

## **IMPLEMENTATION STATUS / DIRECTION 1-22-98**

### **A. COMPLETED PROJECTS FOR FOLLOW UP & DAILY HIT ITEMS**

#### **Bloom Mill Area**

John D      Continue daily tours of area and see that securing remains in place

#### **Steam Leaks other than Coke Plant**

Everybody    As you are reviewing your areas - any steam leaks are to be reported to John H.

John H      Report these leaks to GSS maintenance and follow up on repairs  
Keep list and continue following up with GSS for repairs.

#### **ENERGY MTGS/DAILY ACTIVITIES**

Everybody    Share area reports daily | Share plant wide reports weekly  
Daily Walk Throughs  
Generate and follow up on suggested ideas  
Meeting reports to Frank and Area Books

#### **LMF**

John D      -continue daily readings per chart, make entries into data system,  
and daily review with Bill Stover

Bill S.      Maintain performance. Review performance weekly! Take action on  
non production related problems

Sri          Give performance stats to Bill Stover weekly! To Frank monthly

Frank      Summarize performance for monthly report to Robert Carlson

#### **Mixed Gas Line**

Hot Strip feed has been pulled and cleaned. Clean out has been installed, 400 feet of pipe from Plate and Hot Strip take offs back has been replaced as of 8-30-97.

Dave/John    On or about 3-1-98, when other projects are underway, review  
H              need for replacement of mixed gas line between Hot Strip and  
Plate, determine savings.

## **Overhead Coke Gas Line**

LINE PURGED AND IN SERVICE AS OF 1:50PM 10-15-97.

John H      Maintain pressure. Increase usage opportunities

## **O2 Analyzers**

Installation on #8 and #7 complete.

Dave/John    Target O2 is 6%. Continue to monitor and report. Evaluate stabilizing flame to confirm continued reduction in natural gas use.

## **B. SPECIFIC PROJECTS**

### **Submarine Ladle Heaters**

Parts on hand for Burners and braided hose as of 10-15-97.

Dave / Bill    Follow up for material on hand from Fab Shop, give that information  
S                    back to Engineering so sketch can be redrawn with on hand material. Get sketch approved by area management. Jeffrey Steel providing quote for outside manufacture. Carl has confirmed-steel-is-on-hand. Joe Magee has asked for the burner to have a deflection shield so the structure is being redesigned.

Push for installation by early February or even late January.

### **Blast Furnace**

Work in this area entails review or replacement of PLC system to provide combustion improvement to reduce natural gas usage at the stoves. Since the program involves the operation of the blast furnace, technical assistance beyond simple process control personnel will be needed. Additional focus is to also make complete use of Blast Furnace Gas.

Frank            Follow up with SSC corporate and bring in specialists

Bill S /            Review other ideas for complete Blast Furnace usage.  
Frank            Once approval is given issue P0 to cover same with limiting parameters.

DAVE            REVIEW NEEDS TO METER VENT AT POWERHOUSE.  
Anticipate PSI answer by 1/30/98. Tom Stonich showed us a cone type meter that appeared to be best. Price by 2/6/98.

Dave RESEARCH POWER HOUSE FAN REPAIR COST AND TIMING.

### **Metering**

Frank Issue third and final P0 for last round of meters per agreement (2-1-98?). Waiting for input from Scott. Scott puffing together, will include transmitter for Stoves and Injection.  
First meters arrived at end of September and are now installed for Primary end gas, BOF Gas, CPP, Misc Blast Furnace, Stoves and Injection. Nitrogen base equipment will be installed week of 10-27.

Bill S Ordered second round of meters and all is on hand as of 1-8-98. GSS expects installation completion within the month. Follow progress.

Sri Collect data above daily through project engineers and set up data base  
Review accuracy of plant wide meter with Alagasco on month by month basis.  
Review area meters for accuracy with Scott and Ed.

### **Coke Plant Steam Leaks**

100% completion of coke by products, and top of#2 Battery.

Frank Sent for signature for labor for completion  
Frank /Bill Upon Agreement, Schedule labor for this project, CPP Desuperheater, and Coke Boosters upon agreement so they are completed before arrival of material for the additional projects.

John H Supervise labor for completion within the guidelines of our agreement.

### **Natural Gas Contract**

Note: GSS has committed to installing an 8 gas line from Alagasco entrance at plant to Blast Furnace for high pressure injection.

No current opportunities or activity, project on hold with regards to outside purchasing of gas.

### Caster Vent Reduction

Bill S Determine if any interest and final commitment by area management, otherwise abandon project.

### Test Piece Delivery System

Frank Sent for signature.  
Frank / Bill Upon Agreement, order materials and schedule installation.  
Bill S Follow up on delivery.

### BOF Desuperheater

Frank Sent for signature for labor for completion.  
Frank / Bill Upon Agreement, order materials and schedule labor.  
Bill S / Dave Follow up on delivery. You made need Andes for installation.

### O2 Lance Reduction

Bill S / Dave **Do budgetary analysis on overall water increase for hood panels and give to Frank for consideration of an entire package, or enough to increase the water needed for the lances.** Talk to Gene Cleveland about simply doing the lances and skipping the hood panels. Consumption data too difficult to fix and prices appear like they will be too high.  
Frank WRITE UP AGREEMENT FOR LANCE AND CASTER VENT WHEN RECEIVED FROM BILL.

### Boiler Room Controls

PART OF LARGE PROPOSAL FROM SSC CORPORATE

Frank Met with Pete on 1-20-98. He is interested. Set up with Mike the plan for a due diligence study. Review that plan with Pete and he will arrange meeting with appropriate in house personnel.

**If results of due diligence does not warrant 3rd party relook as a capital.**

## Desuperheater

Parts were in week of 8-11-97. Process change with Blast Furnace requires steam constantly and no shutdown of line is possible. Quote from TEAM too high at \$44k to save interim \$36k. Get quote from second source. Jake Jacobs claims it can be done.

Frank            Review agreements with Bill S and send for signature for labor for completion

Frank / Bill    Upon Agreement, Schedule labor for this project, Steam Leaks Coke Battery, and Coke Boosters upon agreement so they are completed before arrival of material for the additional projects.

Bill / Dave     Joe Magee states line can be shutdown when Blast Furnace is down. Get estimate of time required to change from Ed and monitor planned BF outages to schedule.

John H         Supervise labor for completion within the guidelines of our agreement. (May need Andes)

## Coke gas Boosters

By pass clean out complete and agreement reached on what is need for controls. Running 2 booster 24 hrs per day, 7 days per week. All parts on hand as of 10-17, **PSI owes programming**

Frank            Sent for signature for labor for completion

Frank / Bill    Upon Agreement, Schedule labor for this project, CPP Desuperheater, and Coke Battery steam leaks. Upon agreement so they are completed before arrival of material for the additional projects.

Dave /  
John H         Supervise labor for completion within the guidelines of our agreement.

## Lighting Reduction

John D         Phase 1 complete, continue to monitor,

Finalized small segment low cost approach of Maint. Spares and Bath Houses and completed by week ending 11-7. Gave report to Frank.

Frank            Move on to additional areas.  
Review John D report and give direction if any decision to move ahead is made.

## **BOF Ladle Preheating**

Frank Sent for signature for labor for completion  
Frank / Bill Upon Agreement, order materials and schedule installation  
Bill S Get final drawings and iron out remaining details.  
Bill S / Follow up on delivery and supervise labor for completion within the  
Dave guidelines of our agreement.

## **Models and Daily Energy Reports**

Frank / Sri Work on Generator Optimization plan use and develop spread  
sheet for implementation. Completed.  
Sri DER for Nitrogen up and running as of 11-18

Hydrogen Models complete.

DER for Oxygen done.

Develop O2 Lance model from Bills information into our normal  
format

Develop DER's for the above and Argon.

LOOK AT NATURAL GAS MODEL FOR BOF. Need data to  
develop after meter is working,

Sri / Frank Work on Automation of downtime reports relating to month end  
data Frank receives

## **SCR RESEARCH**

John D      LMF vent system and Desulfurizer vent system given to Frank for review as well as Tilt Drives for BOF and Tandem mill ballpark quotes..  
Frank        Follow up with John East feasibility.

THIS PROJECT IS ON HOLD UNLESS DETERMINED TO BE ECONOMICALLY FEASIBLE WITH OTHER METHODS.

## **Lube and hydraulic Oil**

NO INTEREST      DROP AS OF 10-28-97

## **Galvanize Heating Project**

Have completed write up for Ken Means on preliminary feasibility. Project looks good and recommended next step be a co-op visit with GSS and SSC to Michigan to view a live operating facility. Met with Ken Means on 9-17 to review. He is to talk to Pete.

Bill S        Pete-checked with on 1/21/93 and he said it was something he needed to proceed with. Check with Pete on this scheduled visit by late Feb.

## **Ceramic Fibers Reheat Furnaces.**

Bill S /      Figures received from Riverside on HSM entry doors. Will talk to  
Dave        Randy on 1/30/98

## **Infra Red Detectors**

Bill S /      No further interest. Drop this item.  
Dave

## **Capital Research**

Frank        Review GSS 98 capital budget with Staff and assign research duties.

Dave        Get Back with Pete  
Review ELECTRONIC GOVERNORS WITH STAN. No further interest. Drop this item.

Get EPA information on coke plant for Williamson Controls from Stan by 1/30/98.



### **Remote Electric Metering**

John H      Research and develop to a final proposal. There is no payback and must be reviewed carefully before showing customer.

Put together budgetary numbers for Remote metering request from John East and report and make recommendations to Frank.

### **HOT IRON ACTIVITIES**

Bill S      Continue Pig machine research if viable

Follow up on conversation and any interest in a mixer at Melt Shop and look at budgetary numbers.

To: Mike Ratteree  
From: Frank Greco  
Subject: List of Items Discussed and to be Completed  
Date: February 3, 1998

1. Draft a one page document which includes current performance for GSS project, the impact of the additional \$500k investment, the impact of the Plate Mill Investment, and the additional projects available for investment and that total impact.

FRANK GRECO TO GET THAT TO MIKE BY 2-3-98.

2. Summarize three projects, one from GSS, Bethlehem, and Kobe. This was originally requested on Thursday, 1-29-98, for Mike's meeting with ECP 2-6-98.

FRANK TO COLLECT FROM GSS, KOBE, AND BSSP AND FORWARD TO MIKE 2-4-98

3 . Need to review Powerhouse operators availability and track record and develop approach for their partnership with SSC. Specifically at the GSS project.

MIKE TO REVIEW AFTER GSS PLATE MILL DEAL AND DECIDE ON COMPANY AND FORWARD THAT INFORMATION TO FRANK.

4. Mike and Frank to sit with John Hayes on 2-3-98 to discuss approach and needs for John to become Electric Utilities Contract Technician for the company.

JOHN AND MIKE TO DISCUSS WITH JOHN.  
JOHN TO WRITE UP NEEDS FOR EACH PROJECT MANAGER TO HAVE READY.  
JOHN TO FORWARD TO FRANK FOR REVIEW AND THEN TO MIKE BY 2-15-98

5. Mike and Frank to sit with SRI on 2-3-98 and discuss approach and needs for a check and balance person to verify and review models at each project.

SRI TO WRITE UP PROCESS FOLLOWING THIS ABOVE MEETING AND FORWARD TO FRANK FOR REVIEW AND THEN TO MIKE BY 2-15-98

6. Need to develop a set of guidelines for Flex time.

BILL STOVER TO DRAFT IDEAS TO FRANK, FINAL DRAFT TO BE SENT TO MIKE FOR HIS REVIEW. NEED TO BE COMPLETE BY END OF FEBRUARY 98. CONDENSE TO ONE PAGE

7. Roy to work with Adrian McBride on recruitment.  
ADRIAN TO BE AT BSSP NEXT WEEK WITH LEN, LEN TO SEE FRANK WITH ADRIAN AND GET HIM IN TOUCH WITH ROY STEEL.