



THE CITY OF KEY WEST

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BUREAU OF
AIR REGULATION

Mr. Joe Cahn
Department Environment Protection
Division of Air Resource management
Bureau of Air Regulation Title V 2600
Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Soot Blowing Modification

Using steam the original soot blowing system caused major problems with our equipment. The loose ash was converted to a solid state which jammed our rotaries and the steam damaged our tubes.

PROBLEMS:

1. The steam had high moisture content, which caused the ash to harden and stick to the tubes, making it harder to clean the generating section.
2. The lances on the fixed soot blowers did not last as the ends were constantly burning off.
3. The steam lances did damage to the tubes, which caused tube failures.
4. The I.K. steam lance cut the screen tubes.
5. The chain driven rotary would always come off and the rotary would stick open endangering our steam supply to the turbine. There was a need to constantly make adjustments to maintain the correct pressure.
6. The labor, parts and time to maintain the system was very expensive.
7. Using steam caused the boiler water levels and temperatures to cycle.
8. The units plugged up faster and required longer down time to clean the ash residue.

The new system is simple and solves many of the above problems.

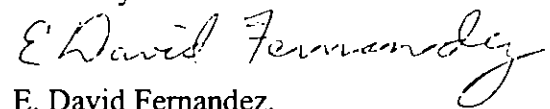
ADVANTAGES:

1. New system uses dry air at the same pressure 120 psi.
2. The soot ports are positioned for every other row which allows for more efficient cleaning.
3. The units stay up longer without plumage.

Key to the Caribbean - Average yearly temperature 77° F.

4. Maintenance is low because of the simplicity of the system.
5. The new system does not effect the temperatures or water levels of the units, so the units do not have the cycling problems.
6. Fewer tube problems will save the facility time, labor and money.

Sincerely



E. David Fernandez,
Utilities Director

cc: SD