### INTEROFFICE MEMORANDUM

**Date:** 20-Jul-2000 02:14pm

From: J-Michael.Kennedy

J-Michael.Kennedy@fpc.com

Dept: Tel No:

Subject: Tiger Bay Package Boiler Permit

Jonathan,

Sorry I didn't get this to you sooner. As we discussed, FPC agrees to the following specifications in the Tiger Bay package boiler construction permit:

EPA Method 7E for NOx testing.

Opacity standard of 20% for normal operating conditions.

Up to 27% opacity allowed for one 6-minute period per hour.

I think that covers what we discussed. Feel free to call me with questions. Thank you.

Mike Kennedy (727) 826-4334

Jonathan,

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Mike Kennedy (727) 826-4334

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Date:	5/16/00
Ta:	Jonatha Holton
FAX#:	(350) 9 x 2 - 6979
·	<u>( )</u>
From:	Mike Konnedy
FAX #:	(727) 826-4216
Phone #:	(727) 826 - 4334
4	Total number of pages including cover page.
	at (727) 826at (727) 826
Comments:	

02,418/2008 \_\_09:44\_\_ \_\_941-619-6166\_\_ MATTUNWIDE HOLLER PAGE 01/12 **2**001 ationwide Boiler Incorporated 42400 Civisty Street Fremont. CA Q-7100 Fax: 510-490-0571 February 17, 2000 Florida Power Corp. 263 - 13" Ave. South MAC BB2A St. Petersburg, FL 33701 Attn: Cerey Frost RFP, FPC File No.: 90-013-CFF Subject Auxiliary Boller - Tiger Bay

in response to your latest RPP, FPC File No. 11-013-CFF deted February 15, 2000, for an auxiliary boiler at Tiger Bay, we are pleased to present our ALTERNATE BID as follows:

#### A) Boller

One (1) reconditioned 1990 85,000 lb/hr Cleaver-Brooks model DL-94 package watertube boiler, 260-psi design, natural gas fired, complete as follows:

New Coen Delta NOx low emission burner (0.10 fo/mmbtu NOx or less without FGR) NFPA 8501 fuel train

New Coen Fyr Monitor PLC based boiler/burner control system self-contained in one (1) boiler mounted NEMA 4 panel with touch screen interface

New drum level transmitter with Fisher pneumatic control valve and 3 valve bypass
Rebuilt boiler trim and valving (safety valves, blowdown valves, stop/check & gate type to header valves, vent valve, steam gauge, waterlevel gauge glass, LWCO, ALWCO, HWA)

FD Fan with 100 hp, 480 volt TEFC motor and starter

25' self-supporting stack with flanged boiler transition inlet

### Connection Sizes:

Steam: B" 300 psl flange
Gas: 3" 150 psl flange
Water: 2½ " 300 psl flange
Blowdown: 1½" 300 flange

Dimensions:

Length: 36' 0"
Height: 14' 5'4"
Width: 11' 4'4"

Shipping Weight: 96,800 pounds
Operating Weight: 131,300 pounds

## B) Deaerator With Pumps:

One (1) reconditioned Cleaver-Brooks model SM140 Spray Type Package Deaerstor, built 1992, .005 cc/liter oxygen guarantee, consisting of 84" x 15'4½" 50 psig ASME Coded receiver, stainless steel internals, 2,800 gallons storage capacity, normal tank trim items & pneumatic steam and water inlet control valves, structural steel stand, pump suction piping with strainers, three (3) new Paco model

02/18/2000 09:44 941-519-5166

FPC TIGER BAY

TEL: 727 826 4216

PAGE 82/12 2002

OLN low NPSH 2-stage centrifugal pumps with 50 hp TEFC motors, new NEMA 4 control panel with lights, alarms, pump H-O-A switches and motor starters.

#### EQUIPMENT SALES TERMS AND CONDITIONS

Selling Price:

A) Bailer - \$365,000

B) Deaerator with pumps - \$65,000

Limited Warranty:

One (1) year per attached

Taxee:

Not included

installation:

Not Included

Air & Operating

Permits:

Not included

Expiration:

This quotation is valid for 90 days but availability is subject to prior rental

or sale.

Terms of Payment:

25% with the order; balance upon delivery.

Freight

Allowed to lobsite nearest rail siding (unloaded by others)

Start-up Service &

Operator Training:

Included

## <u>UTILITY CUSTOMERS</u>

Pacific Gas & Electric

Southern California Edison

Duke Power

Public Service Gas & Electric

Texas Utilities

Jacksonville Electric Authority

Sacramento Municipal Utility District

East Bay Municipal Utility District

Louisiana Power & Light

New York Power Authority

New York State Electric & Cass

Toledo Edison

## Nationwide Boiler Incorporated

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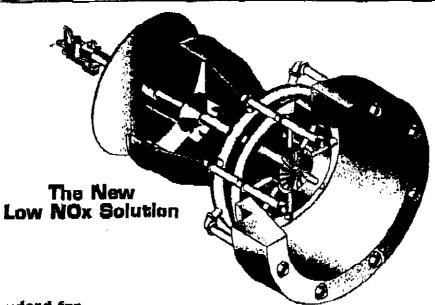
WIIONAIDE BOILER

PAGE 06/12 2006





# THE DELTA-NOX BURNER



### The New Standard for Pookaged Bollers

The newest innovation in Coen's long legacy is the Dalta-NOx burner, destined to be the new standard for the industrial and utility markets. The variable Delta-NOx produces impressive performance results filing a variety of liquid and gaseous fuets. Filing natural gas, the Delta-NOx is designed to achieve 0.1 ibs/MMBtu NOx (83 ppm) without the addition of expensive flue gas recirculation (FGR) in high space heat release rate applications.

Coen's engineering team considered everything ~ from meeting coast to coast emission standards to designing a burner with simple construction and low cost. The result is a burner unlike any other in the industry.

The Delta-NOx utilizes Coen's new "Delta Spuds", which are unique gas injectors with a custom drilling pattern that controls ignition, and at the same time reduces [DIMINITION of prompt and thermal NOx. The Delta Spuds, in combination with our custom low-awirk central stabilizer, achieve high burner turndown and low emissions. Additionally, the ventual style burner design provides superior eir distribution with reduced pressure drop, further reducing NOx and QO emissions.

## Design Features and Benefits

- < 0.1 lbs/MMBtu (83 ppm NOx) firing natural gas without FGR
- Lower NOx raductions with FGR (below 30 ppm)
- · High space heat release applications
- · Law gas prossures
- High burner turndown
- · Low NOx capability with oil firing
- · Sate operation with aimple controls
- Compact flame
- Lower burner pressure and excess air (saves on noneepower costs)
- · Uniform air distribution for low CO
- Simple, rugged design with no moving parts
- Easy Installation and startup