

MAR 14 1996

Tennessee Valley Authority
ATTN: Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: MEETING SUMMARY - WATTS BAR - TO DISCUSS AUXILIARY FEEDWATER SYSTEM
MODIFICATIONS AND POWER ASCENSION TEST PROGRAM ACTIVITIES

Mr. Kingsley:

This letter refers to the management meeting conducted at our request at the Region II office March 13, 1996. The purpose of the meeting was to discuss with TVA the recent modifications made to the condensate and auxiliary feedwater systems and the conduct of power ascension test program activities.

It is our opinion that this meeting was beneficial and provided a better understanding of TVA's activities associated with the Watts Bar facility.

In accordance with Section 2.790 of the NRCs' "Rules of Practice" Part 2, Title 10 Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the Public Document Room.

Should you have any questions concerning this letter, please contact me.

Sincerely,

Original Signed By:
J. P. Jaudon

Johns P. Jaudon, Deputy Director
Division of Reactor Safety

Docket Nos. 50-390, 50-391
License No. NPF-20 and
Construction Permit No. CPPR-92

Enclosures: 1. List of Attendees
2. Presentation Summary

cc w/encls: (See page 2)

250059

9603260031 960314
PDR ADOCK 05000390
P PDR

TE 45

TVA

2

cc w/encls:

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Senior Vice President
Nuclear Operations
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1101 Market ST
Chattanooga, TN 37402-2801

Dr. Mark O. Medford, Vice Pres.
Engineering & Technical Services
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. J. A. Scalice
Site Vice President
Watts Bar Nuclear Plant
Tennessee Valley Authority
Route 2, P. O. Box 2000
Spring City, TN 37381

General Counsel
Tennessee Valley Authority
ET 10H
400 West Summit Hill Drive

Mr. P. P. Carrier, Manager
Corporate Licensing
Tennessee Valley Authority
4G Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. D. V. Kehoe, Manager
Site Nuclear Assurance & Licensing
Watts Bar Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Spring City, TN 37381

Mr. B. S. Schofield
Site Licensing Manager
Watts Bar Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Spring City, TN 37381

TVA Representative
Tennessee Valley Authority
11921 Rockville Pike
Suite 402
Rockville, MD 20852

The Honorable Robert Aikman
County Executive
Rhea County Courthouse
Dayton, TN 37381

The Honorable Garland Lanksford
County Executive
Meigs County Courthouse
Decatur, TN 37322

Michael H. Mobley, Director
Division of Radiological Health
3rd Floor, L and C Annex
401 Church Street
Nashville, TN 37243-1532

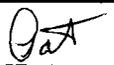
Ms. Jane A. Fleming
8 Oceanwood Drive
Duxbury, MA 02332

Distribution w/encls: (See page 3)

Distribution w/encls:

- S. D. Ebnetter, ORA/RII
 - E. W. Merschhoff, DRP/RII
 - A. F. Gibson, DRS/RII
 - F. J. Hebdon, NRR
 - A. P. Hodgdon, OGC
 - B. K. Keeling, GPA/CA
 - G. M. Tracy, OEDO
 - P. S. Tam, NRR
 - C. F. Smith, RII
 - D. W. Jones, RII
 - D. H. Thompson, RII
 - J. H. Moorman, RII
 - G. A. Hallstrom, RII
- PUBLIC

U.S. Nuclear Regulatory Commission
 Watts Bar Nuclear Plant
 1260 Nuclear Plant Road
 Spring City, TN 37381

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COPY?	<input checked="" type="radio"/> YES NO	<input checked="" type="radio"/> YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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DOCUMENT NAME: G:\BR6.WAT\MTG-SUM.313

LIST OF ATTENDEES

Name

Title

NRC Staff

S. Ebnetter	Regional Administrator, Region II (RII)
F. Hebdon	Director, Project Directorate II-3, Office of Nuclear Reactor Regulation (NRR)
J. Jaudon	Deputy Director, Division of Reactor Safety (DRS), RII
E. Merschhoff	Director, Division Reactor Projects (DRP), RII
C. Julian	Chief Project Branch 6, Watts Bar, DRP, RII
M. Lesser	Chief Project Branch 6, DRP, RII
C. Casto	Chief Engineering Branch, DRS, RII
P. Vandoorn	Senior Resident Inspector, Watts Bar, DRP, RII

TVA Staff

O. Kingsley	President and Chief Nuclear Officer
O. Zeringue	Senior Vice President, Nuclear Operations
J. Scalice	Vice President, Watts Bar Site
R. Purcell	Plant Manager
D. Kehoe	Manager, Nuclear Assurance and Licensing
B. Schofield	Manager, Site Licensing
W. Elliott	Manager, Site Engineering
T. Tohill	Manager, Public Relations

NRC/TVA MANAGEMENT MEETING

MARCH 13, 1996

NRC REGION II OFFICES, ATLANTA

Enclosure 2

AGENDA

INTRODUCTION AND SITE OVERVIEW

J. SCALICE

PLANT STATUS

R. PURCELL

SECONDARY PLANT AND AFW ISSUES

OPERATIONS PERFORMANCE

MAINTENANCE / OTHER DEPT. PERFORMANCE

CLOSING REMARKS

J. SCALICE

BACKLOGS REMAIN LOW

DOCUMENT TYPE	BACKLOG GOAL	CURRENT BACKLOG AS OF 3/3
CORRECTIVE WORK ORDERS	200	166
OTHER WORK ORDERS	500	348
CORRECTIVE ACTION PROGRAM OPEN ITEM AVERAGE AGE	<90 days	87 days
SUPPORT DCNs	50	31
NUCLEAR EXPERIENCE REPORTS	40	39
NRC OPEN ITEMS & COMMITMENTS	0 LATE	0 LATE

30% POWER PLATEAU TESTING SUCCESSFUL

- **SYNCHRONIZATION TO POWER GRID**
- **STEAM GENERATOR LEVEL CONTROL TRANSIENTS**
- **CALORIMETRIC**
- **FLUX MAPPING / HOT CHANNEL FACTORS**
- **THERMAL EXPANSION / VIBRATION**
- **STEAM FLOW / FEED FLOW CALIBRATIONS**

REMAINING POWER ASCENSION TESTS

- **50% 10% LOAD SWING, LOSS OF OFFSITE POWER**

- **75% INCORE-EXCORE CROSS-CALIBRATION**

- **100% 10% LOAD SWING**
50% LOAD REJECTION
100% PLANT TRIP
SHUTDOWN FROM OUTSIDE CONTROL ROOM
WARRANTY RUN
STEAM GENERATOR MOISTURE CARRYOVER
DETERMINATION

VEHICLE BARRIER SYSTEM COMPLETED

- **VEHICLE BARRIER SYSTEM INSTALLED IN ACCORDANCE WITH 10 CFR 73.55(c)(7) and (8)**
- **NRC NOTIFIED BY LETTER IN ACCORDANCE WITH LICENSE CONDITION 2.C.(4) ON 2/15/96.**

TURBINE CONTROLS NOW WORKING PROPERLY

TWO AUTOMATIC TURBINE TRIPS ON 2/10 AND 2/17

- **CAUSE:**
 - **INITIALLY BELIEVED TO BE DUE TO DEBRIS IN OIL SYSTEM**
 - **CAUSE DETERMINED TO BE DUE TO MOMENTARY SIGNAL SPIKE ON TURBINE TRIP RELAY**

- **CORRECTIVE ACTION:**
 - **CLEANUP OF OIL SYSTEM**
 - **MODIFY TURBINE TRIP (TTGB) RELAY CIRCUIT TO ACCOUNT FOR INITIAL TRANSDUCER SPIKE**

CONDENSATE HOTWELL LEVEL CONTROL PROBLEM RESOLVED

CONDENSATE FLOW INSTABILITY FOLLOWING INITIAL GENERATOR SYNCHRONIZATION

- **CAUSE:**
 - **HOTWELL LEVEL INDICATING HIGH WHILE
ACTUALLY LOW DUE TO HYDRODYNAMIC
EFFECTS ON THE HOTWELL LEVEL INSTRUMENT**

- **CORRECTIVE ACTIONS:**
 - **MODIFIED INSTRUMENT TAPS**
 - **PROVIDED INDEPENDENT LEVEL INDICATION**
 - **REVISED OPERATING PROCEDURES**

AUXILIARY FEEDWATER ISSUES ARE RESOLVED

TURBINE DRIVEN AUXILIARY FEEDWATER (TDAFW) PUMP SUCTION ALIGNMENT TO ESSENTIAL RAW COOLING WATER (ERCW) SOURCE 2/19/96

- **CAUSE:**
 - **PRESSURE PULSATIONS DURING LOW FLOW
CONDITIONS**

- **CORRECTIVE ACTIONS:**
 - **CONFIRMED SECONDARY CHEMISTRY**
 - **MODIFIED LOGIC TO USE MDAFW PUMP SUCTION
PRESSURE SWITCHES FOR BOTH MDAFW AND
TDAFW VALVES**
 - **CHANGED TIME DELAYS**
 - **INSTALLED SPRINGS IN CHECK VALVES ON AFW
PUMP RECIRCULATION LINES**
 - **ADDED STUBS FOR LARGER RECIRC LINE**
 - **POST MODIFICATION TESTING CONFIRMED
OPERABILITY**

**LOOKED AHEAD TO ANTICIPATE
OTHER SECONDARY SIDE ISSUES**

IDENTIFIED COMPONENTS YET TO BE PLACED IN SERVICE

- **EVALUATED EACH ITEM FOR POSSIBLE PROBLEMS**
- **TOOK STEPS TO MINIMIZE POTENTIAL PROBLEMS**

OPERATIONS CONTINUES TO IMPROVE

- **WHAT WE ARE DOING WELL:**
 - **CONTROL ROOM COMMAND AND CONTROL**
 - **CONSERVATIVE APPROACH TO OPERATIONS**

- **WHAT IS SHOWING IMPROVEMENT:**
 - **OPERATOR AWARENESS OF ALARMS / PLANT CONDITIONS**
 - **OPERATIONS SHIFT TURNOVERS**
 - **COMMUNICATIONS**

- **WHAT NEEDS FURTHER IMPROVEMENT:**
 - **OPERATOR AWARENESS OF CONTROL BOARD INDICATORS**
 - **CONTROL ROOM ACTIVITY LEVEL**
 - **CONSISTENT HOUSEKEEPING STANDARDS**

MAINTENANCE AND OTHER AREAS CONTINUE TO BENEFIT FROM ASSESSMENT FEEDBACK

- **WHAT WE ARE DOING WELL:**
 - **BACKLOGS KEPT LOW / QUALITY FIELD WORK**
 - **RADIATION MONITORING SYSTEM AVAILABILITY**
 - **PRE-JOB BRIEFINGS**
 - **ENGINEERING SUPPORT**
 - **RADCON PERSONNEL INVOLVEMENT**

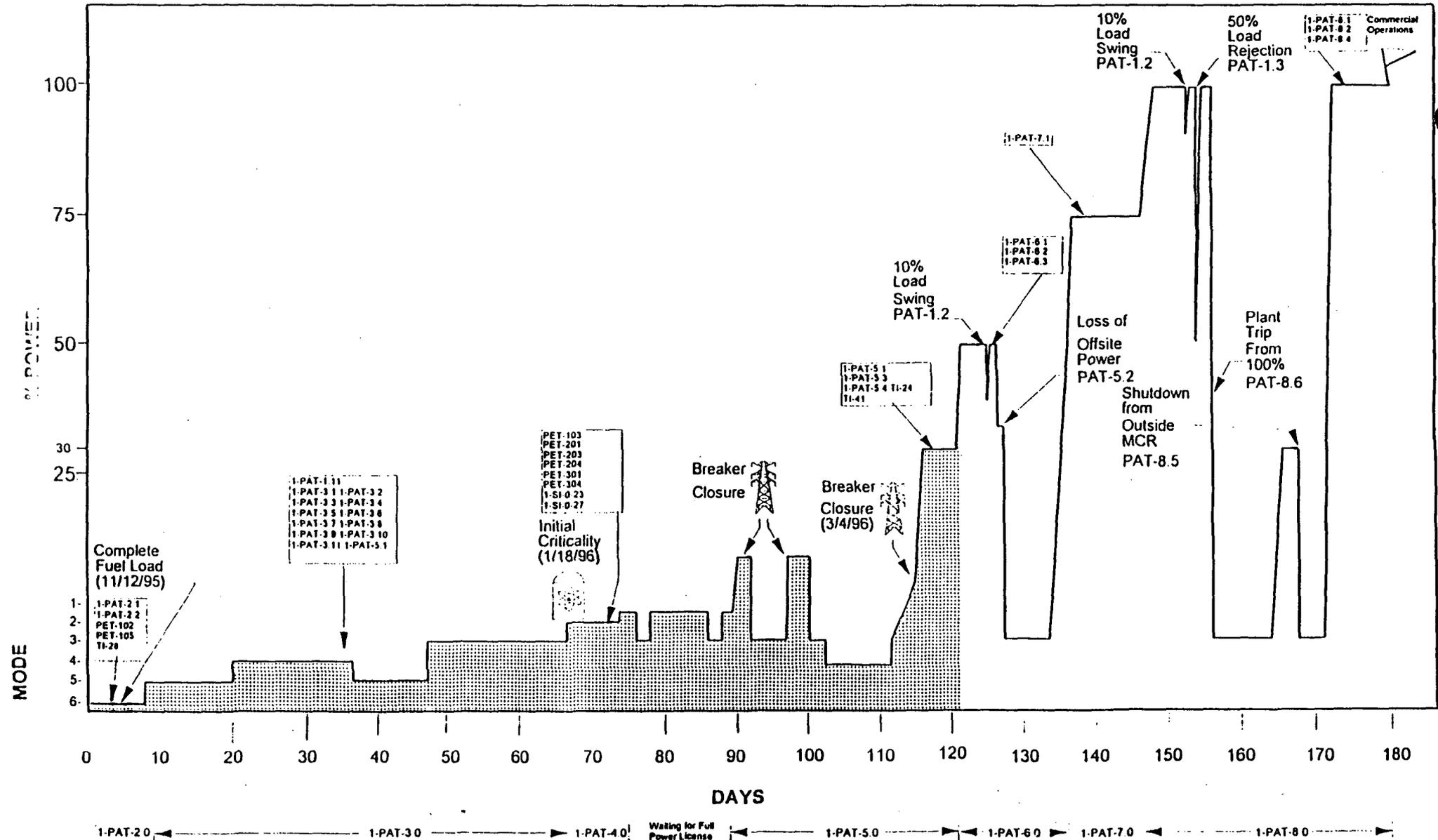
- **WHAT IS SHOWING IMPROVEMENT:**
 - **CHEMICAL SAMPLING CONTAMINATION CONTROL**
 - **FOREIGN MATERIAL CONTROLS**

- **WHAT NEEDS FURTHER IMPROVEMENT:**
 - **SURVEILLANCE PROGRAM**
 - **INDIVIDUAL RAD WORKER PRACTICES**
 - **HOUSEKEEPING**
 - **MORE CRITICAL LINE ASSESSMENTS**

CONCLUSIONS

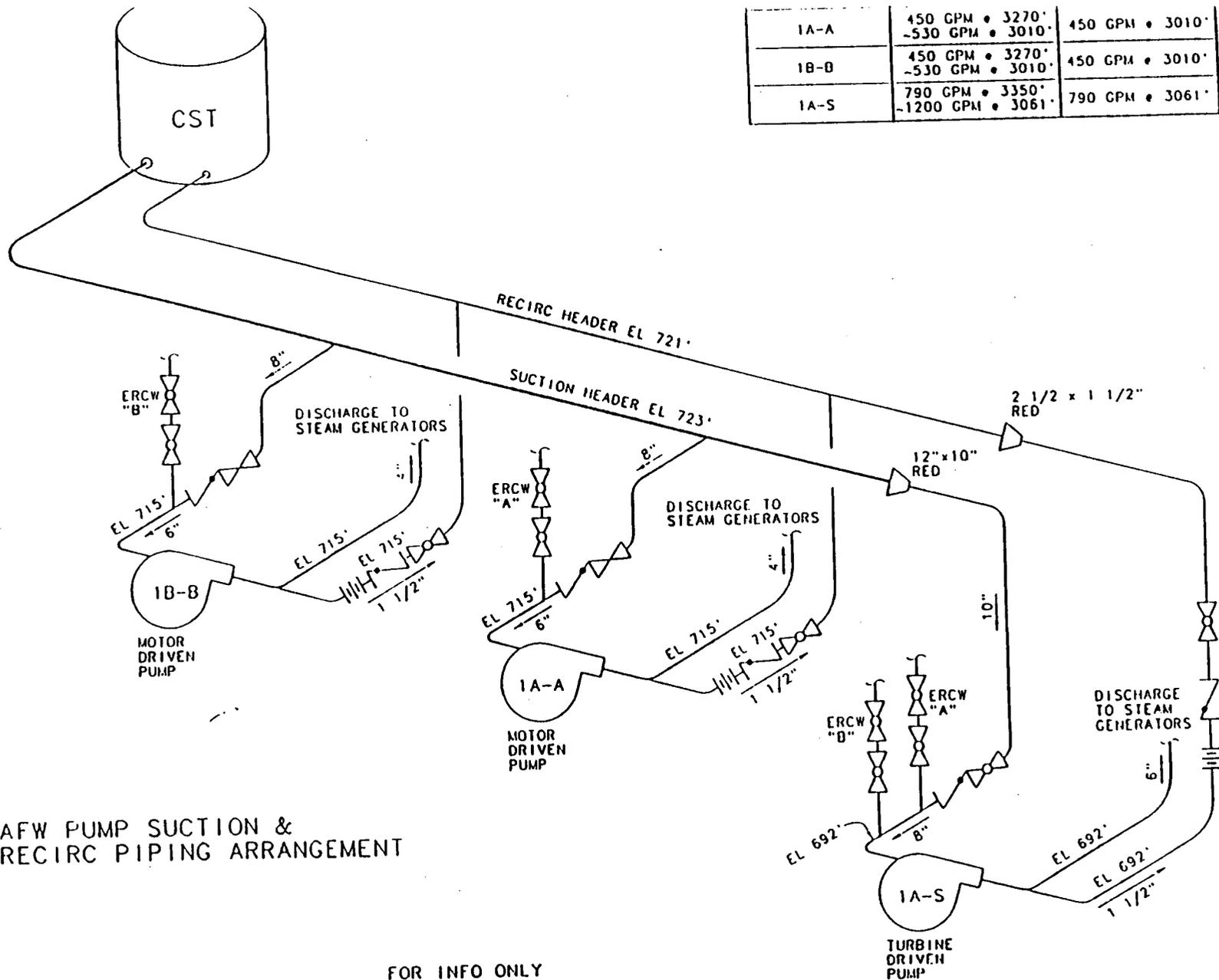
- **WATTS BAR OPERATIONS CONTINUE TO SHOW IMPROVEMENT**
- **AS EXPECTED, PROBLEMS ARE BEING IDENTIFIED AND RESOLVED**
- **SITE CONTINUES TO BECOME MORE SELF CRITICAL**

WBN POWER ASCENSION TEST PROGRAM



IOI : Only major tests shown at each plateau.

1A-A	450 GPM • 3270' -530 GPM • 3010'	450 GPM • 3010'	40 GPM
1B-B	450 GPM • 3270' -530 GPM • 3010'	450 GPM • 3010'	40 GPM
1A-S	790 GPM • 3350' -1200 GPM • 3061'	790 GPM • 3061'	70 GPM



AFW PUMP SUCTION & RECIRC PIPING ARRANGEMENT

FOR INFO ONLY
FOR DETAILS SEE PIPING DRAWINGS

RADMONITORING MAINTENANCE HISTORY

SINCE INITIAL CRITICALITY:

- **44 Work orders Generated**
 - **35 Closed of which**
 - **28 Closed within 7 days**
 - **7 Closed from 8 to 26 days**

 - **9 Remain open of which**
 - **5 less than 7 days old**