 2010.

Enclosed please find a CD containing the PAVAN input and output files; ARCON96 input and output files; and a cross-reference of the ARCON case file names to the release-receptor pairs from Table 2.9.2-7 of LR Section 2.9.2. The attachment provides a description of the St. Lucie Unit 1 meteorological data input files and output, and of the ARCON96 release-receptor combination inputs cross reference given as Table 1.

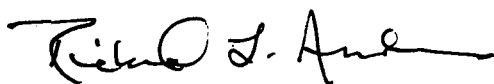
Please contact Mr. James Connolly, EPU LAR Manager, at 772-429-7852 should you have any questions.

A001
NRX

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on June 4, 2010

Very truly yours,

A handwritten signature in black ink, appearing to read "Richard L. Anderson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Richard L. Anderson
Site Vice President
St. Lucie Plant

Attachment: Description of the St. Lucie Unit 1 Meteorological Data Input Files and Output
ARCON96 Release-Receptor Combination Inputs Cross Reference

Enclosure: St. Lucie Unit 1 EPU Meteorological Data CD

Description of St. Lucie Unit 1 Meteorological Data Input Files and Output

Florida Power & Light formally transmits the St. Lucie Unit I meteorological input and output data for PAVAN and ARCON96 that were used to support Section 2.9.2 of the License Amendment Request for Extended Power Uprate (Attachment 5 to L-2010-078, April 16, 2010). The ARCON96 meteorological data that were utilized are from 2001 through 2004 and 2006, while the PAVAN joint frequency data that were utilized are from 2004 through 2007.

The PAVAN directory consists of an input file (with card image joint frequency data) with an output file included.

The ARCON96 directory includes the following types of files:

.MET -- These are the hourly card image inputs for each labeled year. The "screened" file for 2004 eliminated (9999 field filled) periods of time where the wind speeds were clearly bad (repeating or constant values for long periods of time).

.CFD -- These files are automatically generated by ARCON96.

.LOG -- These files are card image inputs for each of the on-site release-receptor pairs as described in Table 2.9.2-7 of the License Amendment Request for Extended Power Uprate. The table below cross-references the ARCON case file names to the release-receptor pairs from Table 2.9.2-7 of the License Amendment Request for Extended Power Uprate.

.RSF -- These files are ARCON96 printer output files for each of the input cases.

.QAO -- A special "QA" or "diagnostic edit" output file is provided/requested for one case that provided a needed reference to certain constants used inside ARCON96.

Table 1- ARCON96 Release-Receptor Combination Inputs Cross Reference

Directory Case	LR Release Receptor Pair	Release Point	Receptor Point
sl101	A	Stack/Plant Vent	N CR intake
sl102	B	Stack/Plant Vent	S CR intake
sl103	C	Stack/Plant Vent	Midpoint between CR intakes
sl104	D	RWT	N CR intake
sl105	E	RWT	S CR intake
sl106	F	RWT	Midpoint between CR intakes
sl107	G	FHB	Closest Point N CR intake
sl108	H	FHB	Closest Point S CR intake
sl109	I	FHB	Midpoint between CR intakes
sl110	J	Louver L-7B	N CR intake
sl114	K	Louver L-7A	S CR intake
sl115	L	Louver L-7A	Midpoint between CR intakes
sl116	M	Closest ADV	N CR intake
sl117	N	Closest ADV	S CR intake
sl118	O	Closest ADV	Midpoint between CR intakes
sl122	P	Closest Main Steam Line Point	N CR intake
sl123	Q	Closest Main Steam Line Point	S CR intake
sl124	R	Closest Main Steam Line Point	Midpoint between CR intakes
sl125	S	Closest Feedwater Line Point	N CR intake
sl126	T	Closest Feedwater Line Point	S CR Intake
sl127	U	Closest Feedwater Line Point	Midpoint between CR intakes
sl128	V	Containment Maintenance Hatch	N CR intake
sl129	W	Containment Maintenance Hatch	S CR Intake
sl130	X	Containment Maintenance Hatch	Midpoint between CR intakes
sl143	Y	Steam Jet Air Ejector	N CR intake