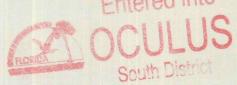
LEE COUNTY SOLID WASTE RESOURCE RECOVERY FACILITY LEE COUNTY, FLORIDA QUARTERLY PROGRESS REPORT NO. 5 OCTOBER THROUGH DECEMBER 1993







OGDEN MARTIN SYSTEMS OF LEE, INC.

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D.E.P. SUUIN DISTRICT

LEE COUNTY SOLID WASTE RESOURCE RECOVERY FACILITY OPI Project No. C-1033

QUARTERLY PROGRESS REPORT

No. 5

OCTOBER THROUGH DECEMBER 1993

SECTION 1 - DESCRIPTION OF FACILITY

SECTION 2 - GENERAL PROJECT STATUS

SECTION 3 - MAJOR FUTURE EVENTS SECTION 4 - KEY EVENTS SCHEDULE

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1. DESCRIPTION OF FACILITY

The Lee County Solid Waste Resource Recovery Facility (the "Facility") will receive, store, and burn Acceptable Waste and produce electricity. Ogden Martin Systems of Lee, Inc. ("the Company") will be required to operate the Facility in accordance with applicable permits and environmental standards. The Facility's technology is a process generally known as "mass burning," in which solid waste is burned with little or no precombustion processing. Mass burn technology has been used successfully in Europe since the early 1900's and in the United States for over 20 years.

Site Description

The Facility site is a 46.4 acre portion of an approximately 300 acre tract of land owned by Lee County, Florida ("the County") located in Lee County, Florida, outside the city limits of Fort Myers, one mile east of the intersection of Interstate 75 and State Road 82. The land is zoned so that it may be used for a resource recovery facility.

The site will be served by a potable water line, sewer line, and a reclaimed water line from the City of Fort Myers. An onsite well system will be provided for limited standby process cooling water. Electricity for in-plant use will be generated primarily by the Facility. The Facility will be tied into the Florida Power & Light Corporation electrical grid at the onsite switchyard. Propane gas service will be supplied from an onsite propane tank. Telephone service will be supplied from the existing telephone lines.

Facility Operation

After being weighed, unprocessed Acceptable Waste will be delivered to a storage pit. From the pit, the waste will be lifted by one of two overhead cranes and placed into one of two combustion unit charging hoppers. Combustion will take place in two boilers with integral waterwall furnaces designed and furnished by Lancaster Distral Group. Each boiler has a design capacity of 600 tons of solid waste per day and operates independently of the other. From the charging hoppers solid waste will be passed downward through a feed chute and then pushed onto the stoker grates by a hydraulically operated ram feeder. To seal the feed chute from outside air infiltration and maintain control of the furnace draft, the hopper will be kept filled with solid waste.

1. <u>DESCRIPTION OF FACILITY</u> (continued)

In the furnace, reverse-reciprocating grates will provide continued mixing, thus assisting in attaining thorough burnout of the Waste. Forced draft combustion air will be supplied to the underside of the grate bars in volumes that are controlled to meet the local combustion conditions. The uniform air distribution also cools the grate bars to prolong grate bar life. Additional combustion air will be introduced above the stoker at the front and rear walls of the furnaces. The resulting flame turbulence prevents the escape of unburned gases from the furnace. A Selection Non-Catalytic Reduction system is provided for NOx reduction by injecting ammonia into multiple temperature zones of the furnaces.

As the hot gases move through the boiler sections of each furnace, water in the boiler tubes will be heated, and steam will be generated. The steam will be directed to a turbine-generator (manufactured by Mitsubishi) to produce electricity. steam from the turbine-generator will be condensed in a watercooled condenser. The electricity produced flows to the electrical switchgear and then over an interconnection line into the Florida Power & Light Corporation (FPL) distribution system. Approximately 32 megawatts of the 40 megawatts produced will be sold to the local utility. After leaving the steam generators, the combustion gases will pass through dry-flue gas scrubbers for removal of HCl and other acid gases and through baghouse-type fabric filters for removal of particulates prior to discharge through the 276-foot concrete square stack. Mercury abatement will be provided by injection of carbon into the gas scrubbers. The air pollution control equipment will be designed and furnished by ABB Environmental Systems.

Bottom ash and grate siftings will be discharged into a water-quenched residue removal system. From the Martin ash discharger, cooled residue will be moved via vibrating conveyors and belt conveyors to an enclosed residue storage are for final disposal at a sanitary landfill. Facility specifications include equipment for the recovery of ferrous materials. The ash removal system will be designed to handle any size material which can be delivered through the feed chute and across the grates. Ash from the air pollution control equipment will be collected separately and conveyed to the ash removal system for handling and disposal together with the bottom ash.

1. DESCRIPTION OF FACILITY (continued)

The principal components of the Facility will be the proprietary grate system, the overhead refuse cranes, the boilers, the dryflue gas scrubbers, the baghouse type fabric filters, and the turbine-generator set. Auxiliary equipment will be provided at a level of redundancy consistent with practices common within the power-generating industry.

The stoker grate system will be designed and furnished by Martin GmbH. Martin GmbH has more than a quarter century of experience in the design, engineering, construction, and operation of systems for solid waste combustion and energy generation. As of January 1992, there were over 172 plants with 343 Martin GmbH combustion units in operation or under construction. In the United States, there are presently twenty Ogden Martin facilities in operation.

<u>Description of Operational Responsibilities</u>

The Company has the responsibility to build, operate, maintain and repair the Facility. Operations, maintenance, and repair shall be performed through Ogden Services, Inc., a wholly-owned subsidiary of Ogden Corporation. Ogden Services is a service company, with over 40,000 employees, which was founded in 1888 and acquired by Ogden in 1982. Ogden Services provided operating, mechanical maintenance and housekeeping services for a variety residential, commercial and institutional facilities. Mechanical maintenance and plant responsibilities include the operation of total energy systems, heating, ventilating and air conditioning plants; painting, plumbing, carpentry, electrical and other related services all utilizing programmed preventive maintenance techniques; installation, operation, maintenance and repair of production equipment; "turn-around" services; and receiving and shipping services in manufacturing and production plants and warehouses.

Facility Permits

The Florida Department of Environmental Regulation (FDER) issued its Power Plant Siting Certification for the Facility on June 16, 1992 and a permit for Prevention of Significant Deterioration (PSD) on July 20, 1992. These events were followed by Lee County completing negotiations on the Power Purchase Agreement with Florida Power & Light. With financing of the project completed prior to the issuance of permits Lee County provided Ogden notice-to-proceed with construction on October 28, 1992.

2. GENERAL PROJECT STATUS

Construction activity was near peak level at the end of this period. The turbine-generator was set, the cooling tower was erected, and the chimney was completed. Stoker erection is nearly complete, boiler waterwalls have been set, and erection of the baghouse modules and scrubber vessels was completed. Main building steel is essentially complete, the majority of the masonry block work within the building is installed, roofing is underway, and building siding commenced at the end of this period. With key areas protected from weather major electrical equipment was set. Cable tray installation is ongoing and pulling of power cable is underway to support energization of the main transformer next period. Water treatment equipment was set this period and pipe installation actively progresses.

The principle engineering for the Facility is nearing completion. Procurement and delivery of equipment is substantially complete. Fabrication and delivery of pipe is mostly complete, bulk electrical material deliveries were active, and pre-engineered building framing is being delivered and actively erected.

Florida Power & Light has completed the transmission line from the Facility to the offsite Buckingham Substation as scheduled to support upcoming Facility start-up activities. Other Lee County work continues to progress: offsite utility piping and wetlands mitigation work is nearing completion, the reclaimed water production facility construction continues, and a second round of responses have been submitted by Lee County to the Florida Department of Environmental Protection in support of obtaining the landfill permit.

3. MAJOR FUTURE EVENTS

- 1. Commence electrical testing.
- 2. Start hydrostatic test for boilers.
- 3. Energization of the main transformer.
- 4. Substantial completion of the demineralizer system.
- 5. Potable water, reclaim water and sewer tie-ins to the offsite utilities.

4. KEY EVENTS SCHEDULE

KEY EVENT	SCHEDULED	ACTUAL	MONTH OF CONSTRUCTION
Notice to Proceed		10/28/92	0
Groundbreaking		10/29/92	1
Complete Refuse Pit Mat	03/15/93	04/15/93	5
Complete Refuse Pit to Grade	04/26/93	05/06/93	6
Start Stoker Erection	06/14/93	06/01/93	7
Start Boiler Erection	06/14/93	06/30/93	9
Turbine On Site	12/28/93	10/18/93	12
Generator On Site	12/28/93	11/02/93	13
Start Hydrostatic Test for Boilers	04/07/94		18
First Fire/Boilout	06/28/94		20
First Refuse Fire	08/12/94		22
Initial Generator Synchronization	09/02/94	•	23
Start Acceptance Testing	10/11/94		24
Target Acceptance Date	11/28/94		25
Scheduled Acceptance Date	01/27/95		27

5. PROBLEM AREAS/EXCEPTION REPORT

No problems exist or are anticipated that would jeopardize the timely completion of the Facility in accordance with the Construction Agreement.

6. PHOTOGRAPHS





OGDEN MARTIN SYSTEMS OF LEE, INC.

40 LANE ROAD, CN 2615 FAIRFIELD, NJ 07007-2615

TEL: (201) 882-9000 FAX: (201) 882-4199



January 27, 1994

Lee County, Florida 2013 Altamont Ave. Ft. Myers, FL 33901

Attention: L. Johnson

Reference: Lee County Solid Waste Resource Recovery Facility

Ft. Myers, Florida

Project C-1033, Our Ref. LE1023L

Subject: QUARTERLY PROGRESS REPORT NO. 5

Dear Larry,

Attached please find a copy of our quarterly progress report for the period covering October through December 1993 for your information and use.

Very truly yours,

L. Peter Young

Assistant Vice President -

Project Management

cc: P. Barbaccia - FDEP South District

S. Coughanour - SFWMD

D. Cerrato - Malcolm Pirnie

J. Kowal - OMSL

J. Treshler - OMSL

V. Badresingh - Ogden N.Y.

pf 7.2 Quarterly Report

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FEB 03 1994

D.E.P. SOUTH DISTRICT



South Florida Water Management District

3301 Gun Club Road • P.O. Box 24680 • West Palm Beach, FL 53416-4680 • (407) 686-8800 • FL WATS 1-800-452-2045

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September 24, 1993

D.E.P. Sugin visitili

Mr. Hamilton S. Oven, Jr., P.E. Administrator, Office of Siting Coordination Florida Department of Environmental Protection Marjory Stoneman Douglas Building 3900 Commonwealth Blvd. Tallahassee, FL 32399-3000

Dear Mr. Oven:

Subject:

Lee County Solid Waste Resource Recovery Facility (Phase_II)

Off-Site Utility Lines

Authorization to Commence Construction

South Florida Water Management District (SFWMD) staff have reviewed the construction plans and details for the above-referenced project submitted on April 5, 1993 (and revised on May 20, 1993, June 29, 1993, and September 3, 1993), pursuant to Certification Conditions XV.C.3.b., XV.D.1.a., and XV.D.2.c.

The proposed utility line construction is consistent with SFWMD criteria, the SFWMD's October 20, 1992 construction authorization letter for Phase I, the scope of activities permitted under the approved Site Certification Order for the Lee County Solid Waste Resource Recovery Facility, and the applicable Certification Order Conditions. Therefore, issuance of this letter constitutes authorization to commence construction and/or initiation of the specific activities enumerated above. This authorization to commence construction presumes that all construction and maintenance activities will be performed in compliance with:

- (1) the construction plans and specifications, as contained in the detailed engineering drawings, supporting documents, letters of agreement, and other supporting documentation submitted by Malcolm Pirnie on the abovenoted dates; and
- (2) all of the conditions in the Certification Order that are applicable to the Lee County Solid Waste Resource Recovery Facility including, in particular, those conditions that address activities during and after the construction of the resource recovery facility.

This letter shall not be construed as a waiver by the SFWMD of any of the requirements specified in any of the Certification Conditions contained in the Certification Order.

Mr. Hamilton S. Oven, Jr., P.E. September 24, 1993
Page 2

Please note that the wetland mitigation activities proposed in connection with this project have been approved subject to the conditions outlined in the SFWMD's October 20, 1992 construction authorization letter for Phase I and the Conservation Easement and Agreement between Lee County and the SFWMD which was executed on January 14, 1993.

Construction authorization for the future proposed electrical transmission line connection to FPL's network (Phase III) is subject to the satisfaction of the applicable Conditions of Certification for that portion of the project.

If any of the above requires additional clarification, please do not hesitate to contact Susan Coughanour at (407) 687-6920.

Sincerely,

Steve Lamb Director

Regulation Department

SL/SC/JG/cah

Richard P. Donelan, DER-Tallahassee Philip Barbaccia, DER-Fort Myers Linda McCarthy, DER-West Palm Beach R. Lane Ware, Raytheon, Inc. Don Markley, Malcolm Pirnie, Inc. L. Peter Young, Ogden Martin Systems of Lee, Inc. Lindsey Sampson, Lee County Solid Waste Division Jim Yaegar, Lee County Attorney David Owen, Assistant Lee County Attorney Walter Stephens, Lee County Division of Water Resources George Crawford, Lee County DOT David Dee, Carlton, Fields, Ward, et al. Wayne Daltry, Southwest Florida Regional Planning Council Ken Plante, Department of Natural Resources James V. Antista, Game & Freshwater Fish Commission Steve Pfeifer, Department of Community Affairs

LEE COUNTY, FLORIDA

DEPARTMENT OF SOLID WASTE MANAGEMENT



LEE COUNTY RESOURCE RECOVERY FACILITY CONSTRUCTION MONITORING REPORT

October 1993

Malcolm Pirnie, Inc. P. O. Box 490 Fort Myers, Florida 33902 ALCE TO

JUL 1 9 1994

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MALCOLM PIRNIE

LETTER OF TRANSMITTAL

South Distric	a Avenue, Suite 364			July 18, 1994 Lee County SWERF
We are sen	nding you X Enclose	d □ Under separat	te cover via Mail	☐ Messenger, the following items:
□ shop	drawings	□ prints	□ data sheet	X Quarterly Report
□ specif	ications	□ sketches	□ brochures	<u> </u>
	Our action rel	ative to items submitte	ed for approval has been	noted on the drawings.
COPIES	PREPARED BY	REFERENCE NO.		DESCRIPTION
2	Malcolm Pirnie, Inc.		Lee County Solid Wast Fifth Quarterly Report	e Energy Recovery Facility
	•			
THESE AR	E TRANSMITTED AS	CHECKED BELOW	7:	
☐ As re X For y ☐ For re	quested	☐ Approved☐ Approved☐ Revise and☐ Not Appro	as Corrected Resubmit	□ Resubmit copies for approval □ Submit copies for distribution □ Return corrected Prints □
Remarks:			Very truly your MALCOLM PI	
Copies to:	C. Merriam, SFW L. Johnson, Lee C L. Sampson, Lee	County Department Fields, et al. (w/o er (w/o encl.) (w/o encl.) L (w/o encl.)	ne enclosure) one enclosure) of Solid Waste (w/o enclosure) of Solid Waste (w/o enclose)	

MALCOLM

CONSTRUCTION MONITORING REPORT

LEE COUNTY DEPARTMENT OF SOLID WASTE LEE COUNTY RESOURCE RECOVERY FACILITY

OCTOBER 1993

MALCOLM PIRNIE, INC.

10500 BUCKINGHAM ROAD FORT MYERS, FLORIDA 33905

1 INTERNATIONAL BOULEVARD MAHWAH, NEW JERSEY 07495

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Construction on the Lee County Resource Recovery Facility and ancillary facilities (the "Project") began one year ago on 28 October 1993. This monthly report provides an overview of construction progress during month 12 of the contractual construction schedule.

The Project remains approximately four weeks ahead of the twenty-seven month contractual construction schedule. Ogden Martin Systems of Lee (OMSL) however reports the project to be 42 percent complete versus the 48 percent planned at the end of their reporting period (20 October 1993). This is based on OMSL's planned twenty-five month construction schedule (the "early construction schedule"). The work force reached 347 employees by the end of the OMSL reporting period.

Concrete placed this month included the tipping floor push walls, various building slabs, water treatment building foundations and miscellaneous tank foundations. OMSL reports that 67 percent of the total concrete required for the project has been placed. OMSL's subcontractor, Yeargin, continued erection of the refuse building structural steel, roof trusses, and electrical work. Yeargin mobilized Ron Kendall Masonry Co. and commenced installation of the administration building and electrical room masonry block work. OMSL also mobilized the cooling tower contractor (GEA Thermal Dynamic) and the field fabricated tank contractor (Fisher Tank Co.).

Heavy rains during the evening of 21 October 1993 caused erosion and under mining of the tipping floor roads and ramps. Fill placed in these areas had not been stabilized prior to the rain storm. These areas will need to be repaired during next reporting period.

OMSL's boiler subcontractor (Clark Boiler & Engineering Co.) continued erection of the boiler building structural steel and pressure components. Units No. 1 and 2 water wall panels continued to be assembled and erected. Unit No. 1 evaporator sections, superheat modules and economizer modules were erected. Although progress on the boiler building continues to be documented, OMSL reported that the boiler subcontractor was approximately three days behind their intended schedule.

Erection of turbine/generator building steel continued except for the leave out areas needed for clearance during turbine and generator erection. Overall project structural steel

erection is reported to be 62 percent complete. The steam turbine arrived on site and preparations for setting the turbine to the pedestal continued.

OMSL's air pollution control (APC) equipment subcontractor (ABB Environmental Systems/Caprice) continued erection of the fabric filter house structural steel, baghouse modules and associated duct work. The APC subcontractor also commenced ground assembly of the Unit No. 1 spray dryer absorber (SDA) and erected Unit No. 1 SDA support steel. The stack subcontractor (Commonwealth) completed the stack flue liners, sampling and roof platforms and concrete roof deck this period. The stack permanent safety/warning lighting was installed and put into service with temporary power.

Engineering activities and equipment deliveries continued in support the of early construction schedule. Major equipment arriving on site this period included the steam turbine, cooling tower components, fabric filter houses and SDA's, field fabricated tanks and Unit substations.

Interconnection activities continued in support of the Project's scheduled February 1994 energization date. Florida Power & Light's (FP&L) Buckingham substation subcontractor (Megatran) continued installation of the substation equipment foundations and commenced installation of the relay vault building. The Lazy Acres substation subcontractor (Hennessey) is nearing completion of work on the relay vault building and switchyard foundations. FP&L's scheduled mobilization for installing the Lazy Acres structural and electrical components did not occur this period. This work will begin next reporting period. This should not have a material effect on the overall FP&L construction schedule.

FP&L reported to Lee County Department of Solid Waste ("the County") that the transmission line contractor will mobilize early next reporting period to commence installation of the transmission line and poles between the Lazy Acres and Buckingham substations. FP&L continues to report that all activities will be completed in support of the February 1994 energization and June 1994 synchronization requirements.

Offsite activities included the commencement of the offsite utility piping installation. Piping material deliveries continued in support of the piping installation. The offsite utility contractor (Southwest Utility Systems) completed approximately 13 percent of the reclaimed water line, 26 percent of the potable water line and 27 percent of the forcemain.

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The County reported that construction activities (excavation and backfilling) related to the City of Fort Myers Central Wastewater Treatment Plant (the "Plant"), to supply reclaimed water to the Project continued. Construction activities related to the Plant are overseen and reviewed by others. Malcolm Pirnie's responsibility as construction administrator for the Project does not include any responsibility related to the construction and progress on the Plant improvements necessary for the Project to meet certain construction milestones.

Work on the wetland mitigation areas continued with the contractor (Richards Co.) nearing completion of the wetland excavation and final grading. Exotic vegetation removal and treatment continued in the southeast and southwest property areas. Malcolm Pirnie had the area flown and photographed to document the extent of the exotic vegetation and species that will have to be removed as part of the mitigation plan. Lee County Environmental Laboratories initiated the second round of groundwater sampling tests during this reporting period.

At the monthly project progress meeting held on 5 October 1993, OMSL presented their progress report and overview of construction.

This report represents a summary of OMSL construction activities as witnessed by Malcolm Pirnie, Inc. and includes a report on the remainder of the Project related activities.

2.0 CONSTRUCTION ACTIVITIES PERFORMED

The following specific construction activities were performed during the month of October 1993 by OMSL.

2.1 SITE WORK

- continued installation of underground electrical ductbanks (inverts into buildings).
- continued installation of miscellaneous underground piping (inverts into buildings).

3

2.2 STRUCTURES

2.2.1 Tipping Floor

- continued placement of fill material and final grading for tipping floor and tipping floor entry/exit roads and sloped areas.
- placed concrete for column footers along column line 1.
- placed concrete for push wall along column line J and the north section of the push wall along column line 1.
- continued to receive deliveries of tipping floor building structural steel.
- remobilized S & E contractors (fill placement/grading) to begin repairing tipping floor/ramp storm washouts caused by heavy rains on the night of 21 October 1993.

2.2.2 Refuse and Administration Building

- continued with decking, reinforcing steel and concrete placement for elevated slabs (elevation 28.5', 44' & 78').
- continued with refuse and administration building structural steel erection including commencement of refuse building roof truss erection.
- continued conduit, wiring and cable tray support installation throughout administration building.
- temporarily mobilized elevator contractor (Mowry Elevator Co.) to install the elevator shaft assembly.
- commenced installation of plumbing and sanitary piping throughout administration building.
- mobilized masonry contractor and commenced erection of administration area and elevator shaft block walls.

2.2.3 Boiler/Power Generation Island

- continued with boiler building structural steel erection.
- continued with boiler structural steel bolt torque inspections (Law Engineering is providing these inspections for Clark Boiler and Engineering).

- continued with ground assembly of Units No. 1 and 2 boiler pressure components.
- continued with erection and welding of Unit No. 1 and boiler pressure components (including Unit No. 1 economizer modules, evaporator modules, superheat modules and downcomers).
- continued with non-destructive examination of boiler pressure component welds (by independent testing laboratory Duratek).
- commenced ground assembly of boiler ash hoppers.
- continued with stoker, hydraulic piping, cabinets and associated equipment installation.
- placed concrete for boiler forced draft fan foundations.
- continued erection of turbine/generator building structural steel and floor decking.
- continued turbine/generator sole plate installation.
- received steam turbine.
- performed hot oil flush of main transformer.
- placed concrete for main transformer foundation.
- rigged main condenser to support pedestal.(an engineering discrepancy between the condenser support pedestals will require re-design and re-work of the pedestals.)
- continued with fabrication of miscellaneous piping spools at fab shop.
- commenced decking and reinforcing steel installation for turbine/generator building elevated slabs.
- placed concrete for turbine/generator building and operations slab on grade.
- placed concrete for main transformer foundation walls and backfilled up to grade.
- mobilized masonry subcontractor and commenced erection of electrical room block walls.

2.2.4 APC Equipment and Stack

- completed concrete work for APC area foundations and equipment pads (excluding Unit No. 2 SDA slab on grade which is being postponed to coordinate the required construction access).
- continued erection of Units No. 1 and 2 fabric filter house structural steel
 and stair tower.
- received and erected Units No. 1 and 2 fabric filter house module/hopper sections.
- commenced ground assembly of Unit No. 1 SDA.
- erected Unit No. 1 SDA support steel and reactor support ring.
- completed erection of stack flue liners, sampling platform, and roof platform.
- installed masonry block at stack entry door perimeter and future boiler flue duct opening.
- installed stack safety/warning lights (energized on temporary power).

2.2.5 Other (cooling tower, fire water pump house, storage tanks, residue handling building, scale house, water treatment building, etc.)

- mobilized cooling tower subcontractor.
- Began receiving cooling tower materials (fill pack, wood framework, fan shrouds) and commenced erection of cooling tower wood framework, fill pack and water distribution headers.
- set circulating water pump motors to pumps.
- continued installation of water treatment building foundations.
- placed concrete for firewater storage tank, filtered water tank, wastewater tank and neutralization tank.
- mobilized field fabricated tank contractor (Fisher Tank) and commenced erection of demineralized water, wastewater and neutralization tanks.
- mobilized piling contractor (APAC) to install sheet piling at perimeter of water treatment sump.

- excavated water treatment building sump, and formed foundation (this area on hold pending OMSL engineering decisions on water proofing at sump area).
- commenced installation of firewater pump house foundation.
- placed concrete for lift station.

2.3 PROCUREMENT

Essentially all equipment has been purchased. Equipment purchasing and deliveries are in support of the early construction schedule. Instrumentation and bulk electrical are the remaining items to be purchased. Major equipment and materials arriving on site this period included the following.

- refuse boiler, turbine/generator, APC and tipping floor building structural
 steel
- boiler Units No. 1 and 2 pressure and non pressure components
- Units No. 1 and 2 fabric filter house modules and spray dryer absorbers
- boiler feed pumps
- steam turbine and associated parts
- stack liner system
- cooling tower (frame work, fill pack, etc.)
- field fabricated tanks (demineralized water, waste water, neutralization)
- unit substation 13.8 kV and 4160 kV transformers
- ammonia compressor skid
- blowdown tank
- blowdown heat exchanger
- acid and caustic storage tanks
- instrument air dryer skid
- 125 V DC power system batteries
- un-interruptible power system

2.4 OMSL PLANNED VS. ACTUAL PROGRESS

Every month OMSL reports on what construction activities are planned for the following month. In this section Malcolm Pirnie compares the reported planned activities to what was accomplished in the field.

The majority of activities identified by OMSL in their September 1993 report for performance during this reporting period (October 1993) were confirmed with the exception of the following.

- complete lime stone road base at tipping floor ramps and bypass road
- commence tipping floor pre-engineered building erection
- place concrete for tipping floor slab
- erect refuse cranes
- receive generator
- erect turbine and generator to pedestal
- complete water treatment building foundation
- commence scale house/foundation installation (postponed for construction access)

It is reported that the majority of these items will be accomplished in the near future. If, however, they continue to be postponed it may have a material effect on OMSL's ability to meet their early construction schedule.

3.0 DRAWDOWN ANALYSIS

OMSL submitted Application for Payment (AFP) No. 13 this reporting period. OMSL's AFP No. 13 request of 6.585 percent of the Facility Price is .251 percent less that the maximum not to exceed cumulative drawdown percentage allowable under Schedule 15 of the Amended Construction Agreement. This is the third month in a row that OMSL's request for payment as a percentage of the Facility Price is less that what is allowable. Malcolm Pirnie Inc. initiated review of AFP-13 this reporting period and plans to issue its findings in early November.

4.0 PROGRESS SCHEDULE

OMSL is working from a planned 25 month early construction schedule. This is two months shorter than its contractual construction schedule of 27 months. Under the planned early construction schedule, the overall construction progress is estimated to be 42 percent complete versus the 48 percent planned for the period ending 20 October 1993. A copy of the OMSL "Construction Progress Curve" and "Total Manpower Curve" are attached for reference. Major areas remaining behind the early construction schedule are the refuse pit building enclosure and refuse cranes, tipping area and enclosure, turbine/generator building roofing and siding, and the water treatment building foundations and equipment installation. OMSL is committed to the early construction schedule and the project remains ahead of the 27 month contractual construction schedule.

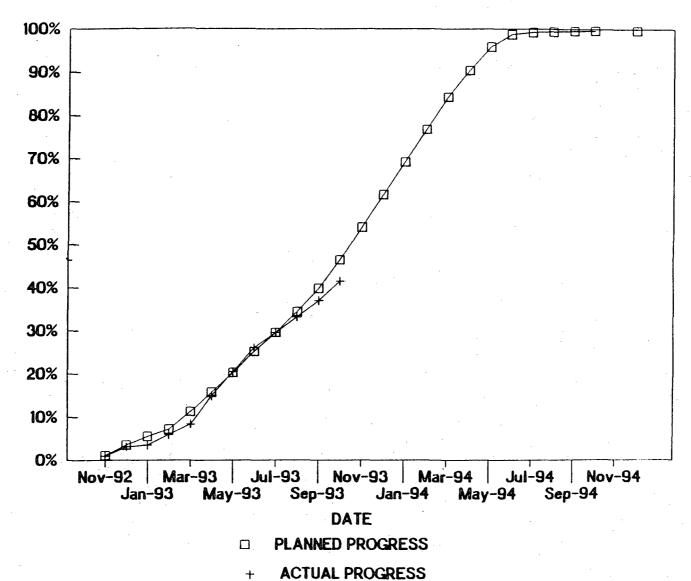
5.0 QUALITY CONTROL

OMSL's quality control team and special inspector continue to monitor all contractors' work for compliance with the applicable codes, drawings and specifications. Malcolm Pirnie Inc. continues to review the OMSL quality control plan implementation, records and special inspector reports. Review of the special inspector reports continues to show that the materials placed to date are in compliance with the contract requirements. Materials include concrete (compressive strength), fill (compaction) and boiler pressure component welds (non-destructive examination). To date OMSL subcontractors have tested and qualified 75 welders for structural steel and pipe welding.

Malcolm Pirnie requested that OMSL review the field fabricated tank contractors welding quality and non-destructive weld examination activities this period. Malcolm Pirnie also notified OMSL of a possible concrete crack in the cooling tower basin sump area. OMSL is reviewing the apparent crack to determine its extent and the need for repairs.

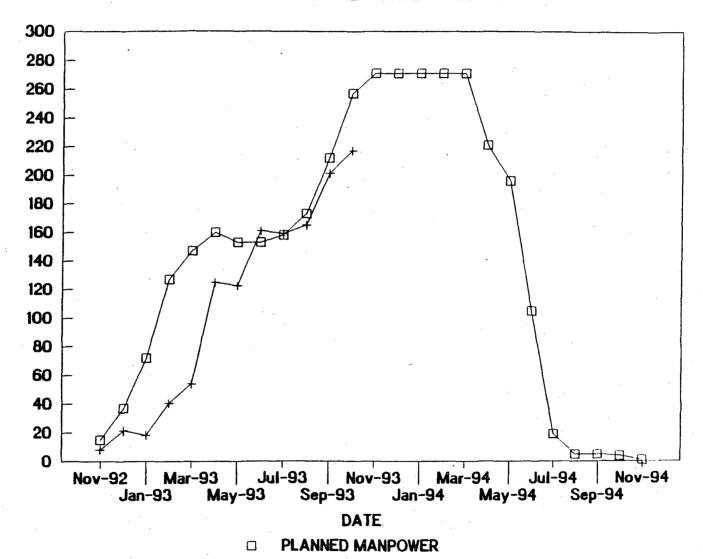
OMSL-LEE COUNTY FACILITY

CONSTRUCTION PROGRESS CURVE-10/20/93



OMSL-LEE COUNTY FACILITY

TOTAL MANPOWER CURVE-10/20/93



ACTUAL MANPOWER

6.0 EQUIPMENT MAINTENANCE

OMSL's subcontractors continued with the required maintenance for all equipment delivered and stored on site. Equipment maintenance is tracked and recorded on a equipment storage and maintenance log. Maintenance activities tracked include equipment external protection, megger tests upon equipment arrival and seven days as applicable, heater hook ups if applicable, oil level and fill inspection dates, shaft rotations, purge if applicable, and equipment general condition. To date OMSL is maintaining 170 pieces of equipment. OMSL received and added fifty pieces of equipment to the log this month.

Malcolm Pirnie continues to monitor equipment maintenance activities and record them in a daily log. Malcolm Pirnie audited OMSL's equipment maintenance log report for conformance with manufactures recommendations and industry standards this reporting period. OMSL and their subcontractors are complying with the manufactures suggested equipment storage and maintenance requirements.

Maintenance activities this report period included shipping the unit substations off site for storage in an air conditioned/heated warehouse, performing a hot oil flush of the main transformer and re-applying a nitrogen purge, storing and covering the steam turbine, applying strip heaters to the circulating water pump motors and covering with rain proof material, as well as receiving, covering and storing a significant amount of equipment.

7.0 PHOTOGRAPHS

Photographs included in Appendix A document construction progress during the reporting period.

8.0 OFFSITE WATER UTILITIES

Malcolm Pirnie Inc. subconsultant, Ink Engineering Inc. (IEI), continued with construction observation/inspection duties for the offsite utilities. The following activities occurred this reporting period.

- Southwest Utility Systems Inc. (SUSI) continued clearing operations within the SR82 road right-of-way.
- SUSI continued to receive materials throughout the month.
- SUSI commenced piping installation on 4 October 1993.
- continued maintenance of traffic activities.
- installed silt barriers and hay bales adjacent to wetland jurisdictional areas.
- SUSI continues to comply with all aspects of the permit requirements.
- SUSI installed approximately 13 percent of reclaimed water, 26 percent of potable water and 27 percent of the sanitary force main between stations 285 and 316 this period.
- installation of the utility lines is on schedule with the original CPM schedule submitted by SUSI.

Construction meetings were held at the offices of IEI on 6 October 1993 and 19 October 1993.

9.0 RECLAIMED WATER PLANT IMPROVEMENTS

The County's reclaimed water plant improvement contractor, Mitchell & Stark Construction Company, completed the demolition activities related to the water plant improvements and backfilled the demolition area. Other activities included commencement of the relocation on an existing underground line and excavation of the filter supply pump basin. Construction activities related to the Plant are overseen and reviewed by others. Malcolm Pirnie's responsibility as construction administrator for the Project does not include any responsibility related to the construction and progress on the Plant improvements necessary for the Project to meet certain construction milestones.

10.0 FP&L INTERCONNECTION

Interconnection activities continued to progress this period. FP&L's Buckingham substation subcontractor, Megatran, continued installation of the substation equipment foundations. Megatran received the County Building Department's approval for the Buckingham substation relay vault permit and should start work on the vault building early next period. FP&L delivered approximately 85 percent of the Buckingham structural and electrical materials to the substation site this period.

FP&L's Lazy Acres switchyard subcontractor, Hennessey, continued with the relay vault building, painting, lighting and interior architectural work. Hennessey also completed the switchyard perimeter fence grounding. Hennessey's remaining work includes miscellaneous punchlist items, and leveling the switchyard for placing the gravel cover.

FP&L personnel attended the County and OMSL monthly progress review meeting on 5 October 1993. FP&L provided the County with an updated schedule for the interconnection activities. FP&L reported that all activities will be completed in time to meet the February 1994 project energization requirement and July 1994 synchronization date.

11.0 GROUND WATER MONITORING SYSTEM

The County initiated the second round of groundwater sampling tests this period. Test results will be forwarded by the County to the appropriate regulatory agencies upon completion of laboratory test work.

12.0 WETLAND MITIGATION/MONITORING PROGRAM/EXOTICS PLAN

12.1 WETLAND MITIGATION/MONITORING PROGRAM

Work on the wetland mitigation area continued with the contractor nearing completion of the created wetland area excavation. Wetland planting is scheduled for the next reporting period. Malcolm Pirnie Inc.'s subconsultant, Kevin L. Erwin Inc. continues to observe the wetland contractors activities for compliance with the contract documents and permit requirements.

12.2 EXOTICS PLAN

Exotic vegetation removal and treatment continued in the southeast and southwest property areas. The main emphasis was on treating the exotic vegetation in place with approved herbicides. Effects of the herbicide treatments became apparent by the end of the reporting period as the undesirable species were turning brown and dying off. Malcolm Pirnie had the area flown and photographed to document the extent of the exotic vegetation and species that will have to be removed as part of the mitigation plan.

13.0 SR82/BUCKINGHAM ROAD INTERSECTION AND BUCKINGHAM ROAD/SITE INTERSECTION

13.1 SR82/BUCKINGHAM

The County Department of Transportation and Engineering (LCDOT&E) opened bids for the SR82/Buckingham Road Intersection on 13 October 1993. Award of the project is scheduled for the middle of the next reporting period.

13.2 BUCKINGHAM ROAD/SITE INTERSECTION

A final top coat of paving is scheduled to be applied in the spring of 1994 after the majority of construction traffic and deliveries are complete.

14.0 CONSTRUCTION ADMINISTRATION

14.1 SITE INSPECTION

Malcolm Pirnie continued to observe construction progress on a full time basis. Malcolm Pirnie maintains daily progress reports for summary/log of daily construction activities and administrative issues on file. These reports are available for inspection by the County and its agents upon request.

14.2 DRAWINGS/DESIGN REVIEW

The following total number of shop drawings and/or technical specifications were received by Malcolm Pirnie.

	Fort Myers	White Plains
No. of shop drawings received	164	17
No. of specifications received	0	0
No. of shop drawings reviewed	131	15
No. of specifications reviewed	0	0

All drawings and specifications received by Malcolm Pirnie are not reviewed. Malcolm Pirnie reviews only those drawings and specifications related to the Facility performance requirements and guarantees. Other drawings received are beyond Malcolm Pirnie's work scope and are filed on behalf of the County.

14.3 MAINTAIN FILES

Malcolm Pirnie maintains a complete set of drawings and specifications on behalf of the County in the County's trailer at the Facility site.

14.4 REVIEW REQUISITIONS AND CHANGE ORDERS

Application for Payment (AFP) No. 13 was received during the reporting period. See Section 3.0 Drawdown Analysis for specific information.

15.0 PERMIT COMPLIANCE

The County and OMSL continue to comply with the project permit requirements. The following permit related activities occurred this reporting period.

- Malcolm Pirnie issued Quarterly Report # 4 to the Florida Department of Environmental Protection (FDEP) and South Florida Water Management District (SFWMD) on 7 October 1993. Quarterly Report # 4 is a collection of Malcolm Pirnie's regular monthly reports for July, August and September.
- OMSL issued Quarterly Report #4 to the FDEP and SFWMD on 29 October 1993.
 OMSL's Quarterly Report 3 4 is a summary of the July, August and September Resource Recovery Facility Progress.
- OMSL continued to submit special inspector reports to the County Building Department.
- FDEP personnel visited the project site on 12 October 1993. This was in response to a complaint by an employee of OMSL's subcontractor, Yeargin Construction Company. The complaint was in regards to an accidental hydraulic oil spill caused by a broken hose on a water pump. The spill occurred on 6 October 1993, adjacent to retention pond # 2 and was contained within the site's storm water management

system. During temporary dewatering pumping, a hydraulic hose broke allowing approximately 10-20 gallons of oil to spill on the ground and into retention pond # 2. OMSL's contractor took immediate corrective actions in accordance with the site spill prevention and control plan requirements. All oil spilled was cleaned up using an oil eater chemical, oil booms and skimming equipment. The oil was transferred to an approved steel drum, temporarily stored on site and OMSL reports it was then shipped for proper disposal. FDEP personnel inspected the area of the spill as well as the remainder of the site including the temporary fuel storage areas. FDEP personnel found no evidence of residual oil in the pond, ground or surrounding areas adjacent to the spill. FDEP personnel also investigated the employee's complaints of temporary fuel storage tank leaks and improper disposal of used construction materials. FDEP personnel reported that all temporary fuel tanks are properly stored and the claims of leaks to be without merit. The claim of improper disposal of used construction materials was due to a worker inadvertently putting used PVC piping in the incorrect recycling container. OMSL's contractor, Yeargin, had already corrected this problem. FDEP personnel were supplied with Yeargin's report on the oil spill and clean up. FDEP's investigation of the complaint found no incorrect activities or actions on OMSL's or Yeargin's part. The complaint was filed as inactive by the FDEP after they completed their investigation.

On 22 October 1993 OMSL notified the SFWMD and FDEP of a breach in the site stormwater management system perimeter berm that was caused by heavy rains during the evening of 21 October 1993. The rains (approximately 4 inches within a two hour period) caused erosion and wash outs in the fill that had been placed for the tipping floor entry/exit ramps, roads and tipping floor area. The majority of the fill washed down the sloped earth east of the central portion of the tipping floor area. This was due to a recently excavated trench for installing a drain pipe within the road area. The excavation was left open overnight as pipe installation had not been completed. Rains came that evening. Some of the fill washed through the excavation and down the sloped earth area eventually breaching the site stormwater management system perimeter berm. The over spill required minor clean up of fill on the area outside the berm. SFWMD personnel were on site on 25 October 1993

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to investigate this item. SFWMD personnel recommended temporary berming actions to prevent any further breaches in the stormwater management system until the permanent system could by re-stored. FDEP personnel chose to let SFWMD investigate this item since it was related to the stormwater management system.

16.0 CONSTRUCTION ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD

The following specific construction activities are proposed for the month of November 1993 by OMSL.

16.1 SITE WORK

- continue with underground electrical duct banks
- continue with underground piping inverts into buildings.

16.2 STRUCTURES

16.2.1 Tipping Floor

- repair tipping floor/ramp storm wash outs
- complete lime stone road base for entry/exit roads.
- place concrete for slab.
- commence pre-engineered building steel erection.

16.2.2 Refuse and Administration Building

- continue with refuse building structural steel.
- erect refuse cranes and building roof trusses
- continue concrete placement for administration building elevated slabs.

 continue with administration building electrical conduit, wiring and cable tray installation.

16.2.3 Boiler/Power Generation Island

- continue with installation of stoker grate equipment.
- continue boiler building structural steel erection.
- continue with boiler Units No. 1 and 2 pressure part erection and welding.
- continue with boiler, stoker and feed chute associated piping/tubing.
- continue with boiler auxiliary equipment erection to platforms.
- set steam turbine and generator
- continue with turbine/generator building steel erection and elevated slab work.
- complete modifications to main condenser support pedestal.
- continue masonry block work at control room, elevator and administration building areas.
- close in electrical rooms and commence installation of electrical equipment.
- mobilize roofing and siding contractor to begin closing in turbine/generator building.

16.2.4 APC Equipment and Stack

- complete stack service lighting and electrical work and demobilize stack contractor.
- continue installation of fabric filter house duct work.
- continue with spray dry absorber ground assembly and erection.

16.2.5 Other (cooling tower, fire water pump house, storage tanks, etc.)

- complete water treatment building foundations.
- continue field fabricated tank erection.
- commence installation of water treatment equipment.
- complete fire water pump house foundation.

- FP&L subcontractor to mobilize and commence installation of transmission line and poles between Lazy Acres and Buckingham substation.
- FP&L to mobilize and construct the Lazy Acres structural and electrical components.

16.3 PROCUREMENT

Essentially all equipment is purchased. Bulk electrical materials continue to be actively procured. The following major equipment and material is expected to be delivered next month.

- generator
- aquatech water treatment equipment.
- turbine/generator lube oil equipment skid
- initial deliveries of large bore prefabricated piping spools
- pre-engineered building materials

APPENDIX A PHOTOGRAPHS



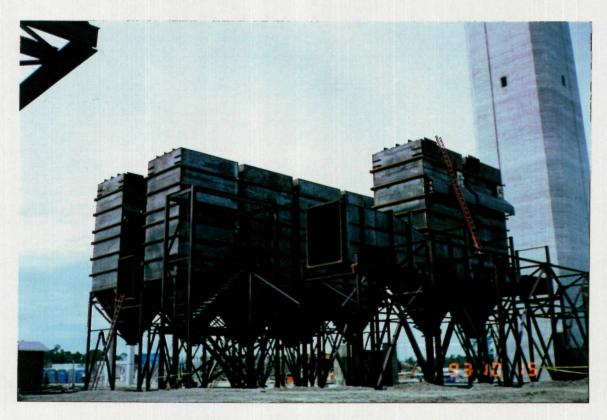
First refuse building roof truss erected October 19, 1993 looking north.



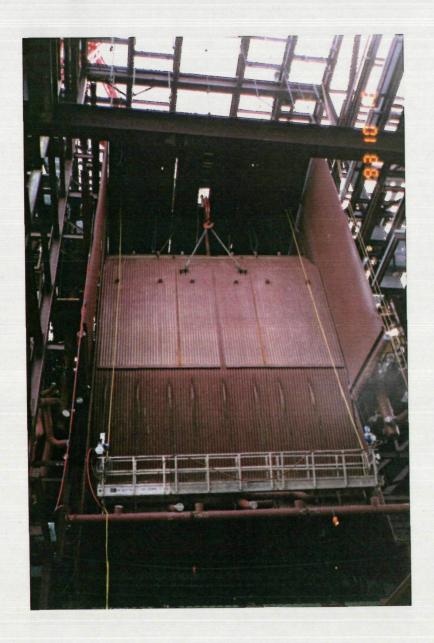
Erecting unit # 1 economizer section looking northeast.



Erecting unit # 1 southwest fabric filter house module. (looking northeast)



Units 1 and 2 fabric filter house modules erected. (looking southwest)



Erecting unit #1 rear water wall panel.

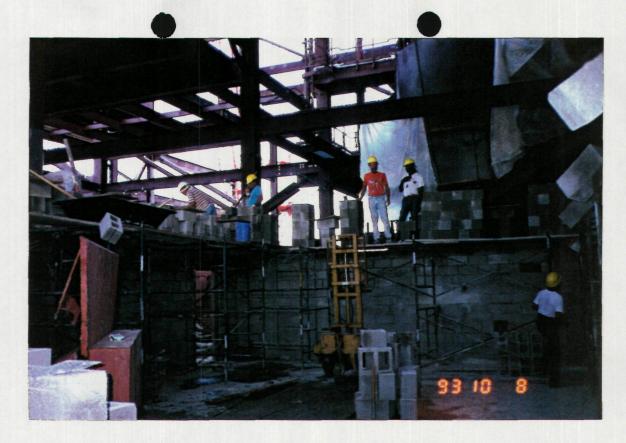
Erecting unit #2 front waterwall panel section.



Steam turbine arrives on site.



Rigging main condenser to beneath turbine pedestal.



Erecting masonry block work at electrical room.



Erecting cooling tower wooden frame work. (looking southeast)



Setting circulating water pump motors. Boiler and turbine building in backround. (looking northeast)



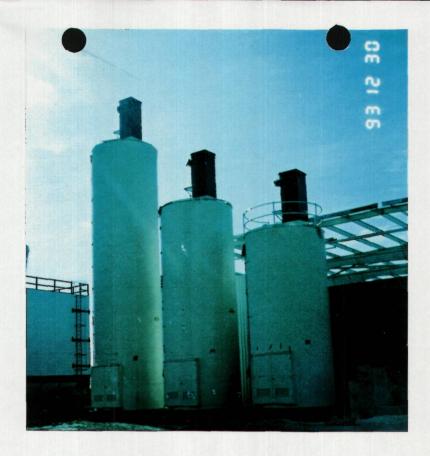
Mobile unit set up and performing hot oil flush on main transformer.



Installing 16" diameter reclaimed water line piping along SR82. (looking west at station 298+63)



Excavating created wetland area to required grade.
Silt barrier in place at wetland perimeter.
(looking north)



Carbon, lime and soda ash storage tanks erected to location. (left to right)



Setting lift station #LS3 to elevation. (adjacent to southwest corner of water treatment building)



Rigging refuse pit pre-cast curtain wall panels to location. (looking northeast)



Rigging main steam piping spool to bypass condenser inlet.



Turbine building bridge crane, roof steel and decking in place.



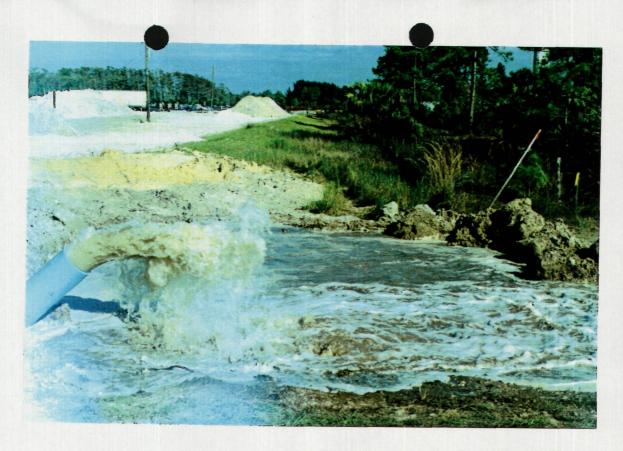
Erecting refuse crane to refuse building.



FP&L workers erecting Lazy Acres substation components.



FP&L subcontractor (Dillard Smith) workers terminating conductors between Lazy Acres pull off structure and steel tower pole.



Full bore flush on 16" and 12" watermain lines at entrance to resource recovery facility.



36" diameter casing installed under I-75 for reuse water line. (southbound on ramp at station 228±)



Created wetland final grade December 7, 1993. (looking west)



Created wetland partial planting December 11, 1993. (looking west)



Created wetland, workers planting herbaceous species December 11, 1993.

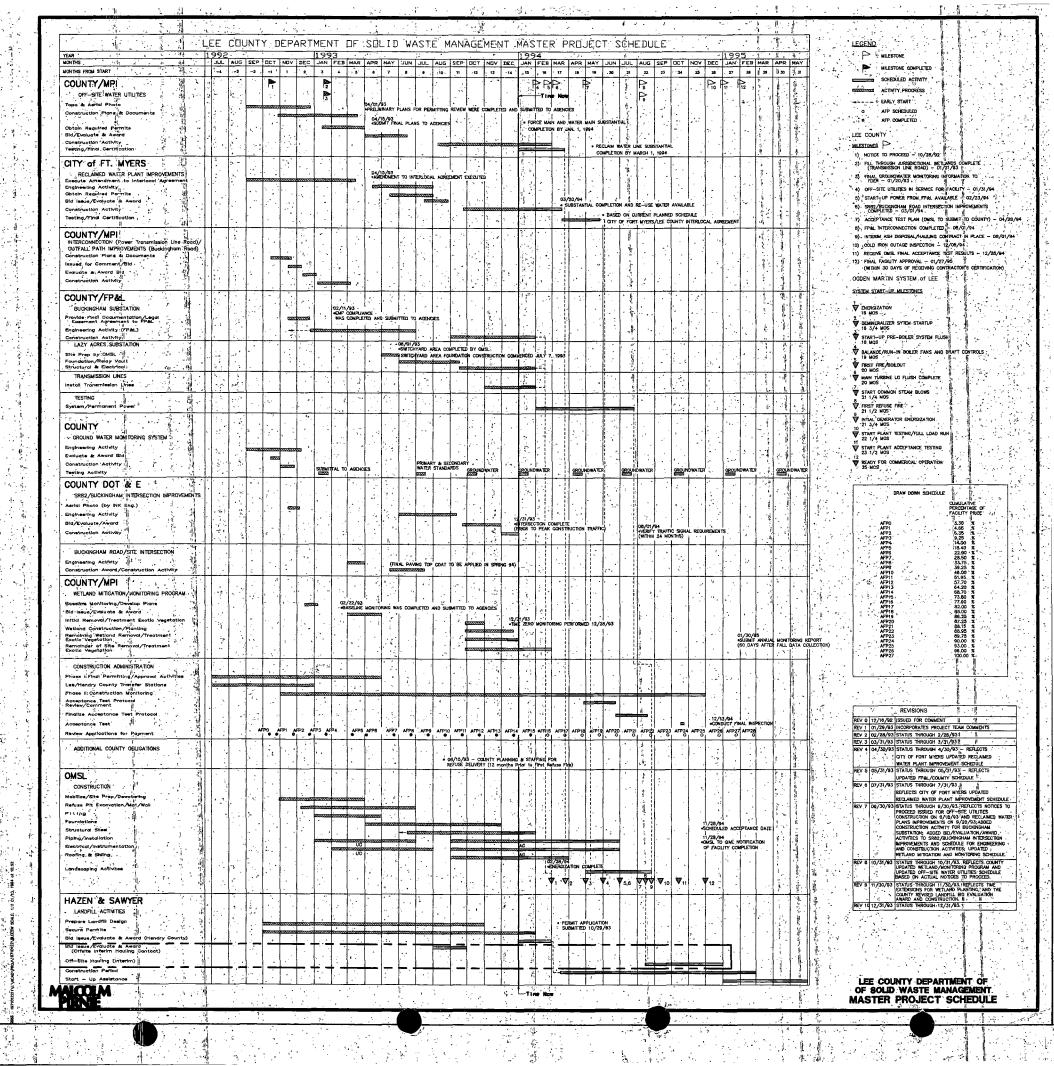
Resource Recovery Plant in background.

(looking east)



Ecologists performing created wetland time zero monitoring. (transect belt boundaries marked with PVC poles)

APPENDIX B MASTER PROJECT SCHEDULE



OVERSIZED DRAWING(S) REMOVED

(SEE OCULUS UNDER SAME INDEXING INFORMATION)

LEE COUNTY, FLORIDA

DEPARTMENT OF SOLID WASTE MANAGEMENT



LEE COUNTY RESOURCE RECOVERY FACILITY CONSTRUCTION MONITORING REPORT

November 1993

Malcolm Pirnie, Inc. P. O. Box 490 Fort Myers, Florida 33902

CONSTRUCTION MONITORING REPORT

LEE COUNTY DEPARTMENT OF SOLID WASTE LEE COUNTY RESOURCE RECOVERY FACILITY

NOVEMBER 1993

MALCOLM PIRNIE, INC.

10500 BUCKINGHAM ROAD FORT MYERS, FLORIDA 33905

1 INTERNATIONAL BOULEVARD MAHWAH, NEW JERSEY 07495

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Construction on the Lee County Resource Recovery Facility and ancillary facilities ("the Project") began on October 28, 1992. At the monthly project progress meeting held on 2 November, 1993 OMSL presented their progress report and an overview of construction activities. This monthly report provides a summary of construction activities during month 13, as witnessed by Malcolm Pirnie, Inc., and includes a report on the remainder of the Project related activities.

Ogden Martin Systems of Lee (OMSL) reports that the project is approximately four weeks ahead of the twenty-seven month contractual schedule. OMSL, however, reports the project to be 46 percent complete versus the 53 percent planned at the end of their reporting period (20 November, 1993). This is based on OMSL's planned twenty-five month construction schedule (the "early construction schedule"). The work force peaked at 401 employees by the end of the OMSL reporting period.

Concrete placed this month included column footers and push walls at the tipping floor, turbine/generator area slab on grade and elevated slabs, water treatment building slab on grade and equipment pads, various tank foundations, firewater pumphouse foundation and pump pedestal, main transformer foundation and the stack roof deck. OMSL reports 71 percent of the total concrete required for the project placed to date. OMSL's subcontractor, Yeargin, continued erection of the refuse building structural steel, roof trusses, and crane rails.

Yeargin's subcontractor, Ron Kendall Masonry Co., continued installation of the administration building and electrical room masonry block work. OMSL's cooling tower contractor, GEA Thermal Dynamic, continued erection of the cooling tower; and Fisher Tank Co. continued erection of the field fabricated tanks.

OMSL's boiler subcontractor (Clark Boiler & Engineering Co.) continued erection of the boiler building structural steel and boiler Unit No. 1 and 2 pressure components. Boiler auxiliary equipment installation (fans, steam coil air heaters, stoker grates) was also

OMSL's air pollution control (APC) equipment subcontractor, ABB Environmental Systems/Caprice, continued erection of the fabric filter house structural steel, baghouse modules and associated duct work. The APC subcontractor continued ground assembly of the Unit No. 1 spray dryer absorber (SDA) reactor and erected Unit No. 1 SDA support steel and reactor chamber rings. OMSL's stack subcontractor, Commonwealth, mobilized their electrical subcontractor and completed installation of the stack lighting, lightening protection and electrical systems.

The residue handling/storage and scale house/scale areas continue to be delayed for construction access and laydown space requirements.

Engineering activities and equipment deliveries continued in support the of early construction schedule. Major equipment arriving on site this period included refuse and boiler building structural steel, boiler Units No. 1 and 2 pressure and non pressure components, fire water storage tank, unit substation 13.8 kV and 4160 v transformers, generator, Aqua-Tech water treatment equipment, turbine lube oil equipment skid and the Bailey Infi-90 DCS panels and plant MCC's.

OMSL mobilized their start-up manager and commenced start-up coordination and planning.

Interconnection activities continued in support of the Project's scheduled February 1994 energization date. Florida Power & Light's (FP&L) Buckingham substation subcontractor, Megatran, continued installation of the substation equipment foundations and commenced installation of the relay vault building. The Lazy Acres substation subcontractor, Hennessey, completed the switchyard foundations and is nearing completion of work on the relay vault building. FP&L mobilized for receiving the Lazy Acres structural and electrical materials and commenced erection of these components. FP&L mobilized their transmission line subcontractor and commenced installation of the transmission line and poles between the Lazy Acres and Buckingham substations. FP&L continues to report that all activities should be complete in support of the February 1994 Project energization and July 1994 synchronization requirements.

Off-site activities included the continued installation of the offsite utility piping. Piping material deliveries and installation continued in support of the project schedule. The County reports that construction activities related to the City of Fort Myers Central

Wastewater Treatment Plant, to supply reclaimed water to the Project continue according to schedule.

Work on the wetland mitigation areas continued with the contractor (The Richards Co.) completing the wetland excavation and initial grading. Wetland planting is scheduled for next period. Exotic vegetation removal and treatment continued in the southeast and southwest property areas. Lee County Environmental Laboratories initiated the second round of groundwater samples this reporting period (Fourth Quarter, 1993).

The following provides a description of progress made on:

- construction activities
- drawdown analysis
- project schedule
- quality control
- off-site water utilities
- reclaimed water plant improvements
- FP&L interconnection
- ground water monitoring system
- wetland mitigation/exotics monitoring program
- construction administration
- permit compliance, and
- construction activities planned for the next reporting period

2.0 CONSTRUCTION ACTIVITIES PERFORMED

OMSL and their subcontractors performed the following specific construction activities during the month of November 1993:

2.1 SITE WORK

 Installed additional hay bale silt barriers upstream of drainage culverts to the detention ponds.

- Continued replacement of the previously installed potable water line piping with a larger diameter pipe.
- Re-mobilized Sun Coast Underground and continued installation of the site underground fire water piping, PIV's and hydrants.
- Mobilized Southwest Water Well Systems, Inc. and commenced drilling activities related to the back up water supply system wells.
- Revised the oil separators at grease trap No. 1 manholes.

2.2 STRUCTURES

2.2.1 Tipping Floor

- Placed concrete for column footers along column line 1. (south 4 footers)
- Placed concrete for push wall along column line A, and the section along column line 1, (columns B-E).
- Continued to receive deliveries of tipping enclosure pre-engineered building steel.
- S & E contractors continued to repair the tipping area exit/entrance ramp storm washouts (grading, backfilling and re-compacting).
- Continued to install underground fire protection piping along the tipping floor bypass road and exit ramp.
- Continued soils and concrete testing by Independent Laboratory,
 (Universal Engineering Services, Inc. is performing this testing for Yeargin).

2.2.2 Refuse and Administration Building

- Placed concrete for administration entry area slab on grade.
- Continued with decking, reinforcing steel and concrete placement for elevated slabs (elevation 28.5', 44' & 62').
- Placed concrete for several sections of the refuse pit parapet wall.
- Continued with refuse and administration building structural steel erection including refuse building roof trusses, crane rail girders and sheeting girts.

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- Continued conduit, wiring and cable tray installation throughout administration building.
- Continued installation of plumbing and sanitary piping throughout administration building.
- Continued erection of stair tower No. 1, 2 and 3 block walls.
- Continued masonry blockwork throughout administration building and elevator.

2.2.3 Boiler/Power Generation Island

- Continued with boiler building structural steel erection including the topping out of Unit No. 1 and 2 steel.
- Continued with boiler structural steel bolt torque inspections (Law Engineering is providing these inspections for Clark Boiler and Engineering).
- Continued with ground assembly of Units No. 1 and 2 superheat ash hoppers and expansion joints.
- Continued with erection and welding of Unit No. 1 and 2 boiler pressure components (including economizer modules, evaporator modules, superheat modules, downcomers, riser tubes).
- Continued with non-destructive examination of boiler pressure component welds (by independent testing laboratory Duratek).
- Commenced stress relieving of pressure welds for Unit No. 1 boiler components.
- Continued with Unit No. 1 and 2 stoker hydraulic piping installation.
- Installed Unit No. 1 stoker grate bars.
- Commenced installation and assembly of Unit No. 1 and 2 forced draft fans.
- Patched and finished the concrete at Unit No. 1 forced draft fan foundation.
- Rigged the Unit No. 1 and 2 steam coil air heaters into boiler building.
- Fit-up and welded the deaerator to the deaerator storage tank.
- Received boiler soot blowers.
- Continued erection of turbine/generator building structural steel and floor decking.

- Completed decking and reinforcing steel installation for turbine/generator building elevated slabs.
- Placed concrete for turbine/generator building slab on grade, turbine/generator El. 25'0" platform, 15kV electrical room floor, lube oil skid foundation, and closed cooling water pump foundation.
- Completed installation of main electrical room and 15kV electrical room block walls.
- Placed concrete for stair tower No. 1 and 2 floors.
- Cleaned and painted masonry walls in main electrical room.
- Completed turbine/generator sole plate installation.
- Rigged turbine and generator to the support pedestal/sole plates.
- Received turbine lube oil skid.
- Rigged lube oil skid to the lube oil foundation.
- Continued electrical cable tray installation throughout turbine/generator building.
- Rigged low pressure feed water heat exchangers to turbine operations floor.
- Rigged electrical switchgear to main electrical room.
- Erected turbine bridge crane to support steel/rails.
- Placed concrete for main transformer support pedestal.
- Rigged main transformer to support foundation.
- Installed protective covering at main transformer.
- Continued with fabrication of miscellaneous piping spools at fab shop.
- Received first deliveries of vendor fabricated large bore piping spools.

2.2.4 APC Equipment and Stack

- Continued to erect Units No. 1 and 2 fabric filter house and associated duct work.
- Continued ground assembly of Unit No. 1 SDA reactor chamber and penthouse section.
- Continued erection of Unit No. 1 SDA reactor chamber.
- Erected Unit No. 1 SDA ash hopper (conical section).

- Installed stack service lights, lightning protection system and remainder of related electrical system.
- Placed acid proof covering over stack concrete roof deck.
- Dismantled and demobilized crane used for stack erection.

2.2.5 Other (cooling tower, water treatment building, fire water pump house, storage tanks, residue handling building, scale house, etc.)

- GEA Thermal Dynamics continued erection of the cooling tower wood framework, stair tower, fill pack, shroud water distribution headers, plywood decking, fans, motors and fan shrouds.
- Placed concrete for the water treatment building foundations and equipment pads.
- Received Aqua-Tech Water Treatment equipment (temporarily stored in northwest laydown area).
- Rigged Aqua-Tech water treatment equipment skids to support foundations in water treatment building.
- Ron Kendall Masonry commenced installation of water treatment building block walls.
- Placed concrete for clarifier tank foundation.
- Fisher Tank continued erection of the demineralized water, wastewater, firewater, and filtered water storage tanks.
- Commenced painting of field fabricated tanks (demineralized water, filtered water, waste water).
- Continued with the dewatering of the water treatment sump.
- Placed concrete for firewater pump house foundation and pump pedestal (set pump to pedestal and covered with plastic).
- Commenced erection of firewater pumphouse pre-engineered building steel.
- Placed concrete for water treatment building filtrate sump foundation and walls (water proofed beneath foundation and outside walls prior to concrete placement and backfilling respectively).

- Backfilled filtrate sump/walls.
- Re-mobilized piling contractor (APAC) to remove sheet piling at perimeter of water treatment sump.
- Installed conduit and electrical panels for circulating water pumps.

2.3 PROCUREMENT

Essentially all equipment has been purchased. Equipment purchasing and deliveries are reported to be in support of the early construction schedule. Instrumentation and bulk electrical are the remaining items to be purchased. Major equipment and materials arriving on site this period included the following:

- refuse and boiler building structural steel
- boiler Units No. 1 and 2 pressure and non-pressure components
- boiler soot blowers
- field fabricated tank (fire water storage tank)
- unit substation 13.8 kV and 4160 v transformers
- Bailey DCS panels and plant MCC's
- stand-by diesel generator
- generator
- Aqua-Tech water treatment equipment
- turbine lube oil equipment skid
- control room HVAC unit
- initial deliveries of shop fabricated piping spools

2.4 OMSL PLANNED VS. ACTUAL PROGRESS

Every month OMSL reports on what construction activities are planned for the following month. In this section Malcolm Pirnie compares the reported planned activities to what was accomplished in the field.

8

The majority of activities identified by OMSL in their October 1993 report for performance during this reporting period (November 1993) were confirmed with the exception of the following:

- Complete lime stone road base at tipping floor ramps and by-pass road.
- Commence tipping floor pre-engineered building erection.
- Place concrete for tipping floor slab.
- Erect refuse cranes.
- Commence scale house/scale foundation installation (postponed for construction access).

It is reported that the majority of these items will be accomplished in the near future. If, however, they continue to be postponed it may have a material effect on OMSL's ability to meet their early construction schedule.

3.0 DRAWDOWN ANALYSIS

OMSL's AFP No. 14 request of 4.023 percent of the Facility Price is 1.12 percent less that the maximum not to exceed cumulative drawdown percentage allowable under Schedule 15 of the Amended Construction Agreement. Malcolm Pirnie completed their review of OMSL's Application for Payment No. 14 and found OMSL to be entitled to their full request of 4.023 percent.

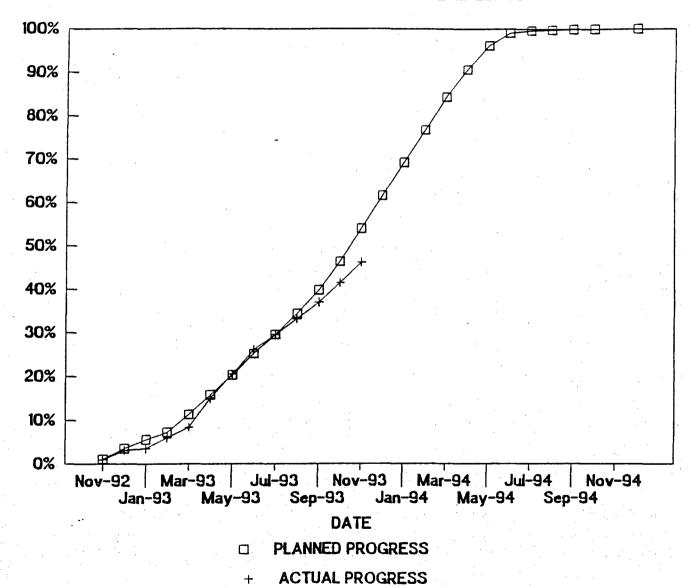
4.0 PROGRESS SCHEDULE

OMSL is working from a planned 25 month early construction schedule. This is two months shorter than its contractual construction schedule of 27 months. Under the planned early construction schedule, the overall construction progress is estimated to be 46 percent complete versus the 52 percent planned for the period ending 20 November, 1994. A copy of the OMSL "Construction Progress Curve" and "Total Manpower Curve" are attached for

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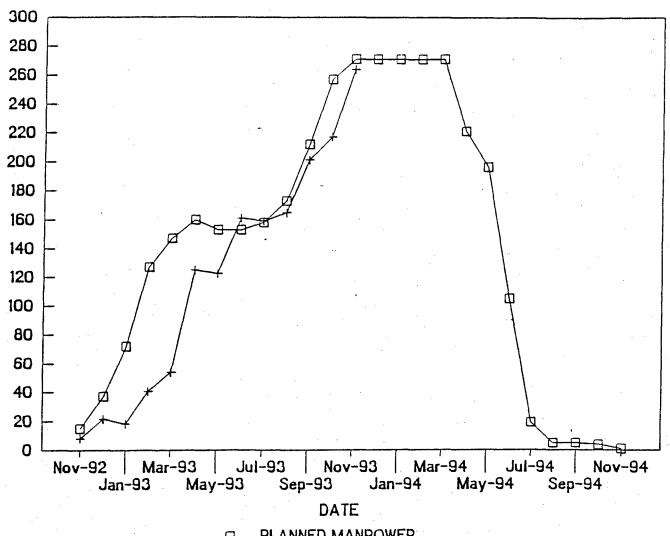
OMSL-LEE COUNTY FACILITY

CONSTRUCTION PROGRESS CURVE-11/20/93



OMSL-LEE COUNTY FACILITY

TOTAL MANPOWER CURVE-11/20/93



- PLANNED MANPOWER
 - **ACTUAL MANPOWER**

reference. Major areas remaining behind the early construction schedule are the refuse pit building enclosure and refuse cranes, tipping area and enclosure, turbine/generator building roofing and siding. OMSL is committed to the early construction schedule and the project remains ahead of the 27 month contractual construction schedule. OMSL held meetings with their subcontractors (Raytheon Engineers and Constructors/Harbert Yeargin) this period. The purpose of these meetings was to obtain a revised plan for regaining the schedule slippage and to get the Project back on track for the early construction schedule.

5.0 QUALITY CONTROL

OMSL's quality control team and special inspector continue to monitor all contractors' work for compliance with the applicable codes, drawings and specifications. Malcolm Pirnie Inc. continues to review the OMSL quality control plan implementation, records and special inspector reports. Review of the special inspector reports continues to show that the materials placed to date are in compliance with the contract requirements. To date OMSL subcontractors have tested and qualified 88 welders for structural steel and pipe welding. Currently, 53 welders are working on the project. Harbert-Yeargin (OMSL's general contractor) added a second Level II certified welding inspector this reporting period.

6.0 EQUIPMENT MAINTENANCE

OMSL's subcontractors continued with the required maintenance for all equipment delivered and stored on site. Equipment maintenance continues to be tracked and recorded on a equipment storage and maintenance log. To date OMSL is maintaining 236 pieces of equipment. OMSL received and added 66 pieces of equipment to the log this month.

Maintenance activities this reporting period included shaft rotations of most rotating equipment. OMSL subcontractors also performed oil level checks as applicable and inspected overall equipment condition and storage covers. Equipment is beginning to be

installed in the field e.g., water treatment building equipment pumps, condensate pumps, motors, etc., and maintenance activities for this equipment are performed in place.

7.0 PHOTOGRAPHS

Photographs included in Appendix A document construction progress during the reporting period.

8.0 OFF-SITE WATER UTILITIES

Malcolm Pirnie Inc. subconsultant, Ink Engineering Inc. (IEI), continued with construction observation and inspection duties for the off-site utility lines. The County's utility line contractor, Southwest Utility Systems, Inc. (SUSI), continued installation of all three utility lines (potable water, sanitary sewer and reclaimed water line). The potable water line and sanitary force main are nearing completion. Items remaining include installation of the remaining piping, hydrants, and hydrostatic testing which is in progress. SUSI has now completed approximately 20 percent of the reclaimed water line. Installation of the utility lines is on schedule with the original CPM schedule submitted by SUSI. A construction progress meeting was held at the offices of IEI on 9 November, 1993.

Other activities occurring this reporting period included the following:

- SUSI continued with installation of potable water and sanitary forcemain along Buckingham Rd.
- SUSI continued with hydrostatic testing of the potable water and sanitary forcemain.
- SUSI continued clearing operations within the S.R.82 right-of-way.
- SUSI continued installation of silt barriers and hay bales adjacent to wetland jurisdictional areas as required.

- SUSI continued to receive materials throughout the month including the initial deliveries of the 24" diameter ductile iron reclaimed water piping.
- SUSI continued with installation of the reclaimed water line.
- SUSI commenced the reclaimed water line jack and bore beneath I-75.
- SUSI continued maintenance of traffic activities.
- SUSI continued to have soil backfill density tests performed by an independent testing laboratory (Commercial Testing, Inc.).
- SUSI continued to comply with the permit requirements.
- The County continued negotiations related to the Alternate 1 easement at the future Buckingham/S.R.82 intersection.

9.0 RECLAIMED WATER PLANT IMPROVEMENTS

The County's reclaimed water plant improvement contractor, Mitchell & Stark Construction Company continued excavation and backfilling activities related to the construction of the reclaimed water upgrade at the City of Fort Myers Central Wastewater Treatment Plant.

Construction activities related to the Plant are overseen and reviewed by others. Malcolm Pirnie's responsibility as construction administrator for the Project does not include any responsibility related to the construction and progress on the Plant improvements necessary for the Project to meet certain construction milestones.

10.0 FP&L INTERCONNECTION

Interconnection activities continued to progress this period. FP&L's Buckingham substation subcontractor, Megatran, commenced installation of the relay vault building foundations and block walls.

FP&L's Lazy Acres switchyard subcontractor, Hennessey, continued with the relay vault building, painting, lighting and interior architectural work. Hennessey also completed

the switchyard perimeter fence grounding. Hennessey's remaining work includes miscellaneous punchlist items, and leveling the switchyard for placing the gravel cover.

FP&L personnel mobilized on 12 November, 1993 and received deliveries of the Lazy Acres structural and electrical components. FP&L is self performing this work and commenced erection of the structural components during the mid part of November.

FP&L's transmission line and pole subcontractor (Dillard and Smith Contractors) mobilized this period. Dillard and Smith's surveying subcontractor laid out the transmission line pole and anchor locations. Dillard and Smith commenced receiving and placing transmission line poles between the Lazy Acres and Buckingham substations, including three poles within the OMSL site area. Pole erection commenced on 17 November, 1993.

FP&L reports that all activities remain on schedule for meeting the February 1994 Project energization requirement and July 1994 synchronization date.

11.0 GROUND WATER MONITORING SYSTEM

The County's testing laboratory collected water samples this month for the fourth quarter 1993 reporting period (second quarter tested to date). Test results will be forwarded by the County to the appropriate regulatory agencies when available.

12.0 WETLAND MITIGATION/MONITORING PROGRAM/EXOTICS PLAN

12.1 WETLAND MITIGATION/MONITORING PROGRAM

The County's wetland mitigation contractor, The Richards Co., completed excavation, rough grading and commenced mulch placement at the created wetland area this period. The Richards Company also acquired a burn permit and burned the vegetation cleared during created wetland excavation. Due to extremely wet conditions, (created wetland under water after excavation and rough grading) the final grading and wetland planting will be postponed until slightly dryer conditions exist. Malcolm Pirnie Inc.'s subconsultant, Kevin L. Erwin Inc., continues to observe the wetland contractors activities for compliance with the contract documents and permit requirements.

12.2 EXOTICS PLAN

Exotic vegetation removal and treatment continued throughout all areas. The main emphasis was on treating the exotic vegetation in place with approved herbicides. Effects of the herbicide treatments became apparent by the end of the reporting period as the undesirable species were turning brown and dying off.

13.0 S.R.82/BUCKINGHAM ROAD INTERSECTION AND BUCKINGHAM ROAD/SITE INTERSECTION

13.1 S.R.82/BUCKINGHAM

The County Department of Transportation and Engineering's (LCDOT&E) awarded the bid for the S.R.82/Buckingham Road Intersection to Ajax in late October. Work on the intersection improvements is scheduled to begin in early January 1994.

13.2 BUCKINGHAM ROAD/SITE INTERSECTION

A final top coat of paving is scheduled to be applied in the spring of 1994, after the majority of construction traffic and deliveries are complete.

14.0 CONSTRUCTION ADMINISTRATION

14.1 SITE INSPECTION

Malcolm Pirnie continued to observe construction progress on a full time basis. Malcolm Pirnie maintains daily progress reports for summary/log of daily construction activities and administrative issues on file. These reports are available for inspection by the County and its agents upon request.

14.2 DRAWINGS/DESIGN REVIEW

The following total number of shop drawings and/or technical specifications were received by Malcolm Pirnie.

	Fort Myers	White Plains
No. of shop drawings received	180	83
No. of specifications received	0	0
No. of shop drawings reviewed	0	2
No. of specifications reviewed	0	0

All drawings and specifications received by Malcolm Pirnie are not reviewed. Malcolm Pirnie reviews only those drawings and specifications related to the Facility performance requirements and guarantees. Other drawings received are beyond Malcolm Pirnie's work scope and are filed on behalf of the County.

14.3 MAINTAIN FILES

Malcolm Pirnie maintains a complete set of drawings and specifications on behalf of the County in the County's trailer at the Facility site.

14.4 REVIEW REQUISITIONS AND CHANGE ORDERS

Application for Payment (AFP) No. 14 was received during the reporting period. See Section 3.0 Drawdown Analysis for specific information.

15.0 PERMIT COMPLIANCE

The County and OMSL continue to comply with the project permit requirements. The following permit related activities occurred this reporting period:

- OMSL continued to submit special inspector reports to the County Building Department.
- The Company submitted the Hendry County Landfill permit application.

16.0 CONSTRUCTION ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD

The following specific construction activities are proposed for the month of December 1993 by OMSL:

16.1 SITE WORK

- Continue installation of transmission line and poles between Lazy Acres and Buckingham substation.
- Continue to erect the Lazy Acres switchyard structural and electrical components.

16.2 STRUCTURES

16.2.1 Tipping Floor

- Complete lime stone road base for entry/exit roads.
- Continue to place concrete for push walls.
- Continue to receive deliveries of pre-engineered building steel.
- Commence pre-engineered building steel erection.

16.2.2 Refuse and Administration Building

- Continue with refuse building structural steel/including roof trusses.
- Commence refuse building siding installation.
- Erect refuse cranes.
- Continue masonry block work at refuse building north end rooms and stair tower No. 3.
- Continue concrete placement for administration building elevated slabs.
- Continue with masonry block work through administration building and stair tower No. 7.
- Continue with plumbing installation throughout administration building.
- Continue with administration building electrical conduit, wiring and cable tray installation.
- Commence administration building steel fire proofing.

Install DCS system and electrical control panels to control room.

16.2.3 Boiler/Power Generation Island

- Continue with boiler building structural steel erection.
- Continue boiler building auxiliary structural steel erection. (fill in steel, grating, handrails etc.)
- Continue with installation of boiler No. 1 and 2 stoker grate equipment.
- Continue with ground assembly of superheat ash hoppers.
- Continue with boiler Units No. 1 and 2 pressure part erection and welding.
- Continue with boiler, stoker and feed chute associated piping/tubing.
- Continue with boiler fan erection.
- Continue with boiler auxiliary equipment erection to platforms.
- Continue with turbine/generator building steel erection and elevated slab work.
- Continue with roofing and siding of turbine/generator building.
- Complete modifications to main condenser support pedestal.
- Continue electrical cable tray installation throughout turbine/generator building.
- Place concrete for main transformer foundation and set transformer.

16.2.4 APC Equipment and Stack

- Continue installation of Unit No. 1 and 2 fabric filter house duct work.
- Continue with Unit No. 1 and 2 spray dry absorber ground assembly and erection.
- Complete stack ladder and clean up.
- Demobilize stack subcontractor.

16.2.5 Other (cooling tower, water treatment building, fire water pump house, storage tanks, residue handling building, scale house, etc.)

- Complete cooling tower.
- Continue field fabricated tank erection.
- Continue concrete placement for remainder of water treatment area foundations.
- Continue installation of Aqua-Tech water treatment equipment.

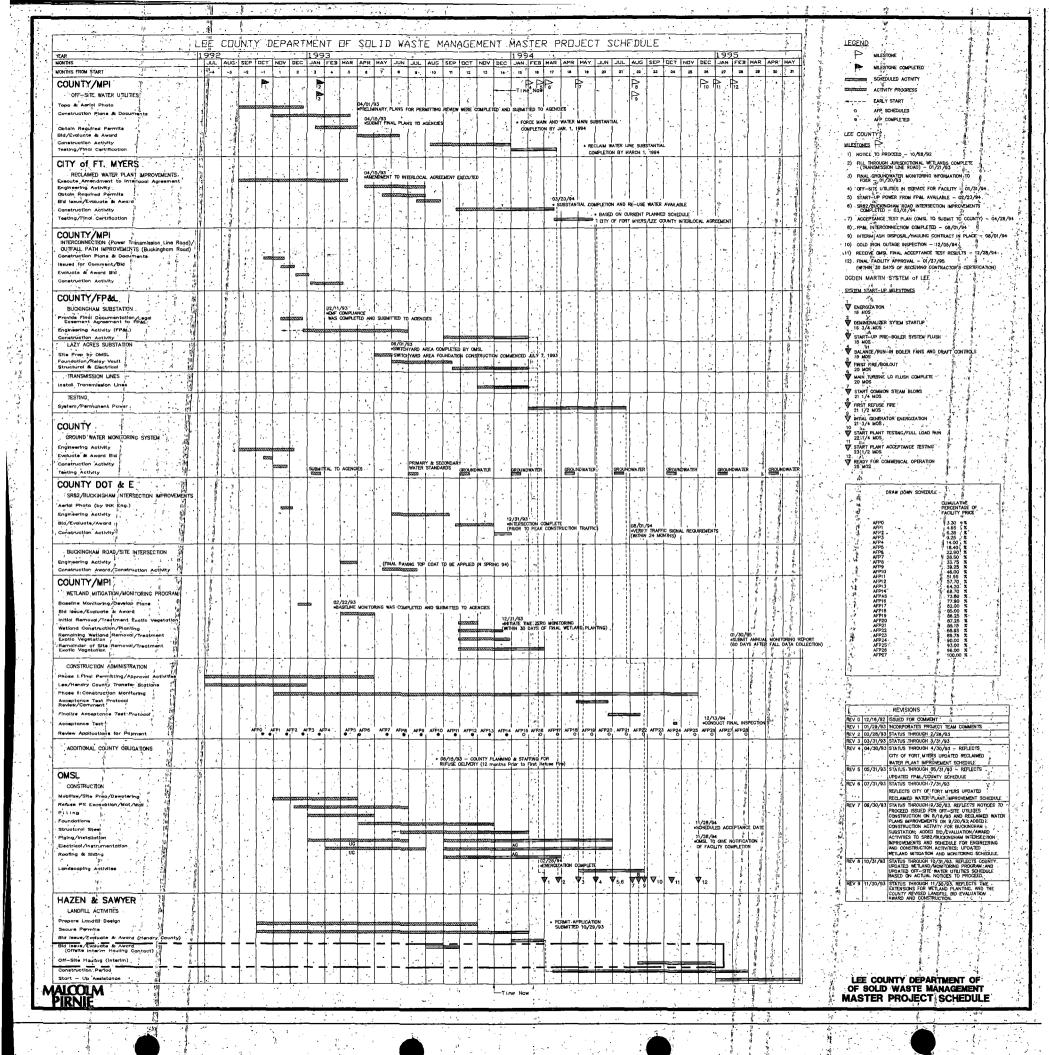
16.3 PROCUREMENT

Essentially all equipment is purchased. Bulk electrical materials continue to be actively procured. The following equipment and material is expected to be delivered next month:

- refuse and boiler building structural steel
- boiler unit No. 1 and 2 pressure and non-pressure components
- boiler roof fans
- inclined ash conveyor/tube enclosure

APPENDIX A PHOTOGRAPHS

APPENDIX B MASTER PROJECT SCHEDULE



LEE COUNTY, FLORIDA

DEPARTMENT OF SOLID WASTE MANAGEMENT



LEE COUNTY RESOURCE RECOVERY FACILITY CONSTRUCTION MONITORING REPORT

December 1993

Malcolm Pirnie, Inc. P. O. Box 490 Fort Myers, Florida 33902

CONSTRUCTION MONITORING REPORT

LEE COUNTY DEPARTMENT OF SOLID WASTE LEE COUNTY RESOURCE RECOVERY FACILITY

DECEMBER 1993

MALCOLM PIRNIE, INC.

10500 BUCKINGHAM ROAD FORT MYERS, FLORIDA 33905

1 INTERNATIONAL BOULEVARD MAHWAH, NEW JERSEY 07495

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Construction on the Lee County Resource Recovery Facility and ancillary facilities ("the Project") began on October 28, 1992. At the monthly project progress meeting held on 7 December, 1993 OMSL presented their progress report and an overview of construction activities. This monthly report provides a summary of construction activities during month 14, as witnessed by Malcolm Pirnie, Inc., and includes a report on the remainder of the Project related activities.

Ogden Martin Systems of Lee (OMSL) reports that the project is approximately four weeks ahead of the twenty-seven month contractual schedule. OMSL, however, reports the project to be 52 percent complete versus the 61 percent planned at the end of their reporting period (20 December, 1993). This is based on OMSL's planned twenty-five month construction schedule (the "early construction schedule"). The work force peaked at 436 employees by the end of the OMSL reporting period.

Concrete placed this month included push walls at the tipping floor, remaining turbine/generator area slab trenches and valve pit, water treatment building slab on grade, lab roof and equipment pads, lime storage tank and carbon storage tank foundations, Air Pollution Control (APC) area duct support piers, grade beam at the chlorination building and the elevator roof slab. OMSL reports 74 percent of the total concrete required for the project placed to date. OMSL's subcontractor, Harbert-Yeargin, (Yeargin) continued erection of the refuse building structural steel, roof trusses, crane rails and erected the refuse cranes.

Yeargin's subcontractor, Ron Kendall Masonry Co., continued installation of the administration building, water treatment building, electrical room masonry block work and commenced stair tower No. 1, 2 and 3 block work. OMSL's cooling tower contractor, GEA Thermal Dynamic, completed erection of the cooling tower. OMSL's tank subcontractor, Fisher Tank Co. completed erection of the field fabricated tanks. Yeargin mobilized the

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HVAC contractor, Harper Mechanical Inc. Harper Mechanical Inc. installed and placed into service the control room HVAC unit for DCS equipment storage requirements.

OMSL's boiler subcontractor (Clark Boiler & Engineering Co.) continued erection of the boiler building roof and auxiliary steel and the boiler Unit No. 1 and 2 pressure components. Boiler auxiliary equipment installation (fans, steam coil air heaters, stoker grates) continue to be active. Clark Boiler & Engineering continued the second shift of welders this month. OMSL reports that the boiler subcontractor is on track with their intended schedule.

OMSL's air pollution control (APC) equipment subcontractor, ABB Environmental Systems/Caprice, continued erection of the fabric filter house structural steel, baghouse modules and associated duct work. The APC subcontractor continued ground assembly and erection of Unit No. 1 and 2 spray dryer absorber (SDA) reactors, penthouses and support steel. OMSL's stack subcontractor, Commonwealth, de-mobilized their electrical subcontractor and completed stack ladder installation and clean up.

The residue handling/storage and scale house/scale areas continue to be delayed for construction access and laydown space requirements.

Engineering activities and equipment deliveries continued in support the of early construction schedule. Major equipment arriving on site this period included refuse and boiler building structural steel, boiler Units No. 1 and 2 pressure and non pressure components, and Aqua-Tech water treatment equipment pre-cast wall panels, APC equipment/ductwork and lime silo, boiler roof fans, boiler chemical feed skids and the inclined ash conveyor/tube enclosure.

OMSL continued start-up coordination and planning in preparation for energization. OMSL's start-up trailer complex arrived on site, was set up and readied for occupancy.

Interconnection activities continued in support of the Project's scheduled February 1994 energization date. Florida Power & Light's (FP&L) Buckingham substation subcontractor, Megatran, completed installation of the substation equipment foundations and the relay vault building. The Lazy Acres substation subcontractor, Hennessey, completed the switchyard leveling and crushed stone placement. FP&L continued installation of the Lazy Acres structural and electrical components. FP&L's transmission line subcontractor, Dillard Smith Construction Co. continued installation of the transmission

line and poles between the Lazy Acres and Buckingham substations. FP&L continues to report that all activities should be complete in support of the February 1994 Project energization and July 1994 synchronization requirements.

Off-site activities included the continued installation of the offsite utility piping. The potable water and sanitary sewer lines are substantially complete and the reclaimed water line installation is in support of the project schedule. The County reports that construction activities related to the City of Fort Myers Central Wastewater Treatment Plant, to supply reclaimed water to the Project continue according to schedule.

Work on the wetland mitigation areas continued with the contractor (The Richards Co.) completing the wetland final grading, perimeter sodding and planting. Exotic vegetation removal and treatment continued throughout the site.

The following provides a description of progress made on:

- construction activities
- drawdown analysis
- project schedule
- quality control
- off-site water utilities
- reclaimed water plant improvements
- FP&L interconnection
- ground water monitoring system
- wetland mitigation/exotics monitoring program
- construction administration
- permit compliance, and
- construction activities planned for the next reporting period

2.0 CONSTRUCTION ACTIVITIES PERFORMED

OMSL and their subcontractors performed the following specific construction activities during the month of December 1993:

3

2.1 SITE WORK

- Continued replacement of the previously installed potable water line piping with a larger diameter pipe.
- Installed concrete for electrical duct bank from the northwest corner of the water treatment building to the pull box 40' west.
- Sun Coast Underground continued installation and hydrostatic testing of the site underground fire water piping, PIV's and hydrants.
- Southwest Water Well Systems completed drilling activities related to the back up water supply system wells (flow testing).
- OMSL received approximately 4500 cubic yards of fill material from the County's wetland excavation project contractor and stock-piled the fill at the southwest portion of the facility site.
- Continued installation of underground sanitary sewer line from the administration building.
- Set up OMSL start-up trailers.
- OSHA representative performed a site wide safety inspection including all buildings and contractors.

2.2 STRUCTURES

2.2.1 Tipping Enclosure and Tipping Floor

- S & E contractors continued to backfill and compact the lime rock base at the tipping floor entry and exit ramps, and bypass road.
- S & E contractors continued final grading at the tipping floor exit ramp slopes.
- S & E placed sod at the tipping floor entrance and exit ramp slopes.
- Continued soils compaction and concrete testing by independent laboratory
 (Universal Engineering Service, Inc. is performing this testing for Yeargin).
- Continued to place concrete for the push walls.

- Continued to receive deliveries of tipping enclosure pre-engineered building steel.
- Continued to excavate and install tipping enclosure building roof drain piping on the east side of the tipping enclosure building sloped earth (underground section).
- Set lift station No. 3 at west side of water treatment building.

2.2.2 Refuse and Administration Building

- Continued with refuse and administration building structural steel erection, including refuse building roof trusses, roof support braces, crane rail girders, sheeting girts and roof purlins.
- Assembled and erected refuse bridge crane No. 1 and 2.
- Painted finish coat at refuse building roof steel top side in preparation for roof decking.
- Commenced installation of the refuse building metal roof decking.
- Erected refuse pit pre-cast curtain wall panels.
- Placed concrete for the refuse pit parapet walls.
- Continued conduit, wiring and cable tray support installation throughout the administration building.
- Continued installation of plumbing and sanitary piping throughout the administration building.
- Commenced installing the door frames throughout the administration building.
- Commenced installation of tile in the control room.
- Commenced application of the fire proofing throughout the administration building steel.
- Commenced bolting-up the structural steel on No. 2 refuse building east stair tower.
- Placed concrete for stair tower No. 1 and 2 foundations.
- Commenced erection of stair tower No. 1, 2 and 3 masonry block walls.
- Continued with elevator block walls and door opening lintel beams.

- Placed concrete at stair tower No. 3 treads and landings.
- Placed concrete for the housekeeping and transformer pads at the electrical room.
- Completed fire proofing at main electrical room and 15 kV electrical room.
- Commenced mounting and bolting up the 480v MCC's along the main electrical room walls.
- Mobilized HVAC subcontractor, Harper Mechanical and commenced HVAC ductwork and equipment installation throughout administration building and control room.
- Received and rigged the Bailey DCS cabinets to the control room.
- Commenced pulling of power cable between switchgear, transformers and MCC's.
- Placed concrete for the elevator roof slab.

2.2.3 Boiler/Power Generation Island

- Continued with boiler building auxiliary steel erection.
- Continued with boiler structural steel bolt torque inspections (Law Engineering is providing these inspections for Clark Boiler and Engineering).
- Continued with grating, handrail and toe plate installation and detailing throughout Unit No. 1 & 2 boiler platforms.
- Continued to bolt up and detail boiler building roof steel.
- Continuing with masonry block work separating the administration/refuse building from the boiler building.
- Commenced painting structural steel at south side of boiler building in preparation for siding installation.
- Rigged Unit No. 1 ash expellers to location.
- Continued with ground assembly of Units No. 1 and 2 superheat ash hoppers and expansion joints.
- Continued with erection and welding of Unit No. 1 & 2 boiler pressure components (including economizer modules, evaporator modules, superheat modules, downcomers, riser tubes).

- Continued with non-destructive examination of boiler pressure component welds (by independent testing laboratories Duratek).
- Continued stress relieving of pressure welds for Unit No. 1 boiler components.
- Continued with Unit No. 1 and 2 stoker and hydraulic piping and stoker grate module installation.
- Rigged Unit No. 1 and 2 overfire air fan steam coil air heaters into boiler building.
- Rigged the superheat outlet header to elevation at Unit No. 1 boiler.
- Received boiler soot blowers.
- Continued with fabrication of miscellaneous piping spools at fab shop (Clark Boiler).
- Commenced installation of piping supports throughout the boiler building.
- Continued installation of Unit No. 1 and 2 feedwater piping between economizers and steam drums.
- Commenced installation of roof tubes at Unit No. 1 boiler.
- Mounted piping header to the boiler drain tank.
- Continued installation of blowdown and drain piping for Unit No. 1 and 2 boilers.
- Continued installation and assembly of boiler Unit No. 1 and 2 forced draft fans.
- Continued electrical cable tray installation throughout Units No. 1 and 2 boiler building.
- Continued erection of turbine/generator building structural steel and floor decking.
- Placed concrete for turbine/generator building remaining floor slab section and "U" drains.
- Placed concrete curbing at perimeter of main turbine lube-oil skid.
- Continued to erect turbine building block walls.
- Continued to paint the turbine/generator building north block wall.
- Completed concrete revision at main condenser support piers.

- Continued to install the roof and parapet wall above the turbine/generator building (curbing for HVAC unit also completed).
- Welded condensate drain line at by-pass condenser.
- Rigged main steam inlet piping to by-pass condenser nozzle.
- Transported steam driven boiler feed pump to turbine/generator building.
- Continued to erect, fit and weld main steam, condensate and closed cooling water piping at turbine/generator equipment.
- Continued electrical installation throughout turbine/generator building.
- Placed concrete for main transformer footers and foundation.
- Continued to install 13.8 kV bus between the main transformer and 13.8 kV switchgear.
- Electricians commenced installation of batteries to the racks in the battery room.

2.2.4 APC Equipment and Stack

- Placed concrete for the support piers for the APC/stack area duct work.
- Continued to erect Units No. 1 and 2 fabric filter house modules and associated duct work.
- Continued ground assembly and erection of Unit No. 1 and 2 SDA reactor chambers and penthouses.
- Set lime silo to support foundation.
- Commenced rigging the ash transfer conveyors to beneath Units No. 1 and fabric filter houses.
- Commenced installation of electrical cable tray along south side of fabric filter house No. 1 support steel.

2.2.5 Other (cooling tower, water treatment building, fire water pump house, storage tanks, residue handling building, scale house, etc.)

- GEA Thermal Dynamics completed cooling tower installation.
- Grinnell Fire Systems mobilized and installed the fire protection system piping for the cooling tower.

- Placed concrete for the water treatment building foundations, grade beam, equipment pads, carbon absorption and sludge tank foundations, and water treatment lab roof and neutralization pump pad.
- Placed concrete for the carbon, lime and soda ash storage tank foundations and walls.
- Commenced installation of water treatment building electrical room block walls.
- Erected carbon, lime and soda ash storage tanks to foundations.
- Placed concrete for dyna sand filter foundations.
- Set water treatment MCC's to water treatment building electrical room.
- Commenced erection of water treatment pre-engineered building steel and siding.
- Welded lifting lugs to the sides of fire water storage tank.
- Corrected the inlet nozzle location of fire water storage tank by lifting tank and rotating to match fire water pump inlet suction line location.
- Hydrostatically tested the fire water storage tank.
- Installed roof decking and gutters at fire water pump house.
- Commenced erection, fit-up and welding of miscellaneous piping spools and hangers throughout the water treatment building.
- Commenced installation of cable tray supports throughout the water treatment building.
- Continued to rig Aqua-Tech water treatment equipment skids to support foundations in water treatment building.
- Fisher Tank completed erection of fire water storage tank and clarifier tank.
- Placed and aligned the demineralized water transfer pumps.
- Mounted the permanent grounding lugs to the circulating water pumps.

2.3 PROCUREMENT

Essentially all equipment has been purchased. Equipment purchasing and deliveries are in support of the early construction schedule. Instrumentation and bulk electrical are

the remaining items to be purchased. Major equipment and materials arriving on site this period included the following:

- refuse and boiler structural steel
- pre-cast wall panels for tipping floor curtain wall
- boiler Units No. 1 and 2 pressure and non-pressure components
- lime silo (APC equipment)
- boiler chemical feed skids
- boiler roof fans
- APC equipment and duct work
- inclined ash conveyor/tube enclosure

2.4 OMSL PLANNED VS. ACTUAL PROGRESS

Every month OMSL reports on what construction activities are planned for the following month. In this section Malcolm Pirnie compares the reported planned activities to what was accomplished in the field.

The majority of activities identified by OMSL in their November 1993 report for performance during this reporting period (December 1993) were confirmed with the exception of the following:

- Complete lime stone road base at tipping floor ramps and bypass road.
- Place concrete for tipping floor slab.
- Commence scale house/scale foundation installation (postponed for construction access).

3.0 DRAWDOWN ANALYSIS

OMSL submitted Application for Payment (AFP) No. 15 this reporting period. OMSL's AFP No. 15 request of 3.591 percent of the Facility Price is 2.737 percent less that the maximum not to exceed cumulative drawdown percentage allowable under Schedule 14 of the Amended Construction Agreement. Malcolm Pirnie completed review of OMSL's

Application for Payment No. 15 and found OMSL to be entitled to 3.491 percent of their requested progress payment.

4.0 PROJECT SCHEDULE

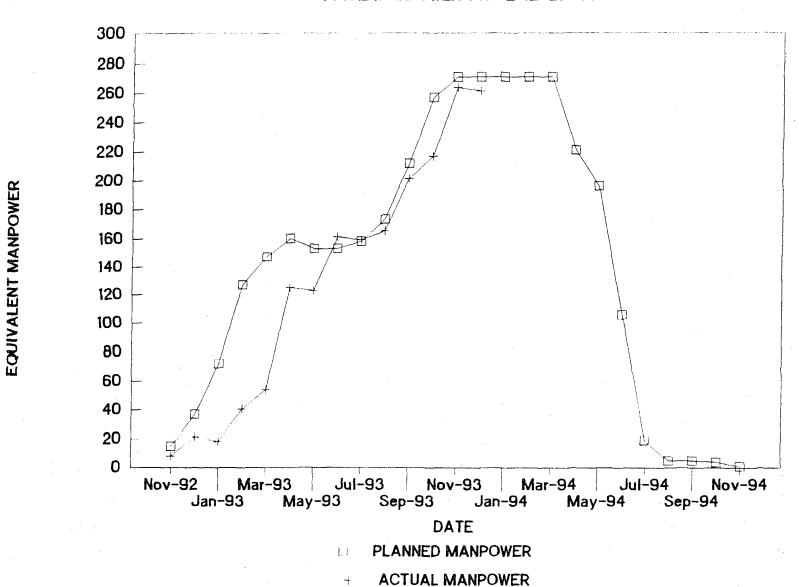
OMSL is working from a planned 25 month early construction schedule. This is two months shorter than its contractual construction schedule of 27 months. Under the planned early construction schedule, the overall construction progress is estimated to be 52 percent complete versus the 61 percent planned for the period ending 20 December, 1994. A copy of the OMSL "Construction Progress Curve" and "Total Manpower Curve" are attached for reference. Major areas remaining behind the early construction schedule are the scale house/scale foundations, refuse pit building enclosure, tipping area slab and enclosure, boiler area roof and siding, turbine/generator building control room, roofing and siding, residue handling building and foundations, mechanical plant wide, electrical plant wide and instrumentation plant wide. OMSL is committed to the early construction schedule and the project remains ahead of the 27 month contractual construction schedule. OMSL is continuing to apply pressure on their subcontractors (Raytheon Engineers and Constructors/Harbert Yeargin) to regain time on the early construction schedule.

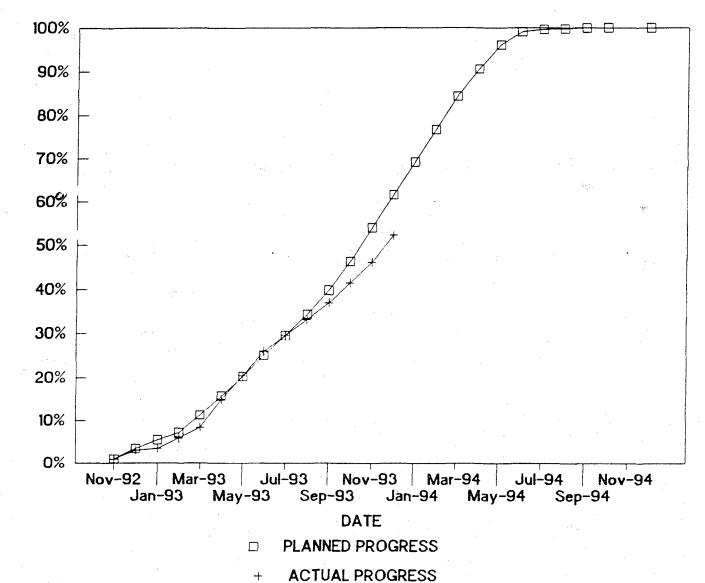
5.0 QUALITY CONTROL

OMSL's quality control team and special inspector continue to monitor all contractors' work for compliance with the applicable codes, drawings and specifications. Malcolm Pirnie Inc. continues to review the OMSL quality control plan implementation, records and special inspector reports. Review of the special inspector reports continues to show that the materials placed to date are in compliance with the contract requirements. To date OMSL subcontractors have tested and qualified 89 welders for structural steel and pipe welding. Currently 68 welders are working on the project. Quality control activities have increased significantly since last reporting period. Inspection of painting, fire proofing

OMSL-LEE COUNTY FACILITY

TOTAL MANPOWER CURVE-12/20/93





PERCENT COMPLETE

and masonry throughout the administration building and various plant wide piping hydrostatic tests are requiring full time attention.

6.0 EQUIPMENT MAINTENANCE

OMSL's subcontractors continued with the required maintenance for all equipment delivered and stored on site. Equipment maintenance continues to be tracked and recorded on a equipment storage and maintenance log. To date OMSL is maintaining 248 pieces of equipment. OMSL received and added 12 pieces of equipment to the log this month.

Maintenance activities this report period included shaft rotations for most rotating equipment stored and tracked on the maintenance log. OMSL subcontractors also performed oil level checks as applicable and inspected overall equipment condition and storage covers.

Installing temporary strip heaters on incoming electrical switchgear/MCC's and plastic covering on the DCS panels also occurred this month.

7.0 PHOTOGRAPHS

Photographs included in Appendix A document construction progress during the reporting period.

8.0 OFF-SITE WATER UTILITIES

Malcolm Pirnie Inc. subconsultant, Ink Engineering Inc. (IEI), continued with construction observation and inspection duties for the off-site utility lines. The County's off-site utility line contractor, Southwest Utility Systems, Inc. (SUSI) continued installation of all three utility lines (potable water, sanitary sewer and reclaimed water line). SUSI substantially completed installation of the potable water line and sanitary force main. SUSI

has now completed approximately 55 percent of the reclaimed water line. Installation of the utility lines is on schedule with the original CPM schedule submitted by SUSI. SUSI recessed for the holidays on 23 December, 1993 and will reconvene on 3 January, 1994. Other activities occurring this reporting period included the following:

- SUSI continued clearing operations within the S.R.82 right-of-way.
- SUSI continued to receive materials throughout the month including deliveries of the 24" diameter ductile iron reclaimed water piping.
- SUSI continued maintenance of traffic activities.
- SUSI continued installation of silt barriers and hay bales adjacent to wetland jurisdictional areas as required.
- SUSI substantially completed the forcemain and watermain.
- SUSI performed pressure testing, full bore flushing and chlorinating of the potable water line.
- SUSI continued rock hauling from along Buckingham Road for off-site disposal.
- SUSI continued to have soil backfill density tests performed by an independent testing laboratory (Commercial Testing, Inc.).
- SUSI continued to comply with permit requirements.
- SUSI continued installation of the reclaimed water line.
- Completed jack and bores at Interstate 75 and the cemetery.
- SUSI continued working the jack and bores at Michigan, Omni, I-75, Benchmark and S.R.82.
- Commenced seeding and mulching on S.R.82 and Buckingham Road.
- The County completed negotiations related to the Alternative 1 easement at the new Buckingham/S.R.82 intersection and is awaiting title insurance to complete the necessary property transfer.
- Construction progress meetings were held at the offices of IEI on 7 December, 1993
 and 21 December, 1993.

9.0 RECLAIMED WATER PLANT IMPROVEMENTS

The County's reclaimed water plant improvement contractor, Mitchell & Stark Construction Company, continued activities related to the reclaimed water upgrade at the City of Fort Myers Central Waste Water Treatment Plant.

Construction activities related to the Plant are overseen and reviewed by others. Malcolm Pirnie's responsibility as construction administrator for the Project does not include any responsibility related to the construction and progress on the Plant improvements necessary for the Project to meet certain construction milestones. The County reports that all activities are in support of the project schedule for needing reclaimed water at the Resource Recovery Facility.

10.0 FP&L INTERCONNECTION

Interconnection activities continued to progress this period. FP&L's Buckingham substation subcontractor, Megatran, completed installation of the relay vault building block walls, trusses and roofing. Foundation work is nearing completion for the existing bus relocation. The Buckingham Substation 138 kV circuit breakers (3) are delivered and stored at the FP&L Orange River Substation.

FP&L continued to install the structural and electrical components at the Lazy Acres Substation. Crews continued to pull and land control cables at the relay vault building. System batteries are installed and charging.

Dillard Smith Construction Co. completed receiving and erecting the transmission line poles between the Lazy Acres and Buckingham substations including the steel pole adjacent to the Lazy Acres substation. Dillard Smith Construction Co. commenced pulling the conductors between the FP&L Lazy Acres substation main pull off structure and the Buckingham Substation.

FP&L reports that all activities remain on schedule for meeting the February 1994 Project energization requirement and July 1994 synchronization date.

11.0 GROUND WATER MONITORING SYSTEM

The County's testing laboratory continued to analyze the groundwater samples collected during last months reporting period. Test results will be forwarded by the County to the appropriate regulatory agencies when available.

12.0 WETLAND MITIGATION/MONITORING PROGRAM/EXOTICS PLAN

12.1 WETLAND MITIGATION/MONITORING PROGRAM

The County's wetland mitigation contractor, The Richards Co., completed final grading and spreading of mulch material for the created wetland area. The Richards Co. subcontractor, Planting and Restorations Services, commenced planting of trees and herbaceous plants for the created wetland. Malcolm Pirnie Inc.'s subconsultant, Kevin L. Erwin Consulting Ecologist Inc., (KLECE) completed the Time Zero monitoring activities and data collection for compliance with the contract documents and permit requirements by the end of the month. The Time Zero Report will be completed and submitted in accordance with permit requirements.

The Richards Co. also surveyed the created wetland area for verifying final elevations. Certified surveys will be included with the Time Zero Report submittal.

12.2 EXOTICS PLAN

Initial exotic vegetation removal and treatment continued throughout the site. The main emphasis was on removing large Maleleuca and Brazilian Pepper trees in the enhanced wetland area. Treatment of exotic vegetation in place with approved herbicides continued.

13.0 S.R.82/BUCKINGHAM ROAD INTERSECTION AND BUCKINGHAM ROAD/SITE INTERSECTION

13.1 S.R.82/BUCKINGHAM

Work on the S.R.82/Buckingham Road intersection improvements is scheduled to begin in early January 1994.

13.2 BUCKINGHAM ROAD/SITE INTERSECTION

A final top coat of paving is scheduled to be applied in the spring of 1994 after the majority of construction traffic and deliveries are complete.

14.0 CONSTRUCTION ADMINISTRATION

14.1 SITE INSPECTION

Malcolm Pirnie continued to observe construction progress on a full time basis. Malcolm Pirnie maintains daily progress reports for summary/log of daily construction activities and administrative issues on file. These reports are available for inspection by the County and its agents upon request.

14.2 DRAWINGS/DESIGN REVIEW

The following total number of shop drawings and/or technical specifications were received by Malcolm Pirnie.

	Fort Myers	White Plains
No. of shop drawings received	76	0
No. of specifications received	0	0
No. of shop drawings reviewed	58	0
No. of specifications reviewed	0	0

All drawings and specifications received by Malcolm Pirnie are not reviewed. Malcolm Pirnie reviews only those drawings and specifications related to the Facility performance requirements and guarantees. Other drawings received are beyond Malcolm Pirnie's work scope and are filed on behalf of the County.

14.3 MAINTAIN FILES

Malcolm Pirnie maintains a complete set of drawings and specifications on behalf of the County in the County's trailer at the Facility site.

14.4 REVIEW REQUISITIONS AND CHANGE ORDERS

Application for Payment (AFP) No. 15 was received during the reporting period. See Section 3.0 Drawdown Analysis for specific information.

15.0 PERMIT COMPLIANCE

The County and OMSL continue to comply with the project permit requirements. The following permit related activities occurred this reporting period:

- OMSL continued to submit special inspector reports to the County Building Department.
- The County submitted the Hendry County Landfill permit application.

16.0 CONSTRUCTION ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD

The following specific construction activities are proposed for the month of January 1994 by OMSL:

16.1 SITE WORK

- Continue to re-grade the bottom and side slopes of detention pond No. 3.
- Continue placement of crushed limestone road base throughout site.
- Continue replacement of the previously installed potable water line piping with a larger diameter pipe.
- Continue installation of underground sanitary sewer line from administration building.
- Continue installation and hydrostatic testing of underground fire water piping,
 PIV's and hydrants.
- Continue soils and concrete testing by Independent Laboratory.
- Continue sandblasting and painting of piping spools and supports in the southeast laydown area.

16.2 STRUCTURES

16.2.1 Tipping Floor

- Continue to place concrete for tipping enclosure column footers and push walls.
- Continue to receive deliveries of tipping enclosure pre-engineered building structural steel and commence erection.

16.2.2 Refuse and Administration Building

- Place concrete for refuse pit parapet walls and grapple drop out areas.
- Continue with refuse and administration building sheeting girt erection.

- Continue installation of refuse building siding and metal roof decking.
- Continue conduit, wiring and cable tray support installation throughout administration building.
- Continue installation of metal stud frame work, plumbing and sanitary piping throughout administration building.
- Continue erection of stair tower No. 1, 2 and 3 block walls.
- Continue HVAC system installation of duct work throughout the administration building and control room.
- Continue to install fire protection sprinkler piping throughout administration building.
- Install the elevator components.
- Final set MCC's switchgear and DCS panels.
- Mobilize electrical testing subcontractor (Gulf Western Electric).

16.2.3 Boiler/Power Generation Island

- Continue with boiler building structural steel erection including leave out steel areas below superheat No. 1 ash hoppers and economizers.
- Continue with boiler structural steel bolt torque inspections.
- Continue with grating, handrail and toe plate installation and detailing throughout Unit No. 1 and 2 boiler platforms.
- Commence boiler building siding installation.
- Continue with ground assembly of Units No. 1 and 2 superheat ash hoppers and expansion joints.
- Continue with erection and welding of Unit No. 1 and 2 boiler pressure components (including economizer modules, evaporator modules, superheat modules, downcomers, riser tubes and water walls).
- Erect Unit No. 2 evaporator section ash hoppers.
- Continue with non-destructive examination of boiler pressure component welds.
- Continue stress relieving welds for Unit No. 1 and 2 boiler pressure components.

- Install SNCR NO_x piping at No. 1 and 2 boiler waterwalls.
- Continue installation of Unit No. 1 and 2 feedwater piping between economizers and steam drums.
- Continue installation and assembly of Unit No. 1 and 2 forced draft fans and duct work.
- Continue to fit and weld boiler Unit No. 1 and 2 drain piping, blowdown piping and supports.
- Commence fit-up and welding of Unit No. 1 overfire air duct.
- Mobilize boiler insulation subcontractor.
- Continue with fabrication of miscellaneous piping spools at fab shop.
- Continue to receive deliveries of vendor fabricated large bore piping spools.

16.2.4 APC Equipment and Stack

- Continue installation of fabric filter house duct work.
- Continue with spray dry absorber ground assembly and erection.

16.2.5 Other (cooling tower, fire water pump house, storage tanks, etc.)

- Complete cooling tower electrical.
- Continue installation of Aqua-Tech water treatment equipment.
- Continue installation of transmission line and poles between Lazy Acres and Buckingham substations.
- Complete installation of the Lazy Acres switchyard structural and electrical components.

16.3 PROCUREMENT

Essentially all equipment is purchased. Bulk electrical materials continue to be actively procured. The following major equipment and material is expected to be delivered next month:

pre-engineered building materials

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APPENDIX A PHOTOGRAPHS

APPENDIX B MASTER PROJECT SCHEDULE



Placing concrete for water treatment building slab on grade. (looking west)



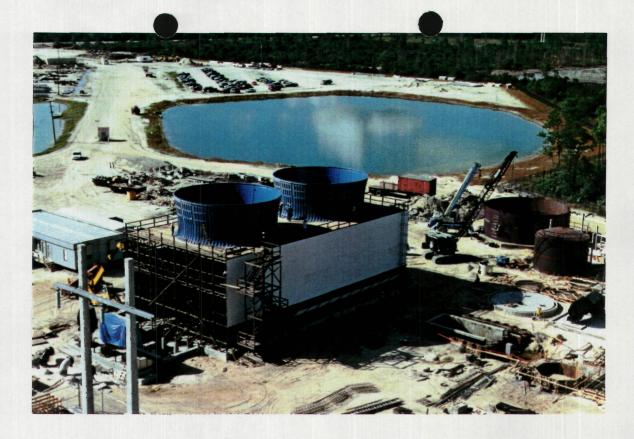
Clarifier tank support foundation ring concrete placed.
Slab reinforcing steel placed.
(looking south)



Turbine lube oil skid arrives on site. (looking east)



Electrical generator arrives on site.



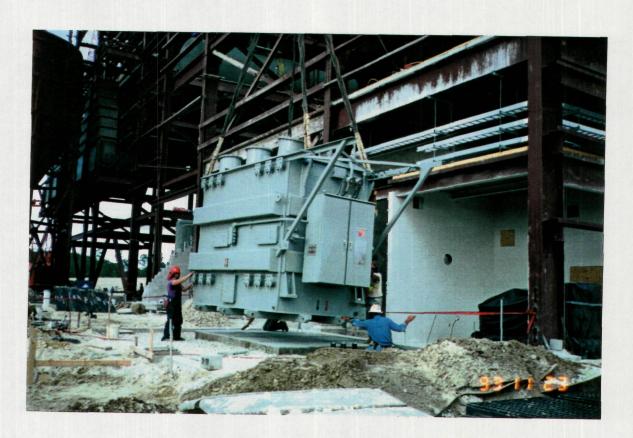
Cooling tower, fire water storage and waste water tanks under erection. (looking southwest)



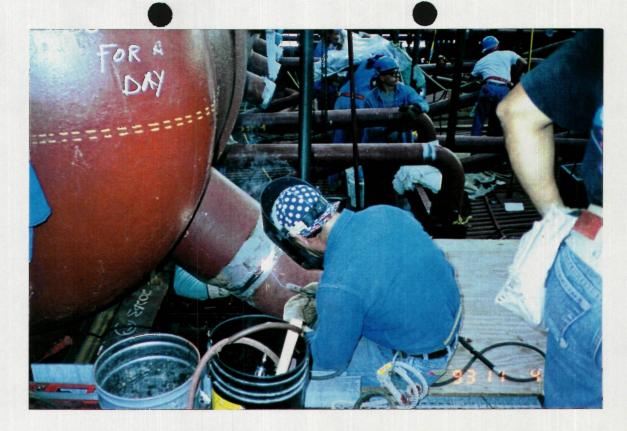
Aerial view of SDA No. 1 penthouse ground assembly.



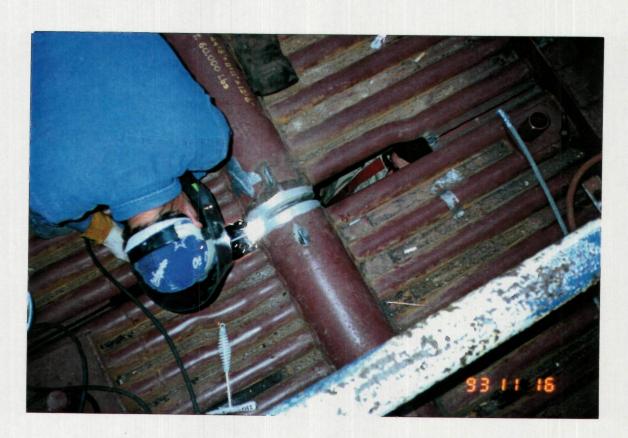
Rigging electrical generator to support pedestal.



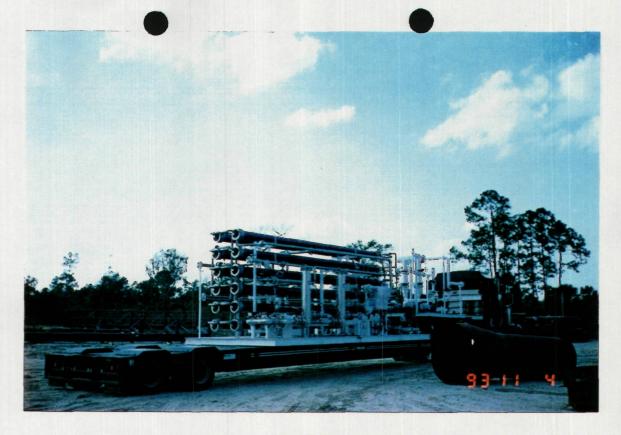
Rigging main transformer to support foundation.



Welding boiler No. 1 main downcomer at steam drum nozzle. (looking south)



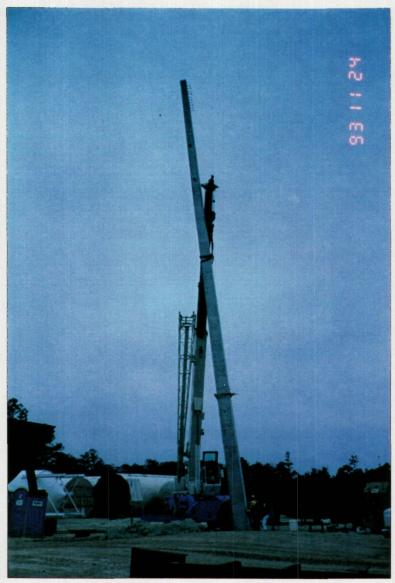
Welding Unit No. 1 evaporator section upper header.



Water treatment equipment R/O unit arrives on site.



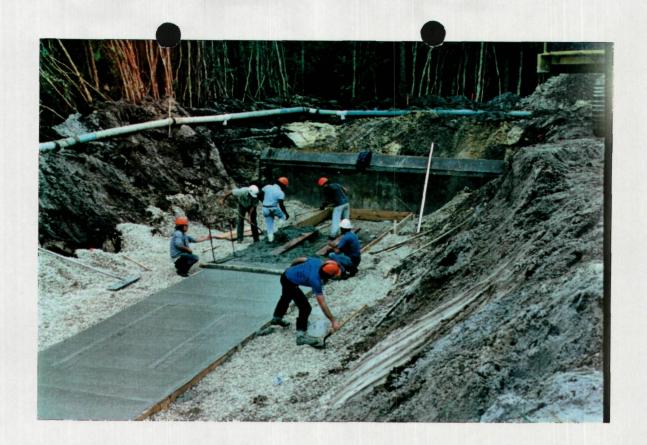
FP&L workers offloading incoming Lazy Acres substation equipment structural supports. (looking northeast)



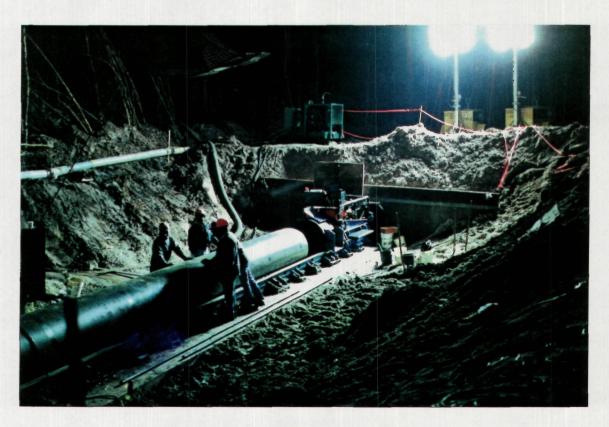
FP&L subcontractor Dillard Construction erecting transmission line pole at location No. 13 (looking west)



Jack and bore pit at I-75 station 230±. Note steerable head and pea trap for water level. (Offsite Utilities)



Pouring concrete floor in jack and bore pit at I-75 station 230±. (Offsite Utilities)



Jack and bore operation at I-75 station 230±. (Offsite Utilities)