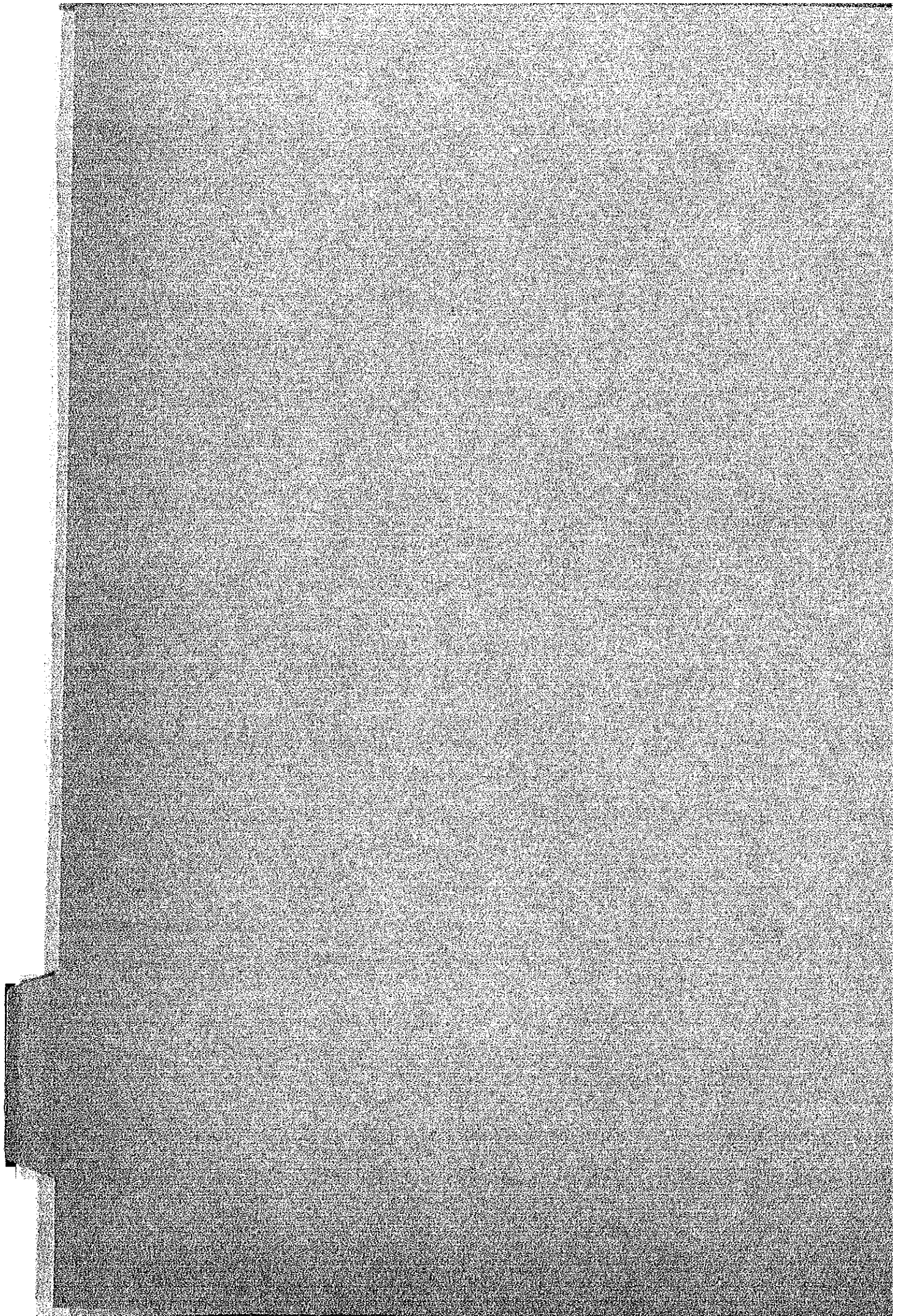


III - Inspection Items			
Equipment/Machine	During/After dismantling	After cleaning	During/After reassembling
2) Control System a) ABC Control System	i. Controllers ii. Detectors and transmitters - Temperature - Flow - Pressure - Level - Draft - O ₂ Analyzer iii. Control valves iv. Setter and Auto/Manual Stations v. Transducer* vi. Interface relays vii. Limit Switches	viii. Auxiliary relay ix. Thermal Switch x. Current limiting reactor xi. Measurement of insulation resistance	

III - Inspection Items		
Equipment/Machine	During/After dismantling	During/After reassembling
b) Local Control System	<ul style="list-style-type: none">i. Controllerii. Detectors and transmitters<ul style="list-style-type: none">- Temperature- Pressure- Flow- Level- Draftiii. Controller<ul style="list-style-type: none">- Pneumatic actuators- Gauges- Position indicators- Reducing valvesiv. Setting pointsv. Control valvesvi. Transducervii. Limit switches	

APPENDIX-5 OPERATION GUIDLINE FOR ABNORMAL CONDITION



OPERATION GUIDELINE FOR ABNORMAL CONDITION

<u>T I T L E</u>	<u>P A G E</u>
I. ITEM TO BE PREPARED -----	1
II. AN EXAMPLE -----	1

THE UNIVERSITY OF CHICAGO

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BY

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AND IN THE DIVISION OF _____

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BY

Operation guideline for abnormal condition

1. Item to be prepared.

Regarding the following items, measures for each case should be prepared for operation.

- . Unit tripping
- . Black-out
- . Fluctuation of frequency and voltage
- . Power frequency abnormal
- . AC control power failure
- . DC control power failure
- . Instrument air failure
- . Boiler tube failure
- . Burner trouble
- . Electrical fault

2. An Example

An example of measures for trouble is shown on the next page.

1. Fluctuation of frequency and voltage.

(1) Reason

- a. Trouble of the turbine governer control system.
- b. Delay of isolation of fault point

(2) Operation

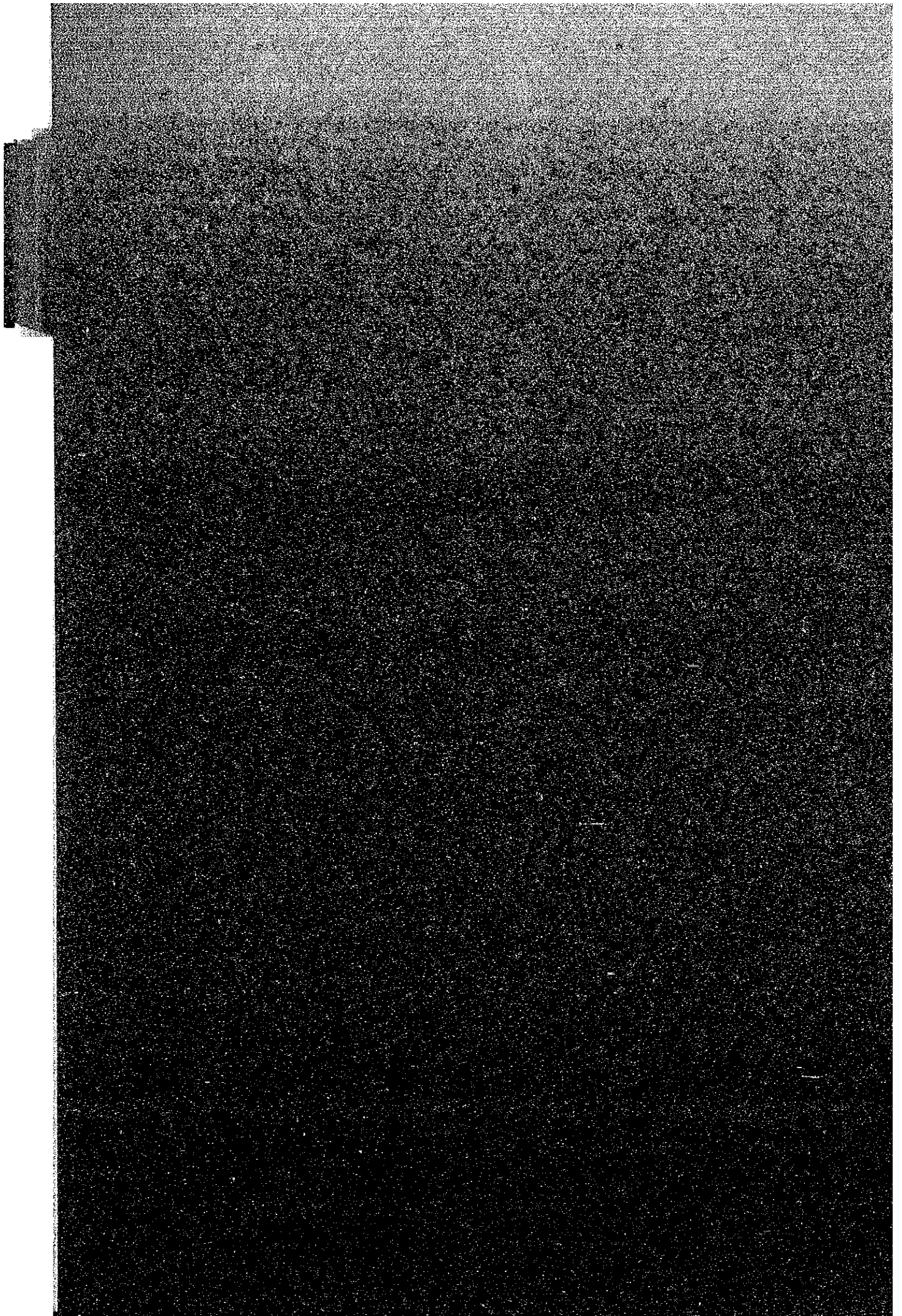
Refer to the table of "Measures for fluctuation of frequency and voltage".

Measure for Fluctuation of Frequency and Voltage (An example)

Position Item	Super intendant of shift	Control room operator				Local Operator		
		Electrical	Boiler	Turbine	Boiler	Turbine	Basement	Others
Hunting (Voltage and frequency)	<ul style="list-style-type: none"> * Confirm the hunting of voltage * Instruct monitoring of unit operator to all operator 	<ul style="list-style-type: none"> * Confirm the voltage and frequency * Pay attention to operating condition of generator and AVR * AVR shall be on Auto. 	<ul style="list-style-type: none"> * Pay attention to: Fuel and Air flow Drum press. and level Steam and water flow Steam temp. Fuel oil press. Current of auxiliaries * If boiler firing condition becomes unstable, put ABC on Man. 	<ul style="list-style-type: none"> * Pay attention to: Governor valve lift Turbine vibration 	<ul style="list-style-type: none"> * Pay attention to drum press. and level 		<ul style="list-style-type: none"> * Confirm the condition of auxiliaries 	<ul style="list-style-type: none"> * Confirm the condition of auxiliaries
Trouble shooting	<ul style="list-style-type: none"> * Request to the load dispatcher to check the transmission line * Instruct to inspect the operating condition of AVR 	<ul style="list-style-type: none"> * Caution to the generator field current (Do not operate in leading power factor) 	<ul style="list-style-type: none"> * If boiler firing condition becomes unstable, put ABC on Man. 		<ul style="list-style-type: none"> * Confirm the boiler firing condition 	<ul style="list-style-type: none"> * Pay attention to turbine vibration 		
Unit stop	<ul style="list-style-type: none"> When it is judged that the operation can not be continued, instruct plant tripping 							

Follow to the measures for unit tripping

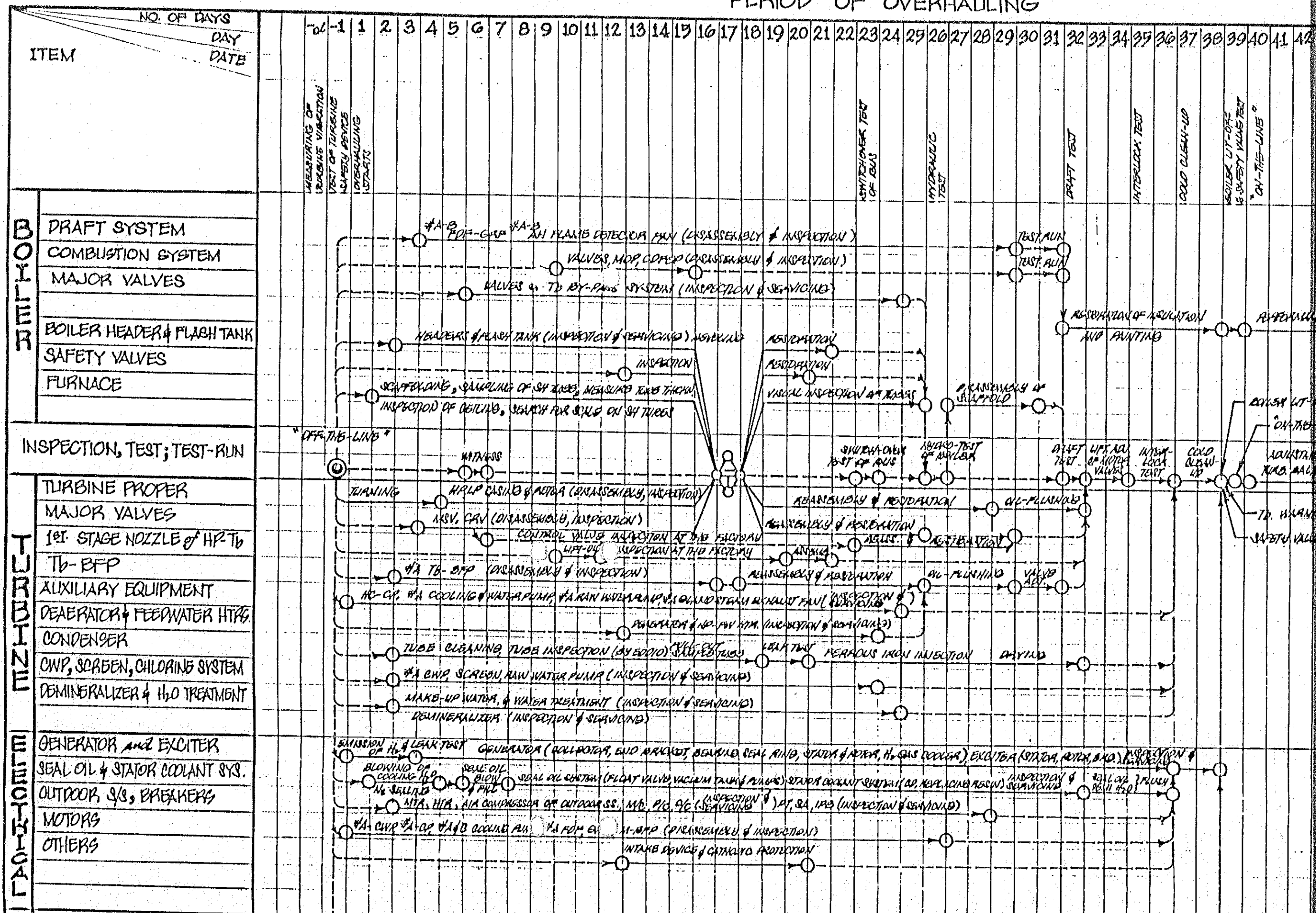
APPENDIX-6 STANDARD OVERHAULING SCHEDULE



STANDARD OVERHAULING SCHEDULE

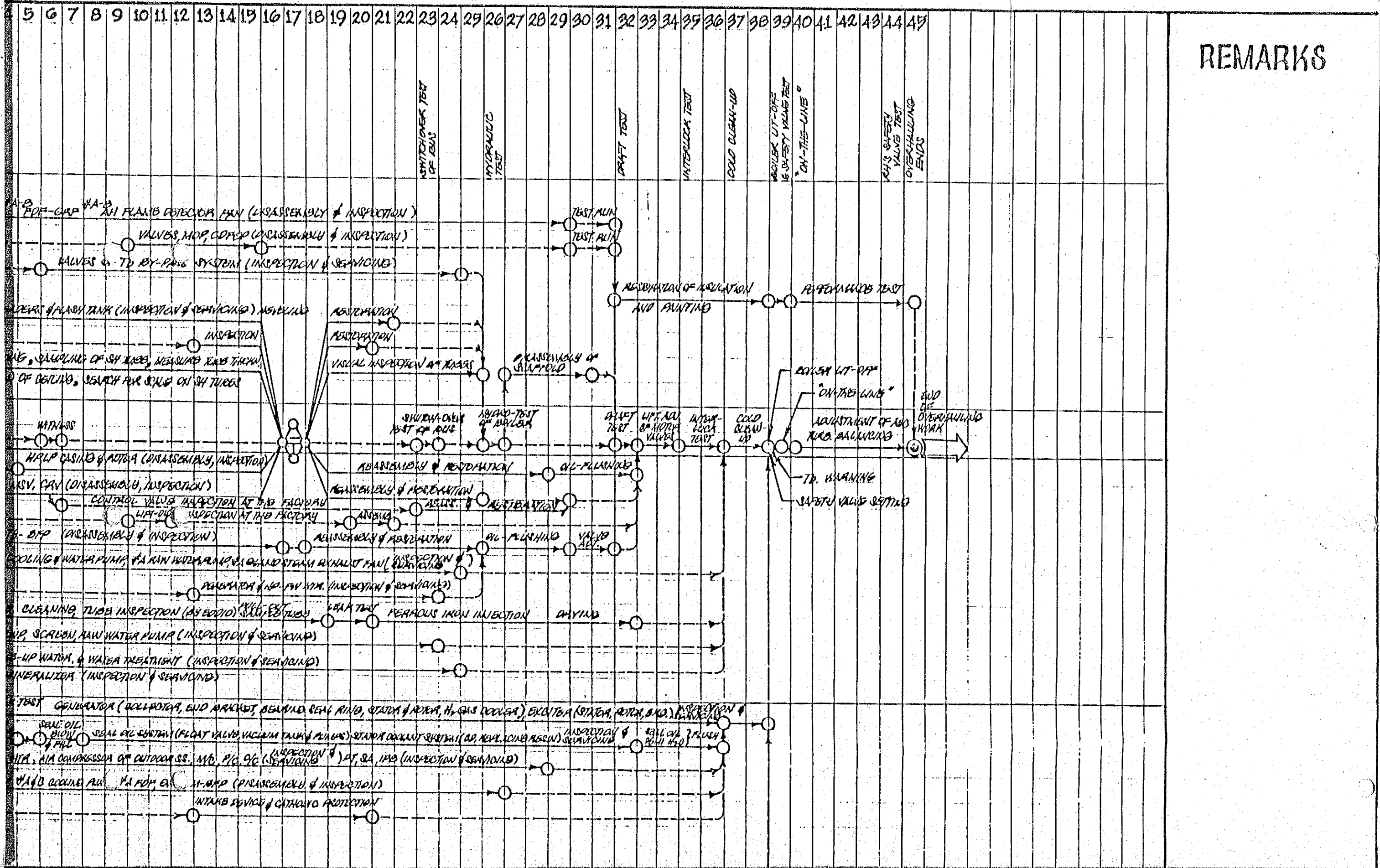
SCHEDULE OF OVERHAULING FOR

PERIOD OF OVERHAULING



SCHEDULE OF OVERHAULING FOR

PERIOD OF OVERHAULING



REMARKS

TURBINE	BOILER HEADER & FLASH TANK
	SAFETY VALVES
	FURNACE
TURBINE	INSPECTION, TEST; TEST-RUN
	TURBINE PROPER
	MAJOR VALVES
	1ST STAGE NOZZLE of HP TB
	TB-BFP
	AUXILIARY EQUIPMENT
	DEAERATOR & FEEDWATER HTFS
	CONDENSER
	CWP, SCREEN, CHLORINE SYSTEM
	DEMINERALIZER & H ₂ O TREATMENT
GENERATOR	GENERATOR and EXCITER
	SEAL OIL & STATOR COOLANT SYS.
	OUTDOOR S/S, BREAKERS
	MOTORS
	OTHERS
CONTROL	BOILER ABC SYSTEM
	TURBINE CONTROL SYSTEM
	ELECTRIC CONTROL SYSTEM
MANUFACTURING	MANUFACTURERS WORKS
	INTAKE & FLOODWAYS ANTI-CORROSION
	MODIFICATION WORK OF GEN. H ₂ P.P.
	REFERENCE WORK OF TRANSMISSION LN
	REFERENCE WORK OF CONTROL SYSTEM

