

June 23, 1994

To: Distribution

From: L. Edward Temple, Jr. *LET*

Subject: Memorandum of Understanding Between APS and PFS

Enclosed is a signed copy of the approved Memorandum of Understanding entitled "Operation and Maintenance of Mechanical Systems in the Utility and Ring Buildings."

Distribution:

R. Bouie
R. Damm
J. Galayda
J. Huggins
R. Kijowski
R. Kneebone
J. Logue

Memorandum of Understanding Between APS & PFS

Operation and Maintenance of Mechanical Systems in the
Utility and Ring Buildings

May 1994

PFS

APS

Reviewed

Raymond M. Kijowski 4-7-94
R. Kijowski Date
Supervisor, PFS/BM

R. Kneebone
R. Kneebone Date
Staff Engineer

Reviewed

Jim Huggins 6-7-94
J. Huggins Date
Manager, PFS/BM

R. Damm 6/9/94
R. Damm Date
Assoc. Div. Dir.
Mechanical Systems

Reviewed

Jack Logue 6/21/94
J. Logue Date
Associate Director, PFS

John Galayda 6/21/94
J. Galayda Date
Division Director
Accelerator Systems

Approved

Rudolph Bouie 6/21/94
R. Bouie Date
Director, PFS

L. Edward Temple 6/21/94
L. E. Temple Date
Project Director, APS

This Memorandum of Understanding (MOU) between the Advanced Photon Source (APS) and Plant Facilities and Services (PFS) is to outline the general guidelines for the maintenance and operation of the various mechanical systems within the Utility building and the APS Ring only. The APS Ring is composed of buildings 400, 410 (EAA), 411 (LINAC), 412 (INJECTOR), 415 (SYNCHROTRON) and 410 (RF EXTRACTION). This MOU will also define what areas are controlled by each group and the responsibilities that are included.

It is agreed upon by both parties that it is in the best interest of the Laboratory to approach the operation and maintenance of this facility in a joint effort of teamwork and open communication. Both APS and PFS will work together to maintain a high level of system reliability and continuous process improvement. It is understood that this document provides general guidelines and that due to the dynamic nature of this facility, variation and occasional modifications will be required.

Control of the various systems in general will be agreed upon to include the following responsibilities:

- 1) Development of operating procedures.
- 2) Approval of all maintenance and preventive maintenance requirements.
- 3) Training and qualification of employees under their supervision.
- 4) Acquisition of spare parts.
- 5) Coordinate and provide response to any required audits or appraisals.
- 6) Overall responsibility for all ESH requirements and issues.

It is also understood that control of PFS areas and systems does not begin until all such areas and systems have been fully commissioned and operating parameters have been established to a level acceptable by both APS and PFS. All engineering and construction activity related to system design and/or operating changes in all areas will be initiated by APS.

APS and PFS will each establish a point of contact to oversee the interactions between the two groups. The normal channels of communication between the two areas should be between the two points of contact. In emergency or off-normal conditions, the point of contact may be bypassed in order to correct such situations in a timely and safe manner.

In consideration of the above, the following agreements are adopted:

A. Utility Building 450

1. This building and all equipment within the building is controlled by PFS. PFS will operate and maintain all equipment and systems upon completion of all start-up and commissioning activities.

B. APS Ring Building

1. PFS shall control, operate, maintain and repair the following systems:
 - a. Low Temperature Hot Water
 - b. Chilled Water System Mains
 - c. Laboratory Water System (Unless connected to experimental facilities.)

- d. Domestic Water System (Unless connected to experimental facilities.)
 - e. Plumbing Systems
 - f. Fire Protection Systems
 - g. De-Ionized Water Mains
2. APS shall control the following programmatic systems:
- a. Compressed Air Piping System from control center vault to the APS Ring.
 - b. Chilled Water supply and return lines serving heat exchangers and other programmatic equipment, such as power supplies, etc.
 - c. De-Ionized Water system from the main shut-off valves to pumps and all equipment serving the APS Ring.

PFS will supply repair services for the above programmatic systems as requested by APS.

3. The following system will be controlled by APS, but will be jointly operated by both PFS and APS. The systems will be maintained by PFS as directed by APS.
- a. Temperature Control System will be operated by both groups at the local Metasys Network Terminal. The personal computer in the Utility building will show system status and operating conditions. All changes to system conditions and set points will be performed by APS personnel only after such changes have been reviewed and acknowledged by appropriate PFS operating personnel. All programming changes to the

Johnson Controls operating program will be performed by APS. Such changes should be communicated to PFS in a timely manner.

- b. The Heating, Ventilating and Air Conditioning (HVAC) systems will be operated by PFS. This is to include heating and cooling coils, system controls, duct work and VAV boxes. PFS will operate and maintain all Liebert and DATAAIRE units, base-board heating and unit-type heaters throughout the APS Ring. All work associated with required modification or upgrading of the HVAC system equipment, piping, duct work, etc., shall be initiated by APS.