SECTION 01650

FACILITY STARTUP

PART 1 GENERAL

1.1 SUBMITTALS

- A. Submit preliminary schedule listing times and dates for start-up of applicable equipment, two (2) weeks prior to proposed dates.
- B. Submit manufacturer's representative reports within ten (10) days after start-up, listing satisfactory startup dates.

1.2 QUALITY CONTROL

A. When specified in individual Sections, require manufacturer to provide authorized representative to be present at site under provisions of Section 01400 to inspect, check, and approve equipment installation prior to start-up; to supervise placing equipment in operation; and to provide a written report that equipment has been properly installed and lubricated, is in accurate alignment, is free from any undue stress imposed by connecting lines or anchor bolts, and has been satisfactorily operated under full load conditions.

1.3 PROJECT CONDITIONS

- A. Verify that any building enclosure is complete and weathertight.
- B. Verify that excess packing and shipping bolts are removed.
- C. Verify that interdependent systems have been checked and are operational.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

- 3.1 INSPECTION
 - A. Verify that Project conditions comply with requirements.
 - B. Verify that status of Work meets requirements for starting of equipment and systems.

3.2 PREPARATION

- A. Coordinate sequence for start-up of various items of equipment.
- B. Notify WSD seven (7) days prior to start-up of each item of equipment.
- C. Have all appropriate documents including shop drawings, product data, and operation and maintenance data at hand during entire start-up process.
- D. Verify that each piece of equipment has been checked for proper lubrication, drive rotation, belt tension, control sequence, and other conditions which may cause damage.
- E. Verify control systems are fully operational in automatic mode.
- F. Verify that tests, meter readings, and specific electrical characteristics agree with those specified by electrical equipment manufacturer.
- G. Verify wiring to motors and controls required by mechanical work for operational smoke and fire protection demonstrations is complete.
- H. Verify wiring and support systems for equipment installed under separate contracts is complete and checked.
- I. Bearings: Inspect for cleanliness; clean and remove foreign matter. Verify alignment; take corrective measures.
- J. Drives: Inspect for tension on belt drives, adjustment of varipitch sheaves and drives, alignment, proper equipment speed, and cleanliness. Take corrective action.
- K. Motors: Verify that motor amperage agrees with nameplate value. Inspect for conditions which produce excessive current flow and which exist due to equipment malfunction. Take corrective action.

3.3 STARTING SYSTEMS

- A. Execute start-up under supervision of responsible Contractor personnel.
- B. Place equipment in operation in proper sequence.

END OF SECTION 01650 - FACILITY STARTUP