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FPL

December 7, 1995

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BUREAU OF
AIR REGULATION

Mr. A.A. Linero, P.E.
Administrator, New Source Section
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: **AIRS ID# AO43-0850001**
Amendment of FPL Martin Units 1 and 2 Operating and Construction Permits

In response to your letter of October 25, 1995, FPL is providing the following information that demonstrates that the Department rules given in 62-212.400 F.A.C. do not apply to our request to co-fire higher sulfur fuel oils with natural gas.

Change in the Method of Operation

FPL does not agree that co-firing fuel oil and natural gas is a change in the method of operation, regardless of the sulfur content of the fuel oil. The current operation permit provides for this operation when 1 percent fuel oil is co-fired with natural gas. When co-firing in this way, the controlling requirement is to assure that the sulfur dioxide *emissions limit* of 0.8 lb/mmBtu is met. The sulfur dioxide emission limit is a requirement of the New Source Performance Standards (NSPS) applicable to each unit [i.e., 40 Code of Federal Regulations (CFR) Part 60 Subpart D and rule 62-296.800 F.A.C.]. Co-firing is expressly allowed by the NSPS [refer to Section 60.43(c) which states: "Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels"]. In addition, as shown on the attached table which presents a comparison of emission when co-firing, emissions when co-firing would meet the NSPS emissions limits.

Capable of Accommodating

Even if the use of high sulfur oil is deemed a change in the method of operation, the Martin units would not be required to undergo PSD review due to the exemption in Rule 62-212.400(2)(c)4. F.A.C. which states:

"A modification that is to occur for any of the following reasons shall not be subject to the preconstruction review requirements of this section.....4) Use of an alternative fuel or raw material which the facility was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975..."

The Martin units "commenced construction" as defined in rule 62-212.200(19) F.A.C. prior to January 5, 1975 and were capable of accommodating any sulfur content fuel oil when the construction permits were issued on March 20, 1973. The emissions limits expressly stated in the construction permits and FDEP rules was the NSPS 40 CFR Part 60 Subpart D. Since the construction permit was issued, there have been no federally enforceable permit conditions that have limited the units ability to co-fire fuel oil and natural gas as long as the NSPS emission limit is met. As discussed on previous cases, FDEP-issued operation permits are not federally enforceable. Moreover, the use of the sulfur content in fuel is arguably not an emission limit but a description on how an emission limit would be met.

For these reasons the analysis of emission increases requested in your letter does not appear to be necessary, and I am requesting that the Department resume processing of the application in accordance with my previous request.

With respect to the Alternative Sampling Procedure you requested, FPL will follow this up with the Department at a later date.

As always, I would be pleased to discuss these issues with you or your staff. I may be reached at (407) 625-7661.

Very truly yours,



Rich Piper
Environmental Specialist
Florida Power & Light Company

cc: Tom Tittle

FDEP/SED

Example Emission Comparison for Co-Firing Residual Oil and Natural Gas at Martin Units 1 and 2

KBN/RGP
12/7/95

Fuel Parameters	Current Permit	Current Permit	Co-Firing with 2.5% Sulfur Fuel			Co-Firing with 1% Sulfur Fuel		
	(Oil firing Only)	(Gas firing Only)	Oil 29.21%	Gas 70.79%	Total	Oil 73.13%	Gas 26.87%	Total
Heat Content (Btu/gal)	150,952	NA	150,952	NA		150,952	NA	
Heat Content (Btu/cf)	NA	1,000	NA	1000		NA	1000	
Heat Content (Btu/lb)	18,300	21,956	18,300	21,956		18,300	21,956	
Heat Input (MMBtu/hr)	8,650	9,040	2,526	6,124	8,650	6,326	2,324	8,650
Fuel Input (lb/hr)	472,678	411,733	138,050	278,907	416,957	345,668	105,861	451,529
Fuel Input (1,000 gal or MMcf)	57.3	9.04	16.74	6.12		41.91	2.32	
Sulfur Content:								
Oil (%)	0.70%	NA	2.50%	NA		1.00%	NA	
gas (grains/100cf)	NA	1.0	NA	1.0		NA	1	
Sulfur Dioxide								
Basis	NSPS Limit	1 gr/100cf	2.5% Sulfur	1 gr/100cf		1% Sulfur	1 gr/100cf	
Emissions Rate (lb/MMBtu)	0.8	0.0029	2.73	0.0029	0.8	1.09	0.0029	0.8
Emissions (lb/hr)	6,920	25.83	6,903	1,750	6,920	6,913	6.64	6,920
Particulate Matter								
Basis	NSPS Limit	AP-42	AP-42	AP-42		AP-42	AP-42	
Emissions Rate (lb/MMBtu)	0.1	0.003	0.17	0.003	0.05	0.08	0.003	0.06
Emissions (lb/hr)	865	27.12	438	18.37	457	520	6.97	527
Nitrogen Oxides								
Basis	NSPS Limit	NSPS Limit	NSPS Limit	NSPS Limit		NSPS Limit	NSPS Limit	
Emissions Rate (lb/MMBtu)	0.3	0.2	0.3	0.2	0.23	0.3	0.2	0.27
Emissions (lb/hr)	2,595	1,730	758	1225	1,983	1,898	465	2,363
Carbon Monoxide								
Basis	AP-42	AP-42	AP-42	AP-42		AP-42	AP-42	
Emissions Rate (lb/MMBtu)	0.033	0.04	0.033	0.04	0.038	0.033	0.04	0.035
Emissions (lb/hr)	286.5	361.6	84	245	329	210	93	302
Volatile Organic Compounds								
Basis	AP-42	AP-42	AP-42	AP-42		AP-42	AP-42	
Emissions Rate (lb/MMBtu)	0.005	0.0014	0.005	0.0014	0.002	0.005	0.0014	0.004
Emissions (lb/hr)	43.55	12.75	12.72	8.63	21.35	31.65	3.28	35.13