

STAGE II FUELS CONVERSION
PROPOSED REVISED SCOPE

FROM BILL JAMES

WHAT DOES THIS DO TO OUR PERMIT APPLICATIONS FOR 21, 22, 23?

I - ECONOMIZERS - Complete

II - UPGRADE NO. 1 STEAM PLANT

all in orig project scope

- (a) Improve burner management system.
- (b) Improve combustion controls (air fuel ratio and lead/lag controls).
- (c) Install third fuel oil pump.
- (d) Add oil collecting sump in tank storage area.
- (e) Add oil temperature permissive to Boilers 1, 2, 3 and 6.
- (f) Add atomizing steam permissive to Boilers 1, 2, 3 and 6.
- (g) Add recording and alarms to existing opacity indications. ✓
- (h) Add trip functions to residue streams to Boilers 4 and 5.
- (i) Install oil drip pans @ Burner fronts.
- (j) Relocate battery and inverter systems.

SMOKE

PERMIT REQUIREMENTS

III - UPGRADE NO. 2 STEAM PLANT

NO OIL BURNING CONVERSION

- (a) Install gas burner management on Boiler 23.
- (b) Add new building for personnel facilities.
- (c) Add lead/lag to combustion controls.
- (d) Add high and low level alarms and trips to drum level on Boilers 21, 22 and 23.
- (e) Correct vibration problem on Boiler 23.

SAFETY

21, 22 NOT CAN BE SHUT DOWN IN 1980

IV - UPGRADE NO. 3 STEAM PLANT

NO OIL BURNING CONVERSION

- (a) Install gas burner management on Boiler 31.
- (b) Add lead/lag to combustion control.
- (c) Add high and low level on Boiler 31.

IV - UPGRADE NO. 3 STEAM PLANT (Cont'd)

(d) Install oil handling facilities for No. 36 Superheater.

- (1) two pumps.
- (2) two heat exchangers.
- (3) storage tank (30,000 gallons).
- (4) oil lines.
- (5) Oil collecting sump.

(e) High and low pressure trip on residue (Butadiene) to Boiler 31.

V - OTHER

(a) Install spare No. 2 Oil Pump at Marine Terminal.

(b) Install sulfur analyzer on fuel oil system. ✓

(c) Install chemical feed system for oil conditioning.

(d) " OIL BLENDING/HEATING FACILITIES for NO. 6 OIL + Low Sulfur Requirements.

90 MM BRO. IN.

NEW
PERMIT
REQ'D

YES

NOT IN STAGE

fuel oil
same as other
0.7% S

PERMIT REQ'D - NSIS
UNIVER?