



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20585

September 23, 1988

Docket No. 50-346

LICENSEE: Toledo Edison Company and The Cleveland Electric Illuminating Company

FACILITY: Davis-Besse Nuclear Power Station, Unit No. 1

SUBJECT: SUMMARY OF FIRE PROTECTION MEETING OF JULY 21, 1988:
(TAC NOS. 60994, 60995, 61745, 61923, AND 65361)

On July 21, 1988, representatives of the licensee and the NRC staff met in Rockville, Maryland to discuss a number of issues which have arisen in conjunction with the licensee's Appendix R reappraisal effort. Enclosure 1 is a list of attendees at the meeting. Enclosure 2 summarizes information presented by Toledo Edison and Enclosure 3 is the partial schedule for performing modification to meet fire protection requirements. Since the last meeting convened to discuss fire protection issues in October of 1987, the licensee submitted additional information on the Davis Besse Fire Protection Program by letters dated January 6, February 8, May 23 and June 6, 1988. The staff reviewed this information and requested the meeting to clarify several issues. An exchange of information occurred which resolved most of the staff's concerns. The remaining open issues can be characterized as follows: (1) licensee identified deviations from the guidelines contained in Appendix A to Branch Technical Position APCSB 9.5-1 (most of these pertain to National Fire Protection Association code deviations), and (2) post-fire safe shutdown actions which may be necessary but which have not yet been finalized due to as-yet incomplete analysis. The licensee committed to submit a schedule in September 1988 for identifying and justifying all Appendix A deviations. The licensee also committed to submit the results of the pending safe shutdown analyses before the end of 1988. The licensee re-affirmed that all work associated with Appendix R to 10 CFR Part 50 is to be completed prior to startup from the sixth refueling outage.

In light of the above, the staff indicated that they will complete an "interim" safety evaluation which will address all those issues which have been resolved to date, including, but not limited to: the penetration seal issue; pending exemption requests; safe shutdown methodology; and previously identified deviations to Appendix A to BTP APCSB 9.5-1. The staff will issue a final fire protection safety evaluation when the remaining information referenced above has been submitted by the licensee and reviewed by the staff. The licensee discussed potential staff acceptance of a revised fire watch program. The staff emphasized that "hourly" fire watches should be scheduled such that each location covered by the watch should be monitored at a frequency not to exceed 1 hour as previously discussed with Region III representatives.

The staff also informed the licensee that plant procedures which do not require assembling the fire brigade at equipment lockers upon receipt of an alarm in

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PDR ADOCK 05000346
F PDC

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the control room is a deviation from staff guidance contained in the June 1977 "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance."

This issue will be the subject of future discussions between the licensee and the staff.

151

Albert W. De Agazio, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects

cc: See next page

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Docket File NRC & Local PDRs
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OGC-Rockville EJordan
BGrimes ACRS (10)
JCifford (Region III)
CMCCracken JULIE
DKubicki
PByron

Office: LA/PDIII-3 PM/PDIII-3 ECEB DPA - PD/PDII-3
Surname: PKreutzer ADeAgazio DKubf. KPerkins
Date: 9/15/88 9/15/88 9/2 9/13/88

ATTENDEES

FIRE PROTECTION DISCUSSION

TOLEDO EDISION COMPANY

ATTENDEE

R. Brandt
A. De Agazio
D. Kubicki
M. Lalor
M. Murtha
J. Roskoph
J. Strausser
L. Young

AFFILIATION

Toledo Edison Company
USNRC/DRSP/PD33
USNRC/DEST/ECEB
Toledo Edison Company
Toledo Edison Company
Toledo Edison Company
Toledo Edison Company
Toledo Edison Company

ENCLOSURE 2

NRC FIRE PROTECTION MEETING
JULY 21, 1988

1. Introduction of Jim Roskoph
2. Response to NRC Questions
3. Scope and Review of Draft SER
4. Exemption for Pressurizer Instruments
5. Repair Response

January 6, 1988

1. Response to multiple high impedance faults is still an open item? This is typical of several questions.

RESPONSE

- The Appendix R SER can be written with a list of corrective actions to be completed by the 6th RFO
- Similar list was attached to Amendment #18 for Appendix A
- Completion of the corrective actions can be audited by Region

January 6, 1988 letter

2. Question 42. For the portable fuel oil pump, how will it function, be controlled & be addressed by procedures?

RESPONSE

- Pump will be portable & stored in centralized location
- Connected to existing fuel oil piping via a quick-connect fitting, which will be installed by 6th RFO
- Fuel oil piping is not in the area containing the fire
- Pump power will be via dedicated power supply or portable generator
- Procedures for operation, maintenance and periodic testing of the equipment will be established

January 6, 1988 letter

3. Discuss how the RCS cold leg temperature readouts will be electrically independent.

RESPONSE

- Temperature indication circuit would be physically isolated from the fire-induced fire by a multi-pin twist-disconnect plug
- Circuit would be connected to the digital readout device
- Use of the "hooked-up" device was discussed with the NRC and verbally accepted

January 6, 1988 letter

4. FHAR, Table 4-1, Sheet 2, why was the reference to the Fire Protection Engineer deleted?

RESPONSE

- The title of the FPE was revised to Fire Protection Compliance Manager
- Toledo Edison has re-organized the Fire Protection Compliance Group
- The previous FPE responsibilities now belong under the Fire Protection Technical Manager
- The current Fire Protection Technical Manager is a degreed fire protection engineer and qualifies for the full SFPE membership

January 6, 1988 letter

5. FHAR, Table 4-1, Sheet 10, discuss why we deviate from the Vassallo letter?

RESPONSE

- "Deviate" refers to the Codes referenced by Appendix A - not the Vassallo letter
- Specific Code deviations were not identified since Code reviews are ongoing
- Auditable Code reviews are established for NFPA 13 & 72E and will be established as other codes reviews are completed
- Vassallo letter deviation is discussed in letter dated May 27, 1987 (Serial No. 1361), Question #8 - QA requirements are not applied to pre-existing equipment

January 6, 1988 letter

6. Discuss why we say we deviate from the NFPA Codes yet no deviations are listed or justified?

RESPONSE

- Code review are scheduled to completed by April 1989 as discussed in letter dated June 6, 1988 (Serial No. 1497)

- Deviations to NFPA 13 & 72E are identified in Serial 1497

- As Code reviews are completed, auditable files will be established

January 6, 1988 letter

7. FHAR, Table 4-1, Sheet 27, discuss Tech Spec coverage for the access doors.

RESPONSE

- Access doors in Tech Spec fire barriers are addressed by the Surveillance requirements
- Inoperable or held-open access doors would be addressed by required fire watches

January 6, 1988 letter

8. FHAR, Table 4-1, Sheet 55, discuss how a single failure will not impact the sprinkler systems and the hose stations.

RESPONSE

- Certain sprinkler and hose stations are not currently independent as discussed in letter dated July 30, 1987 (Serial No. 1396)
- Modifications to establish independence are scheduled for completion by the 6th RFO

January 6, 1988 letter

- 9 FHAR, Table 4-1, Sheet 36, discuss the basis for the Unrated Opening Analysis.

RESPONSE

- Penetrations that could not be sealed were analyzed as unrated openings
- Unrated openings would not be breached by a fire
- Analysis considered fire hazards in the area, suppression, detection, location of safe shutdown equipment, etc
- Review was performed by a fire protection engineer
- Only 28 unrated openings out of over 7000 penetrations (< 1%)

January 6, 1988 letter

10 FHAR, Table 4-1, Sheet 91, discuss how the Low-Level Radwaste Storage Facility (LLRWSF) complies with App A.

RESPONSE

- Completed LLRWSF will be reviewed to App. A and addressed in the FHAR
- Automatic sprinkler provided for above ground areas handling radwaste
- No safe S/D circuits in LLRWSF
- Control area has automatic detection
- Water flow & detector alarms provided locally & sent to C/R
- Extinguisher and hoses are provided
- Floor drain holding tanks are provided

January 6, 1988 letter

11. FHAR, Page 5.A-8, why aren't all the dampers 3-hour rated.

RESPONSE

- Dampers will be 3-hour rated
- FHAR discussion is intended to indicated that some dampers are yet to be installed
- Dampers are scheduled to be installed by the 6th RFO

February 8, 1988

12. Question 24, RCP seal cooling issue has not been resolved. This is an open item for the SER.

RESPONSE

- The Appendix R SER can be written with a list of corrective actions to be completed by the 6th RF0
- Similar list was attached to Amendment #18 for Appendix A
- Completion of the corrective actions can be audited by Region

May 23, 1988

13. Question 19, why delete the detectors in the Heater Bay?

RESPONSE

- Heat detector installation is not adequate - 50 foot spacing under open grating
- Wet-pipe sprinkler water flow alarms when installed would provide fire alarm to Control Room
- Hourly fire watches will be maintained until water flow alarms are installed
- Removal of inadequate detectors will reduce potential for spurious alarms

May 23, 1988

14. Question 29, High-low pressure interface issues have not been completed. This is an open item for the SER.

RESPONSE

- The Appendix R SER can be written with a list of corrective actions to be completed by the 6th RFO
- Similar list was attached to Amendment #18 for Appendix A
- Completion of the corrective actions can be audited by Region

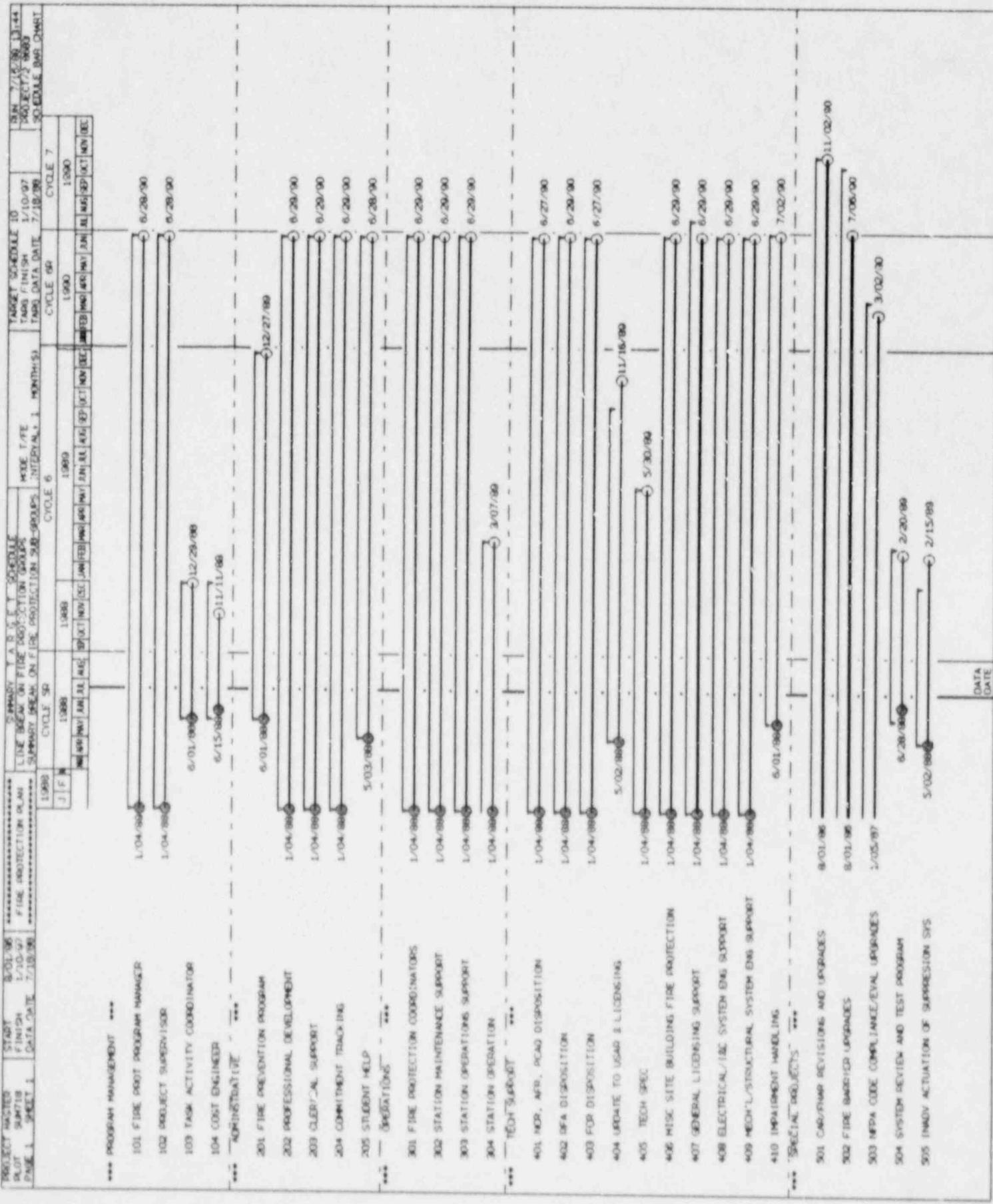
June 6, 1988

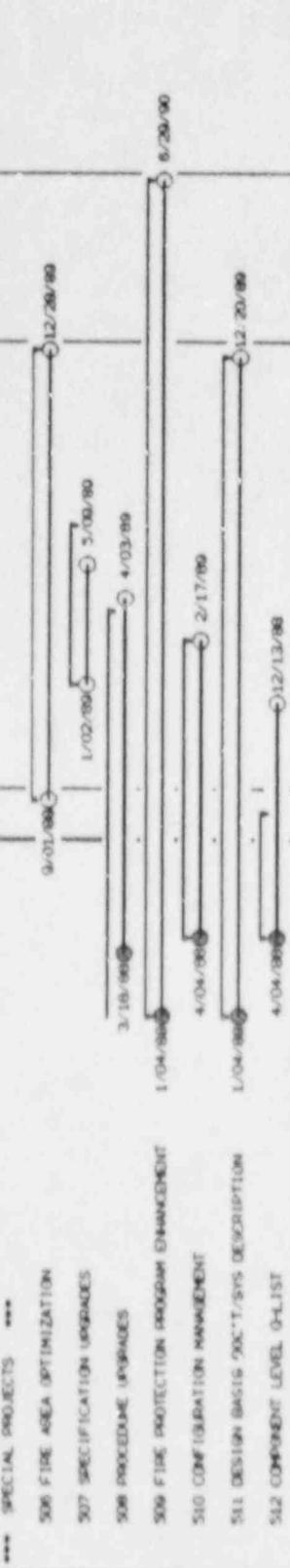
15 Question 1, the manual operator action issue has not been completed. This is an open item for the SER.

RESPONSE

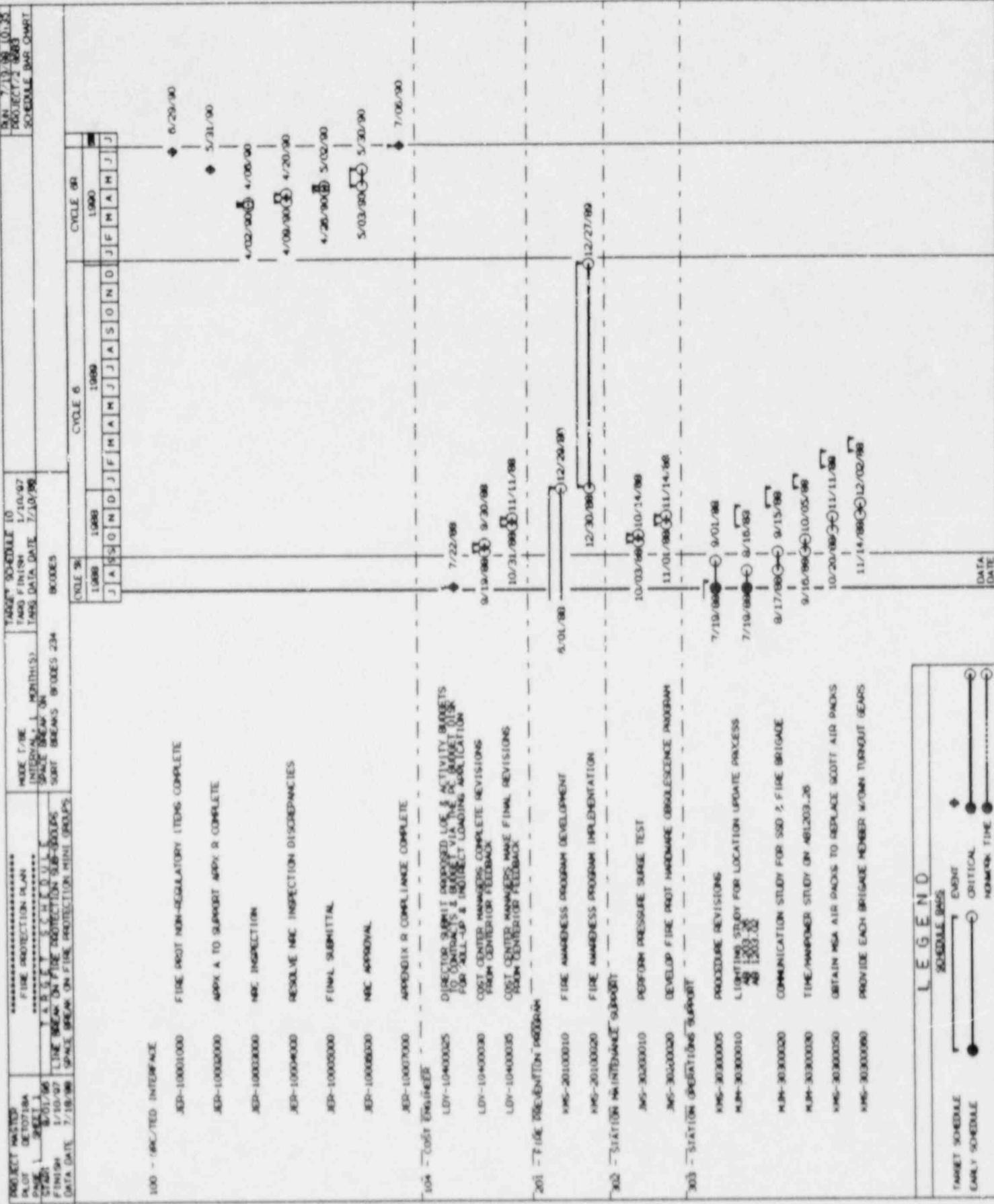
- The Appendix R SER can be written with a list of corrective actions to be completed by the 6th RFO
- Similar list was attached to Amendment #18 for Appendix A
- Completion of the corrective actions can be audited by Region

ENCLOSURE 3





DATA
ONE



1990.000711 WORKER
 DAYLOT DE 102718A
 STAGE 1
 DUE DATE 1-20-90
 FINISH DATE 1-10-90
 DATA DATE 7/18/90

FIRE PROTECTION PLAN
 T A B L E U
 THE BREAK ON FIRE PROTECTION IS AS FOLLOWS
 SPACE BREAK ON FIRE PROTECTION HIGH GROUPS

MODE 1/FIRE (MONTHS 1-12)
 TARGET SCHEDULE (0
 MONTHS 1-12)
 TAOS F INSH 1/10/90
 TAOS DATA DATE 7/18/90

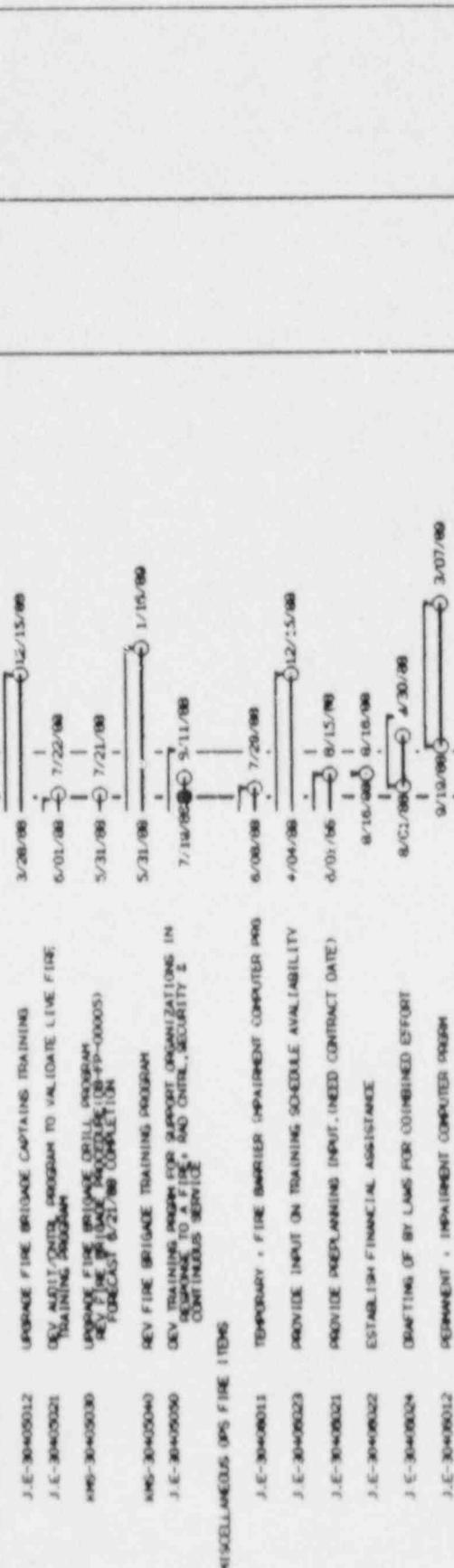
SORRY BREAK ON
 BREAKS 204 (00005)

CYCLE 6
 CYCLE 6
 CYCLE 6
 CYCLE 6

J A S O N D J F M A M J J A S O N D J F M A N J J

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 19900
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 19900

304 - STATION OPERATION

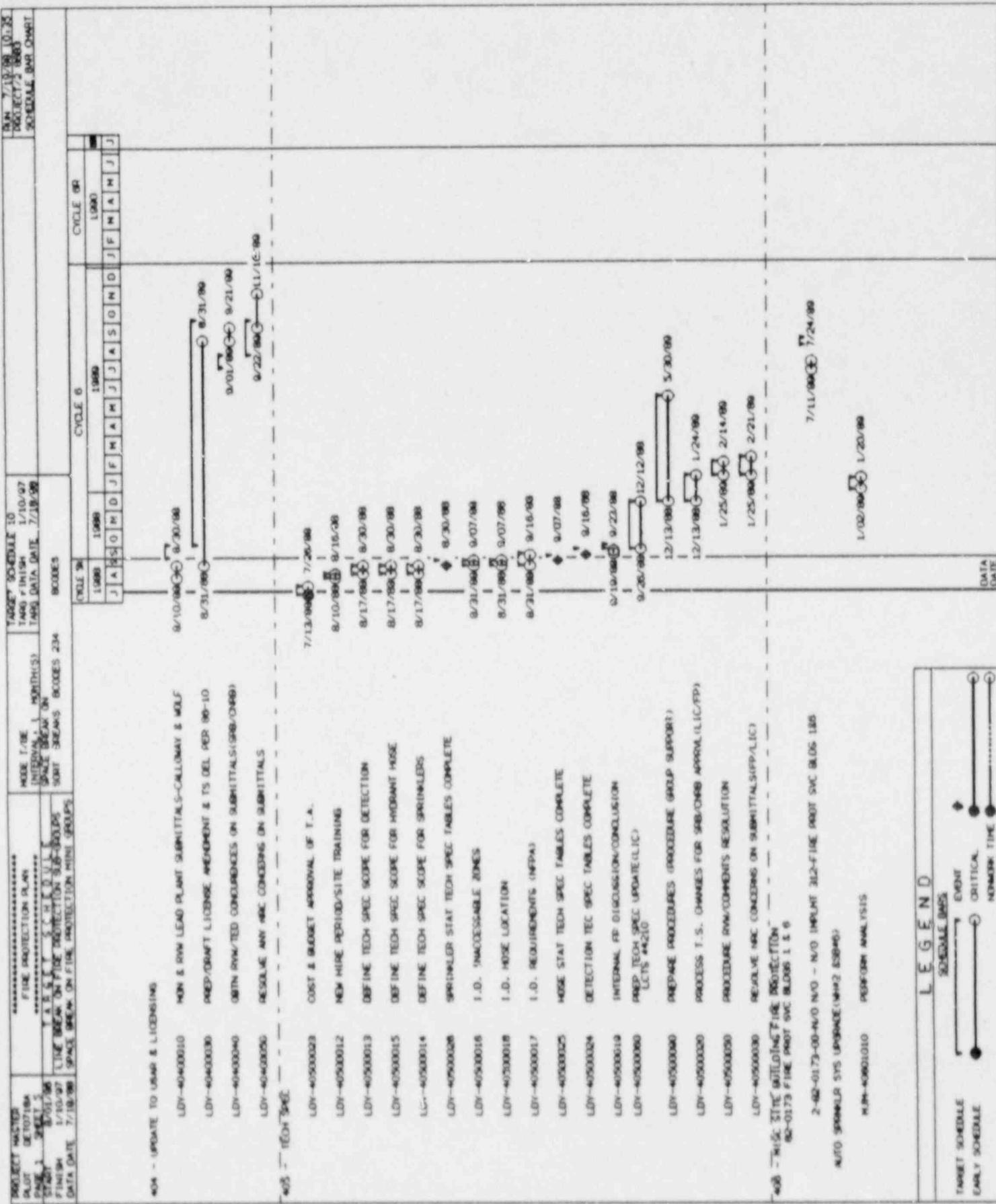


LEGEND

- SCHEDULED WORKS →
- EVENT →
- CRITICAL →
- REGULAR TIME →

WORK SCHEDULE
 CRITICAL SCHEDULE
 REGULAR TIME

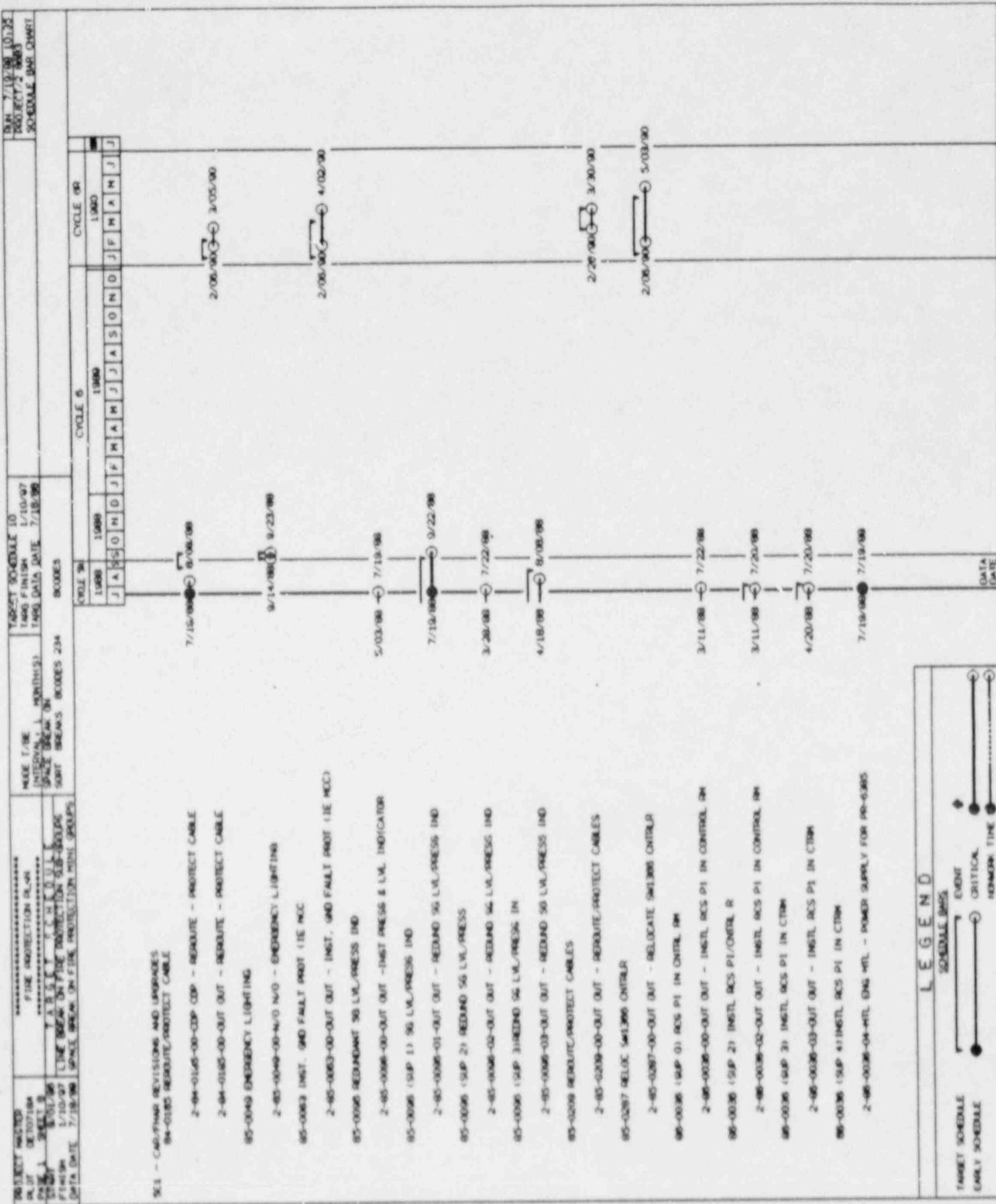
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DATE

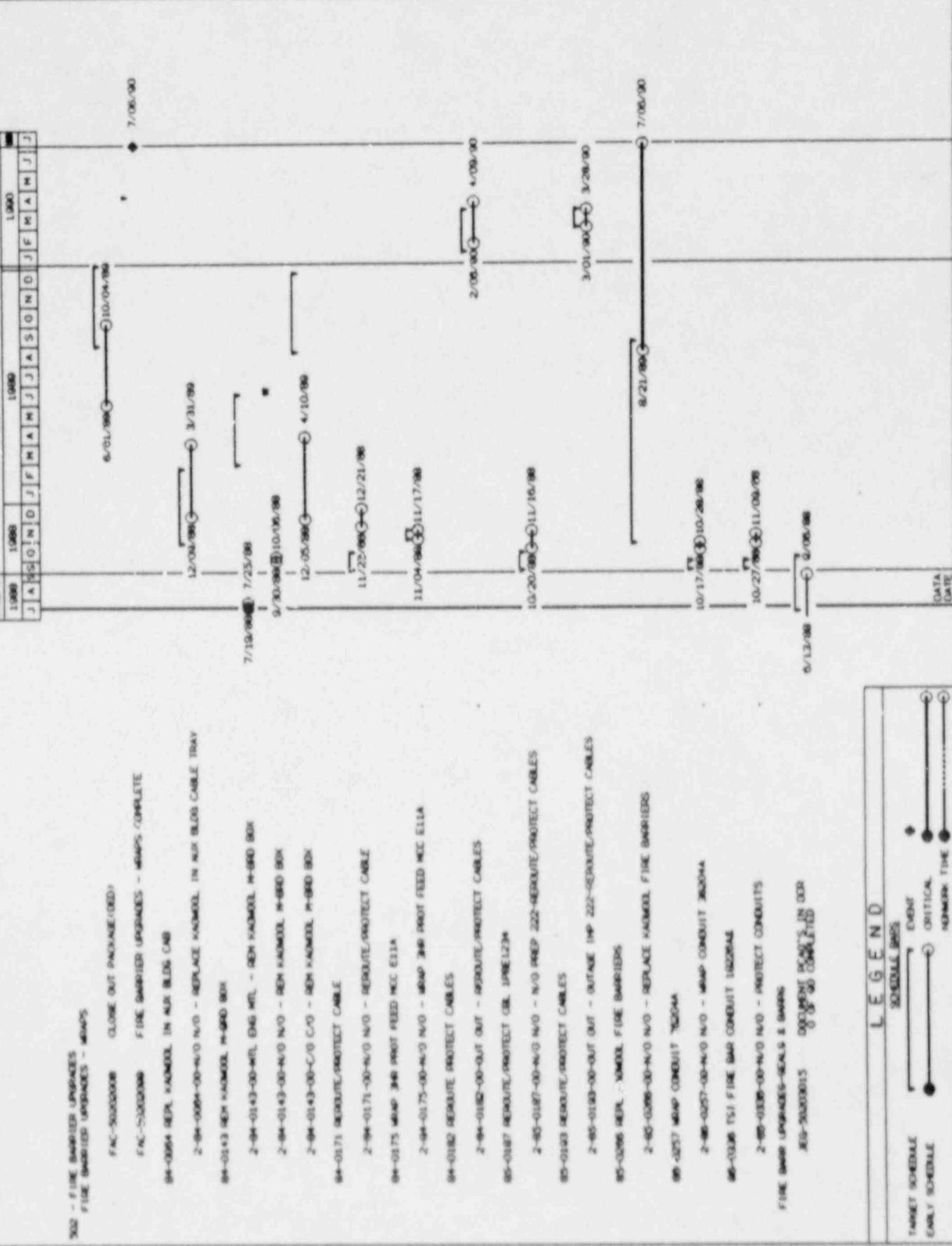


LEGEND

The legend consists of four entries:

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- PENDING:** Represented by a dashed black circle.
- CRITICAL:** Represented by a solid black circle with a diagonal line through it.
- UNMET TIME:** Represented by a dashed black circle with a diagonal line through it.



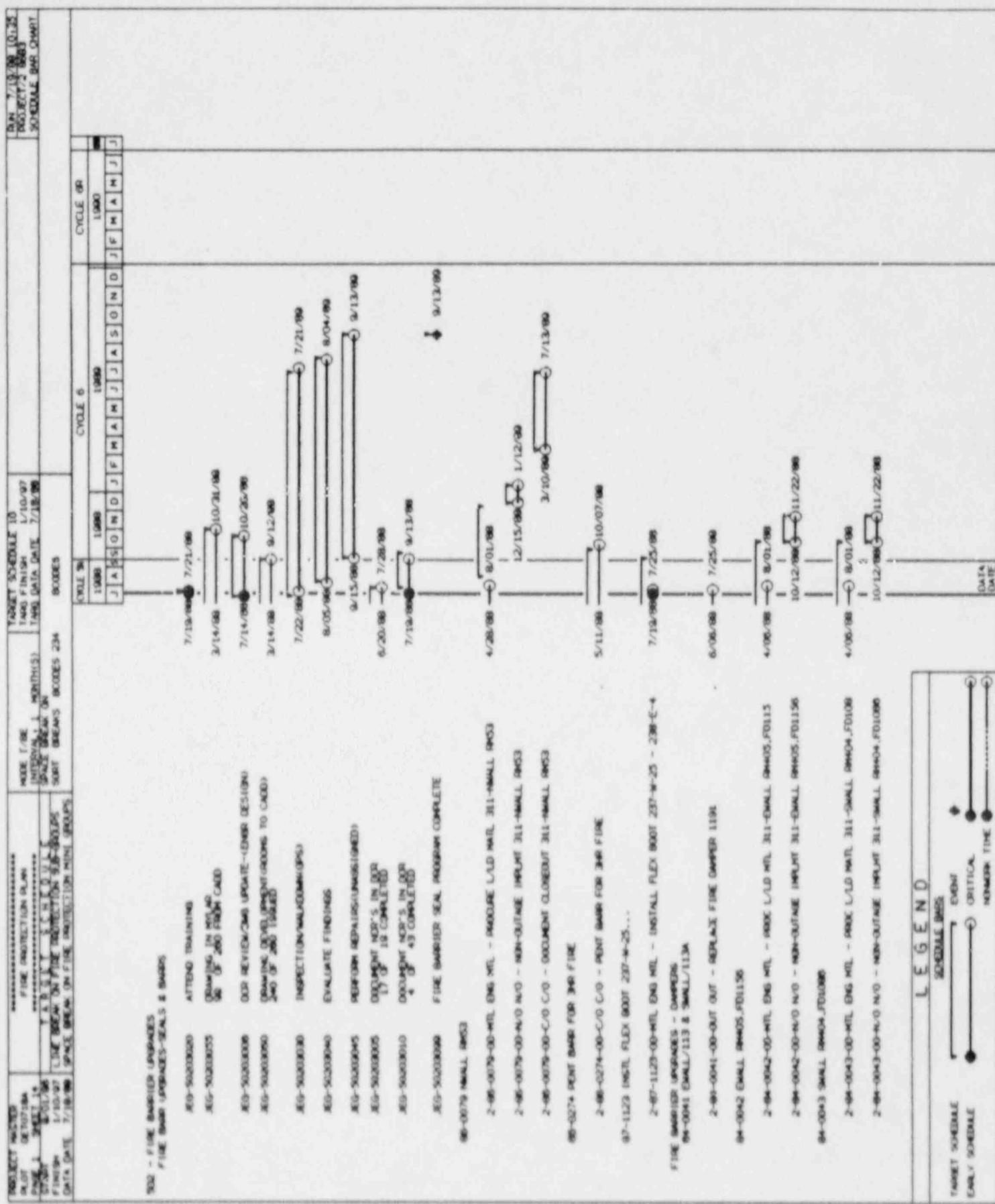


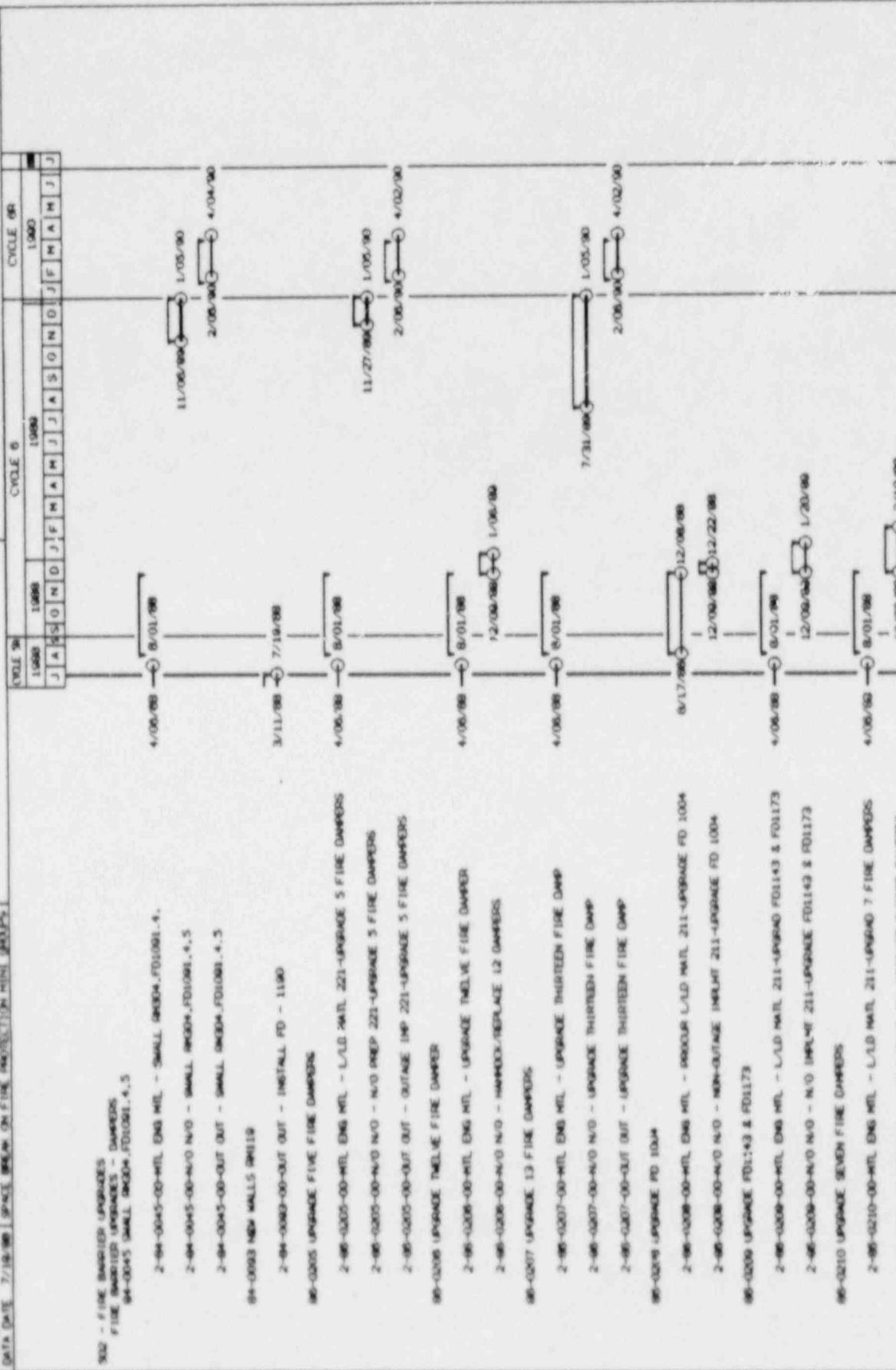
LEGEND

SOCIAL EVENTS	SOCIAL TRENDS
•	◆

POLITICAL EVENTS	POLITICAL TRENDS
○	○

JUDGES 3:10



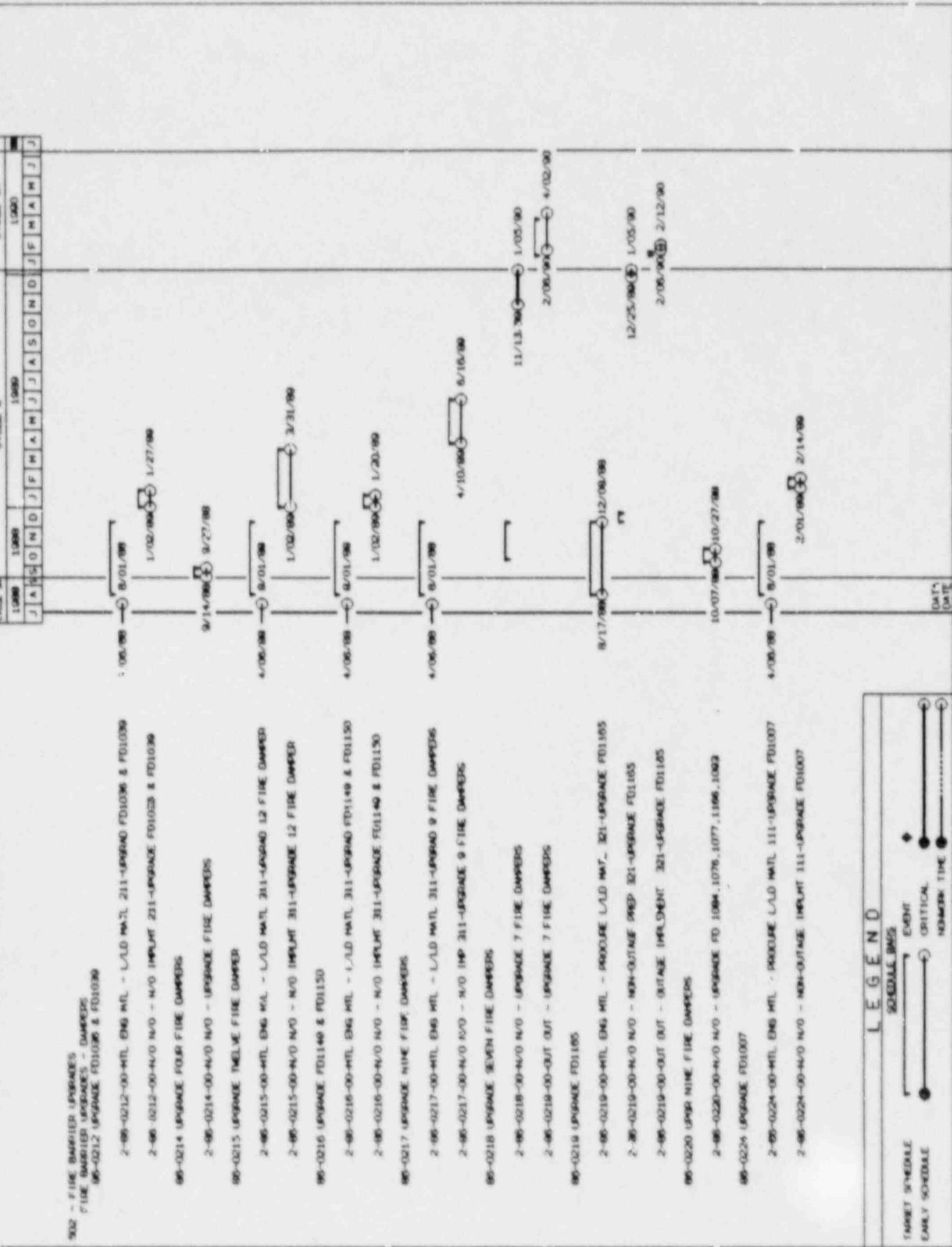


LEGEND

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- EVENT: Represented by a solid vertical line with a small circle at the top.
- OPTIONAL: Represented by a dashed horizontal line.

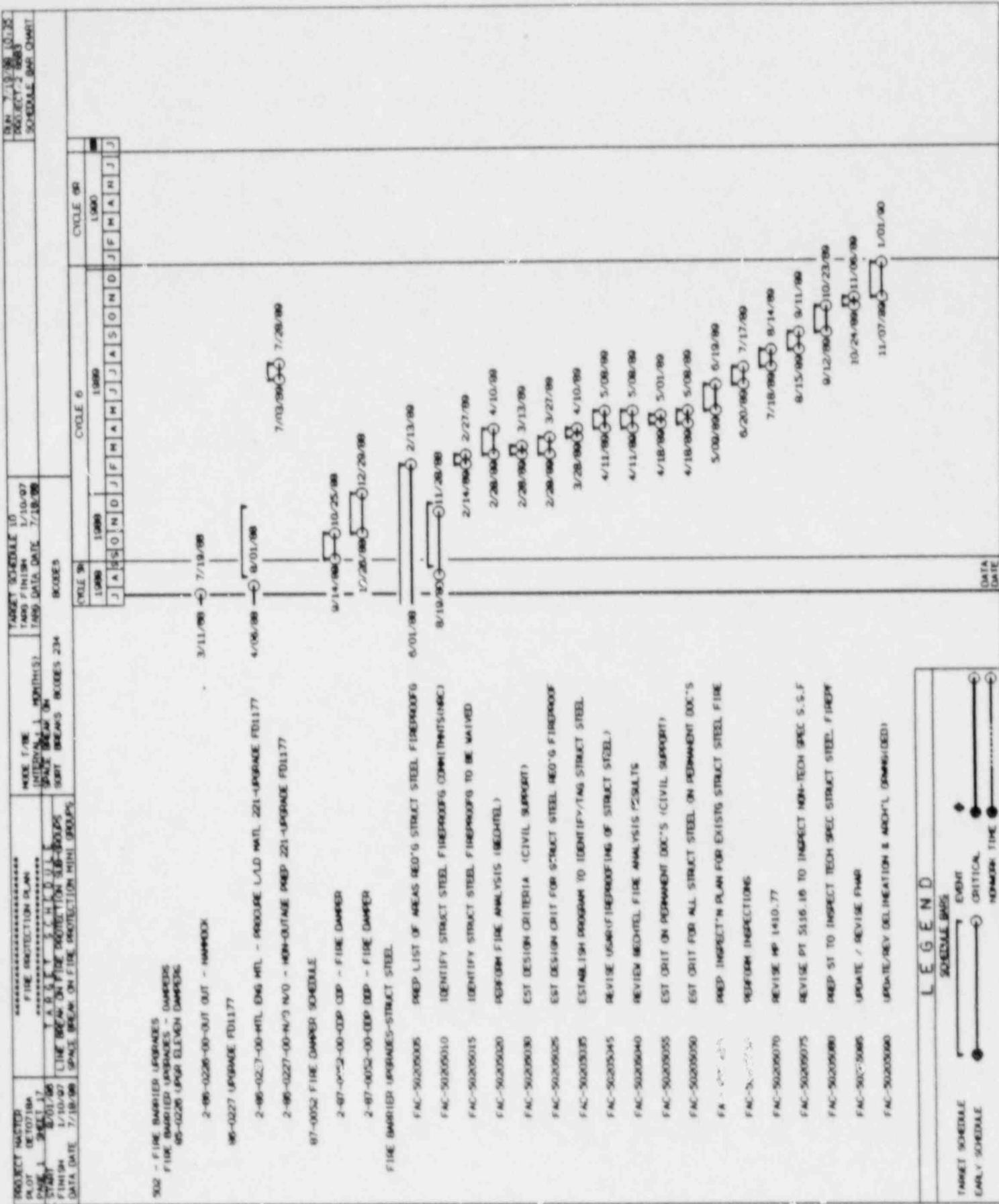
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DATA DATE	7/10-09	BEAMS	BEAMS	00002

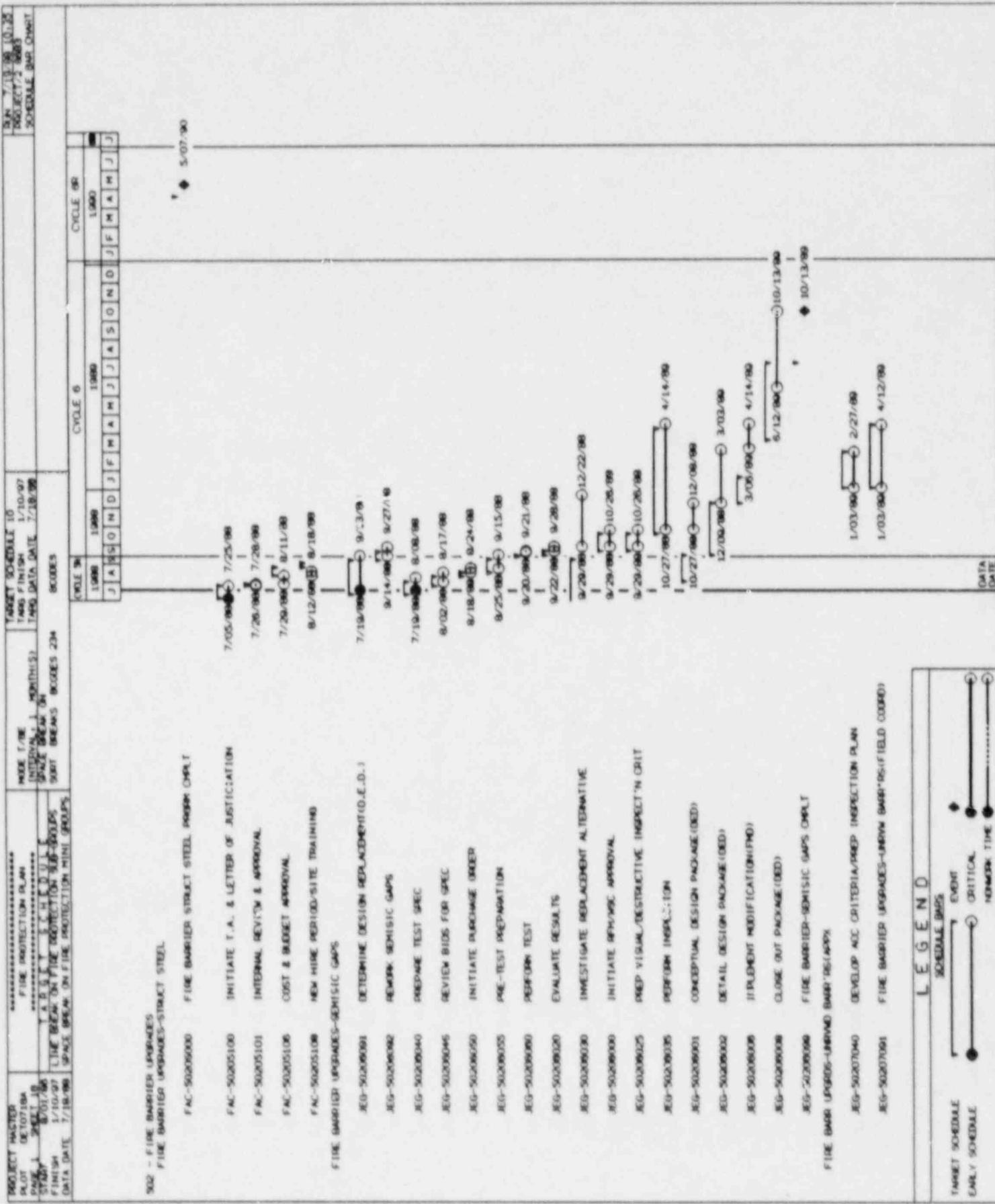


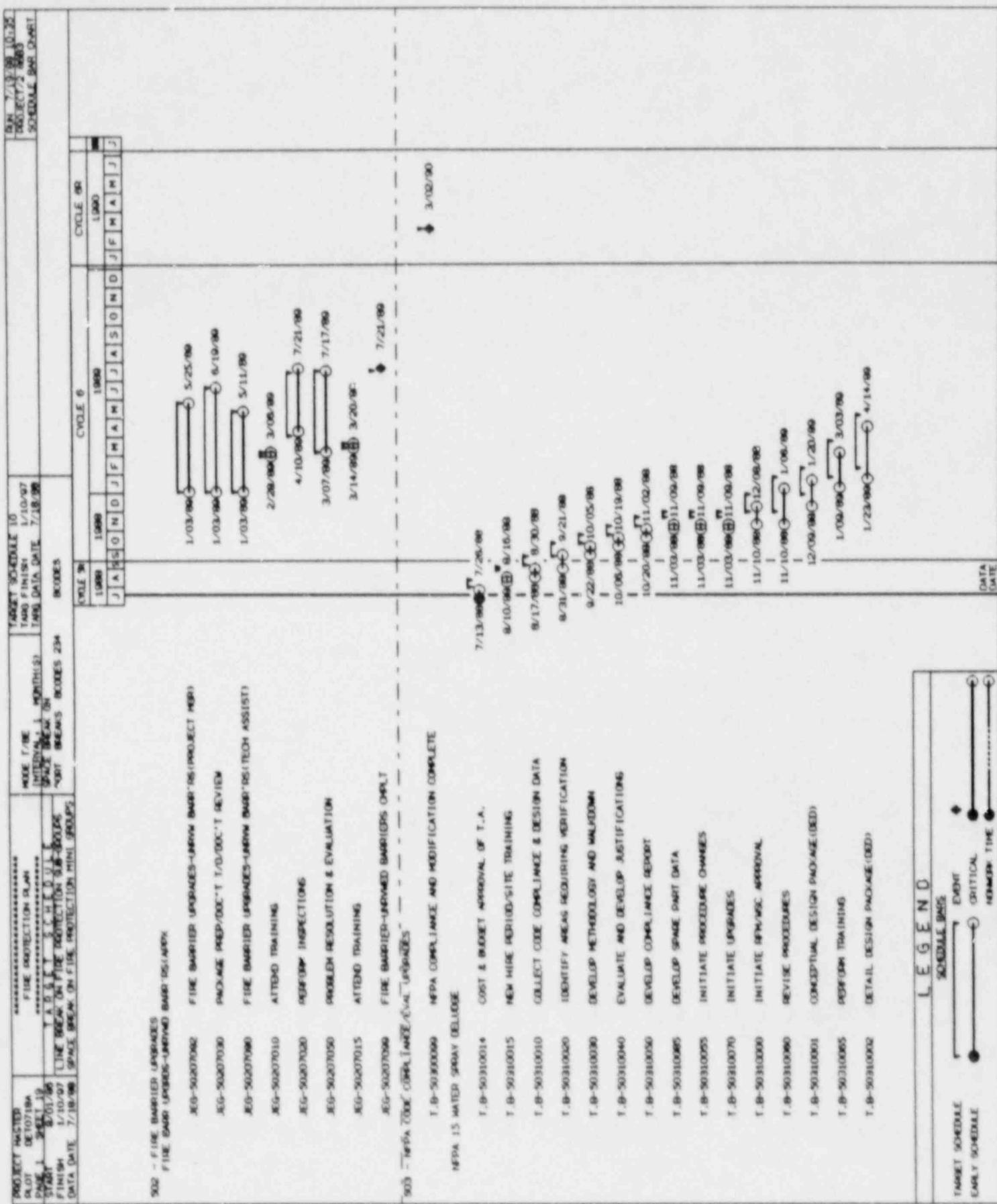
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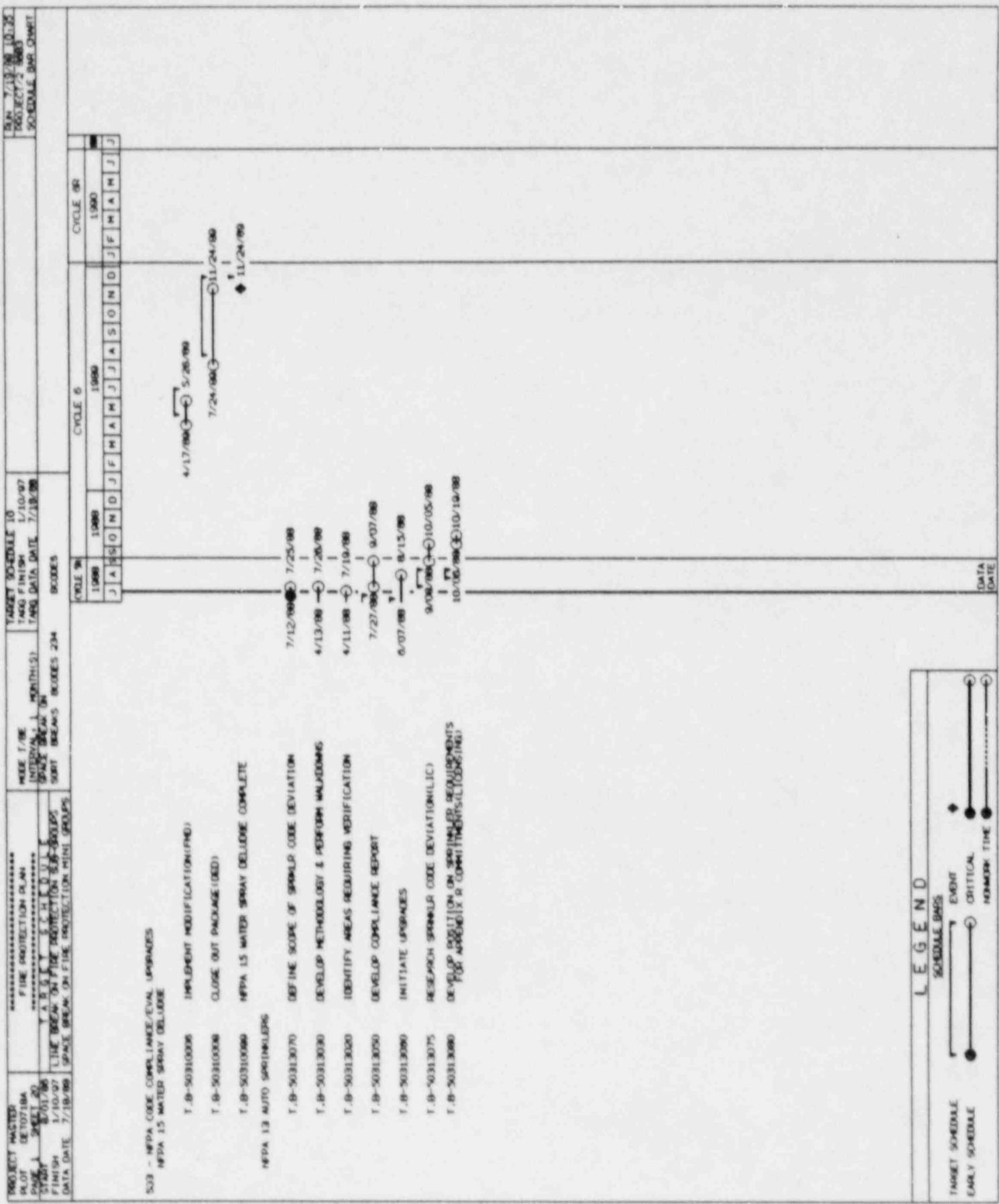
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Critical	DOUBLE-HEADED ARROW
Event	DIAMOND
Non-Work Time	DOTTED LINE

EDWARD S. HARRIS





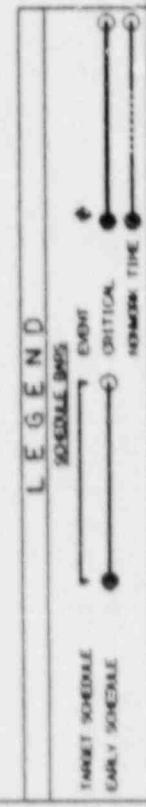


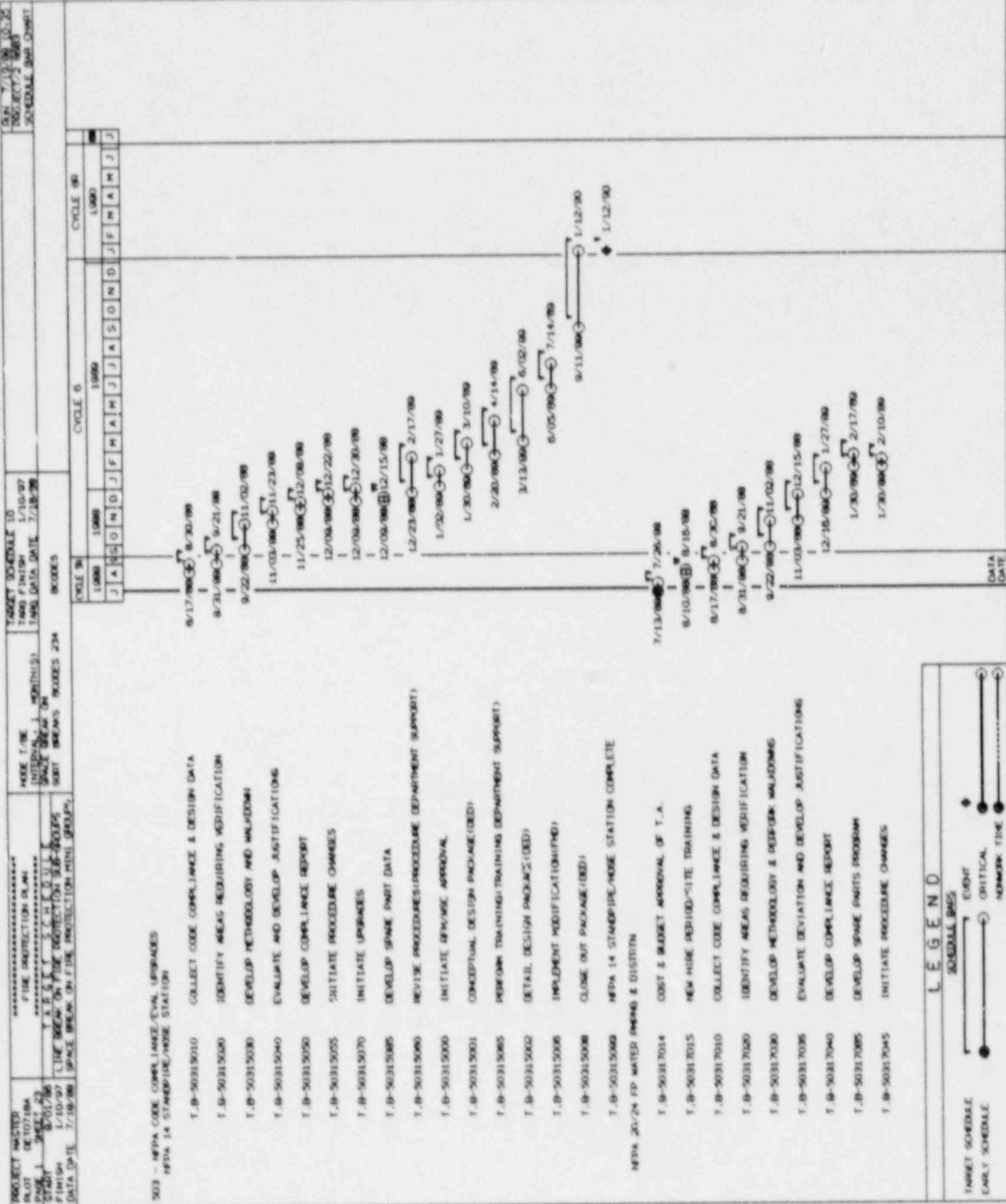


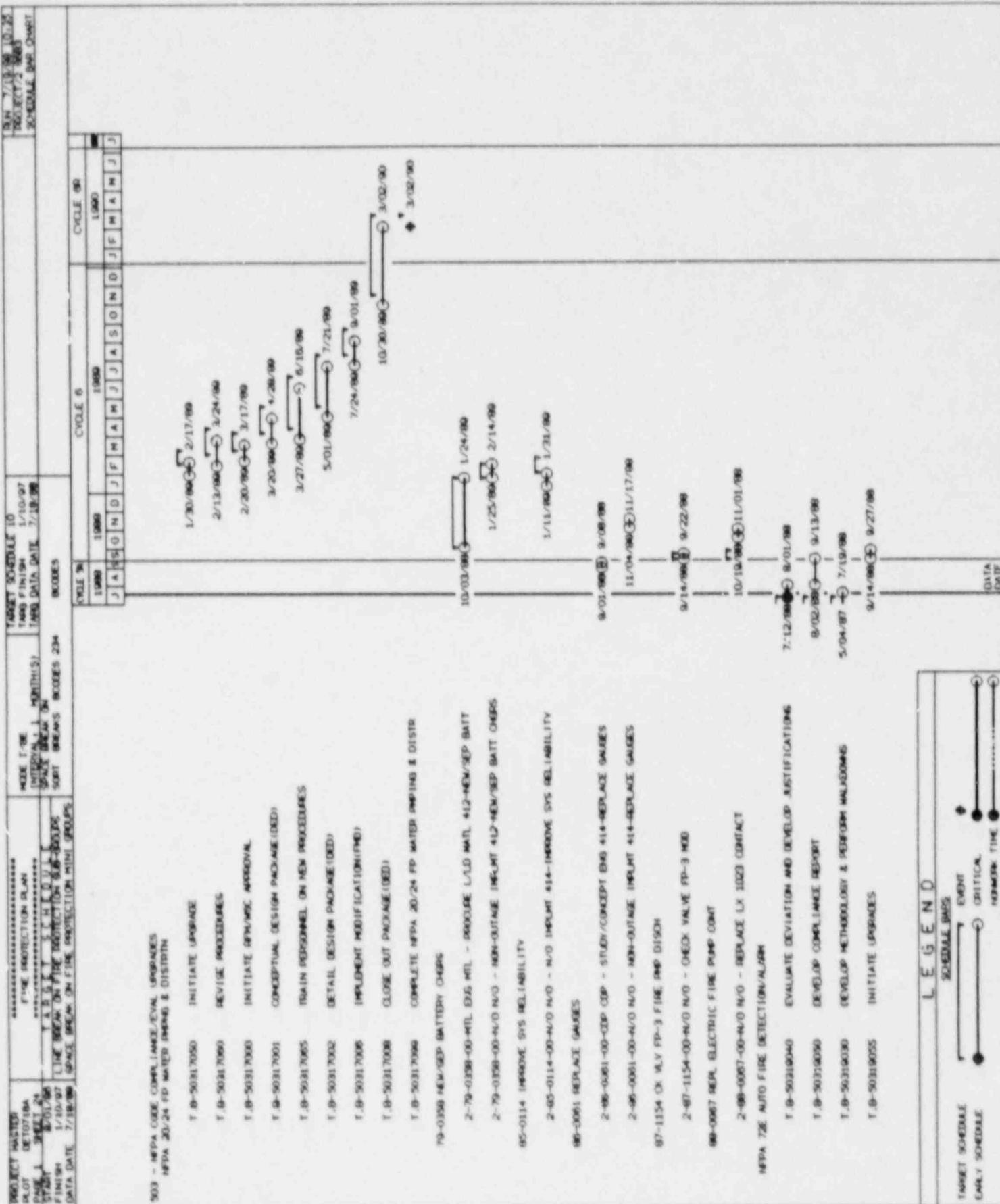
LEGEND

SOCIAL BANDS	EVENT	OPTICAL	TELEMETRY LINE
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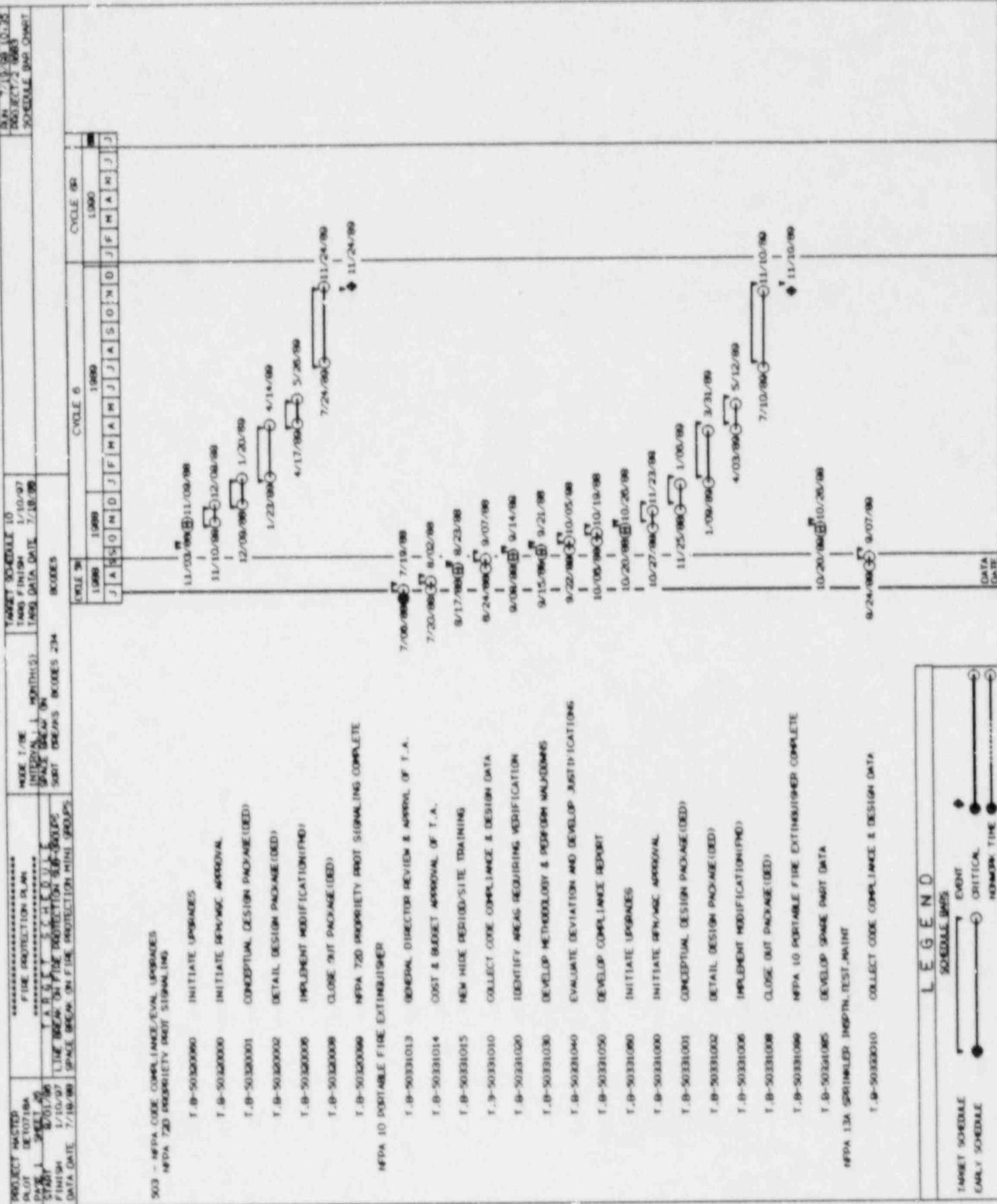


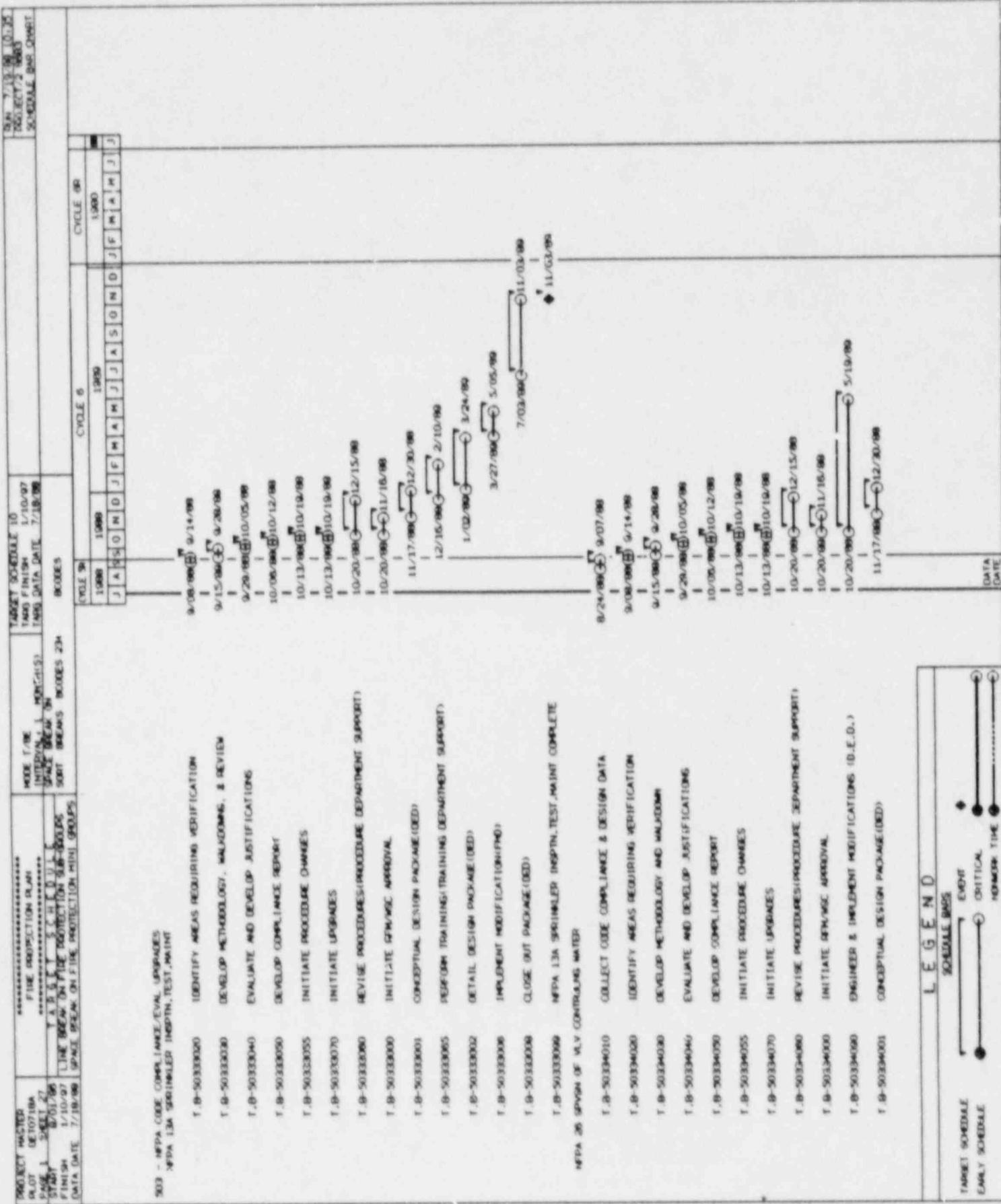


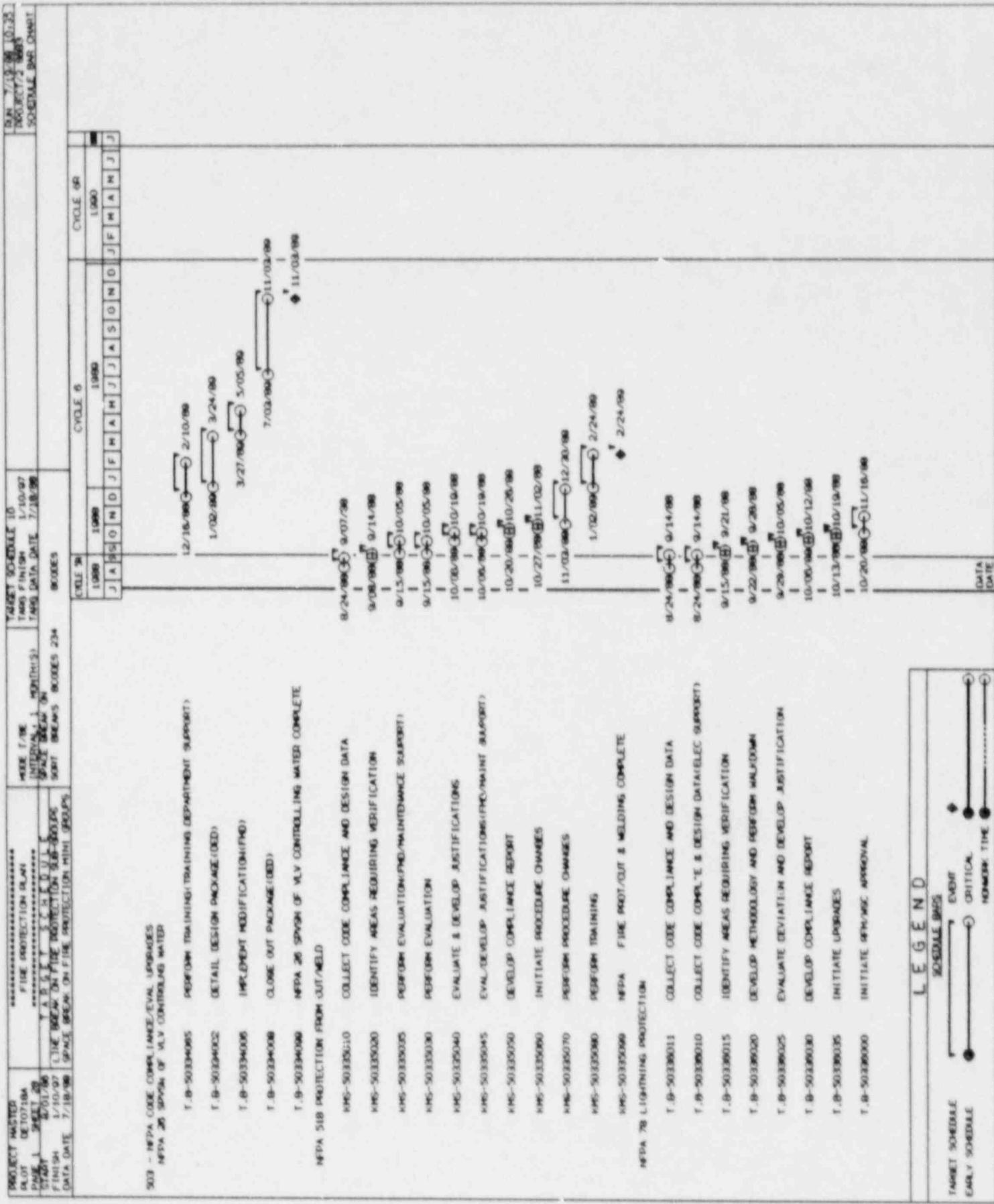


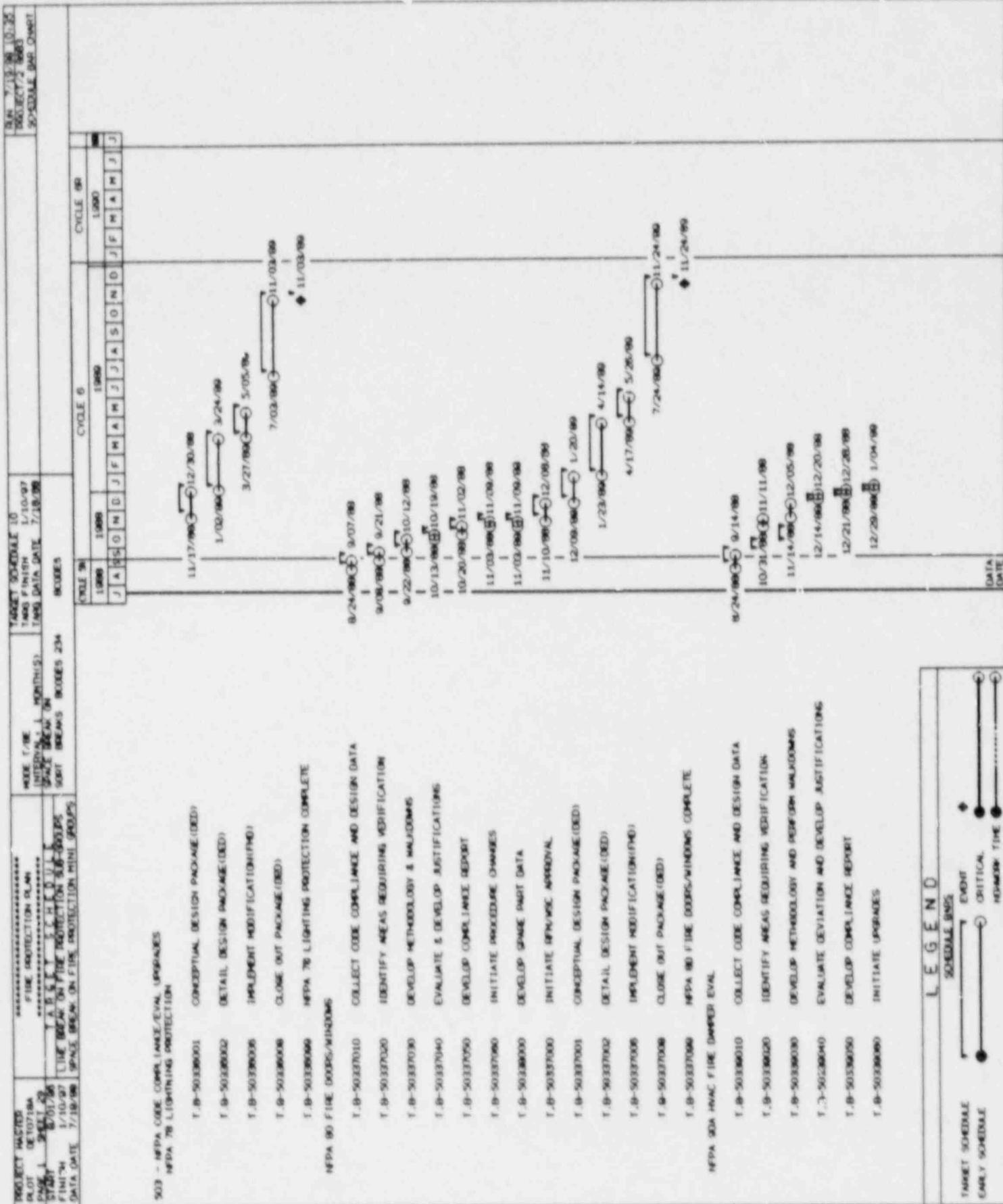
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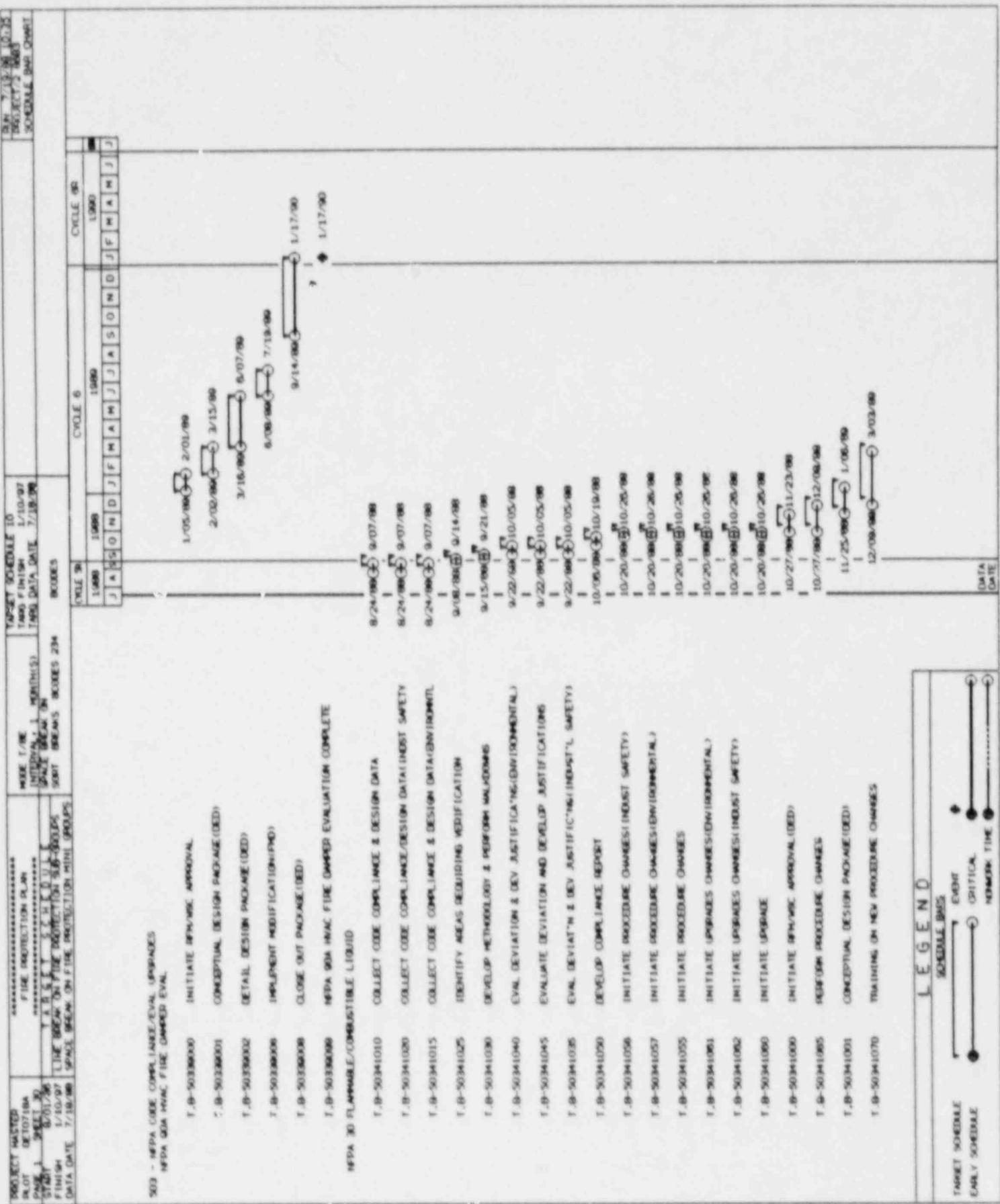
SCHEDULED	EVENT
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LATE SCHEDULE	UNKNOWN TIME

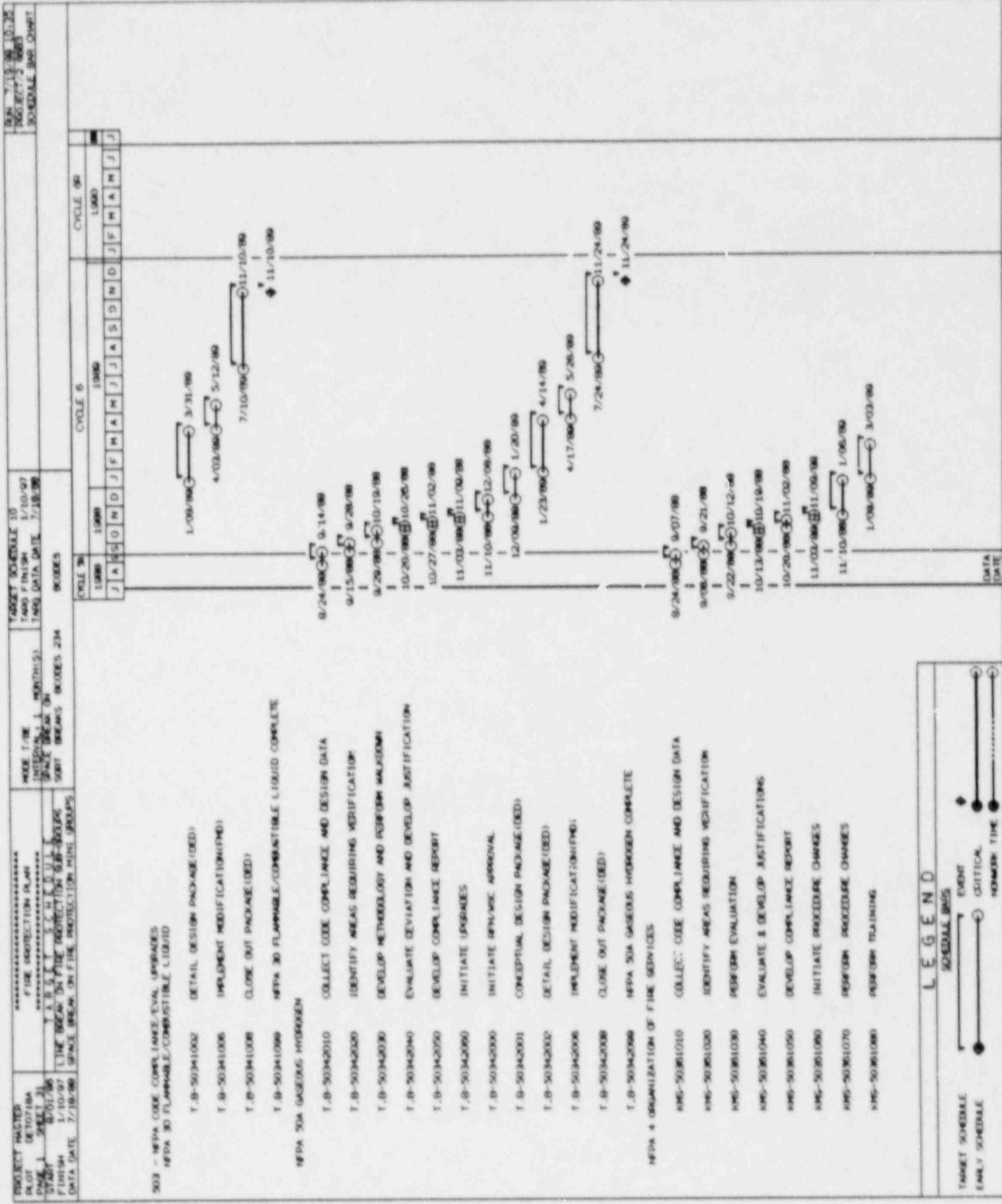


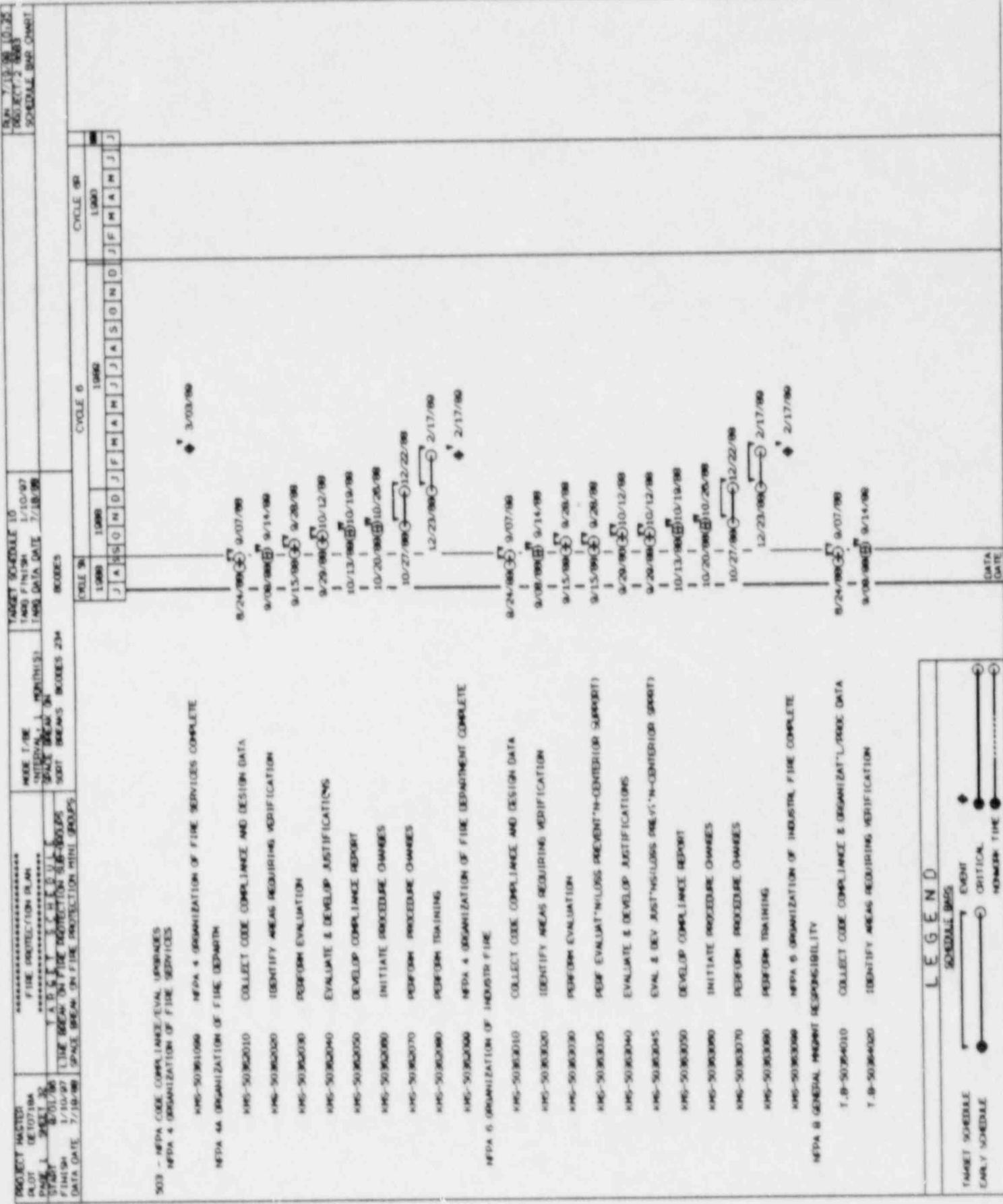


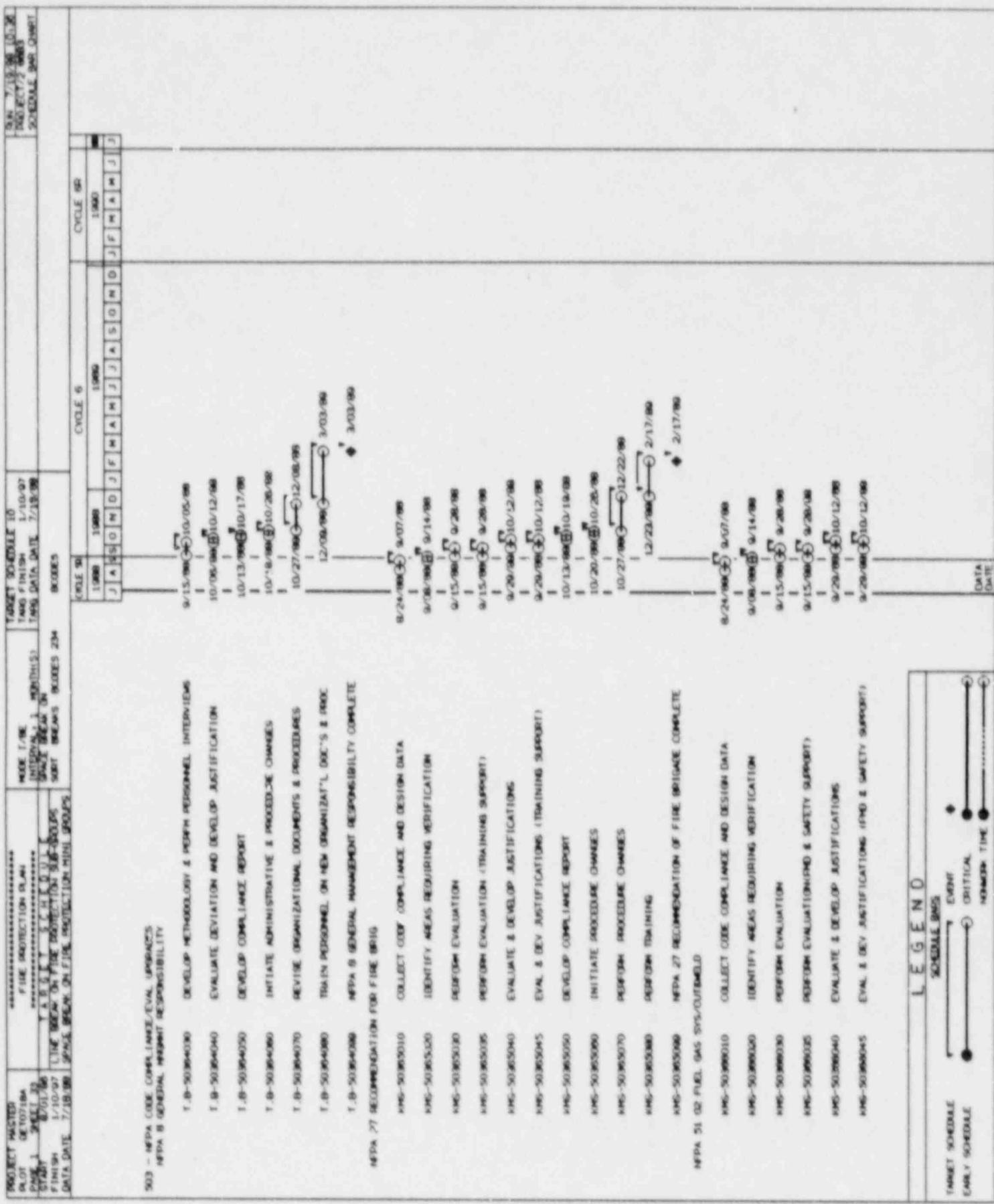


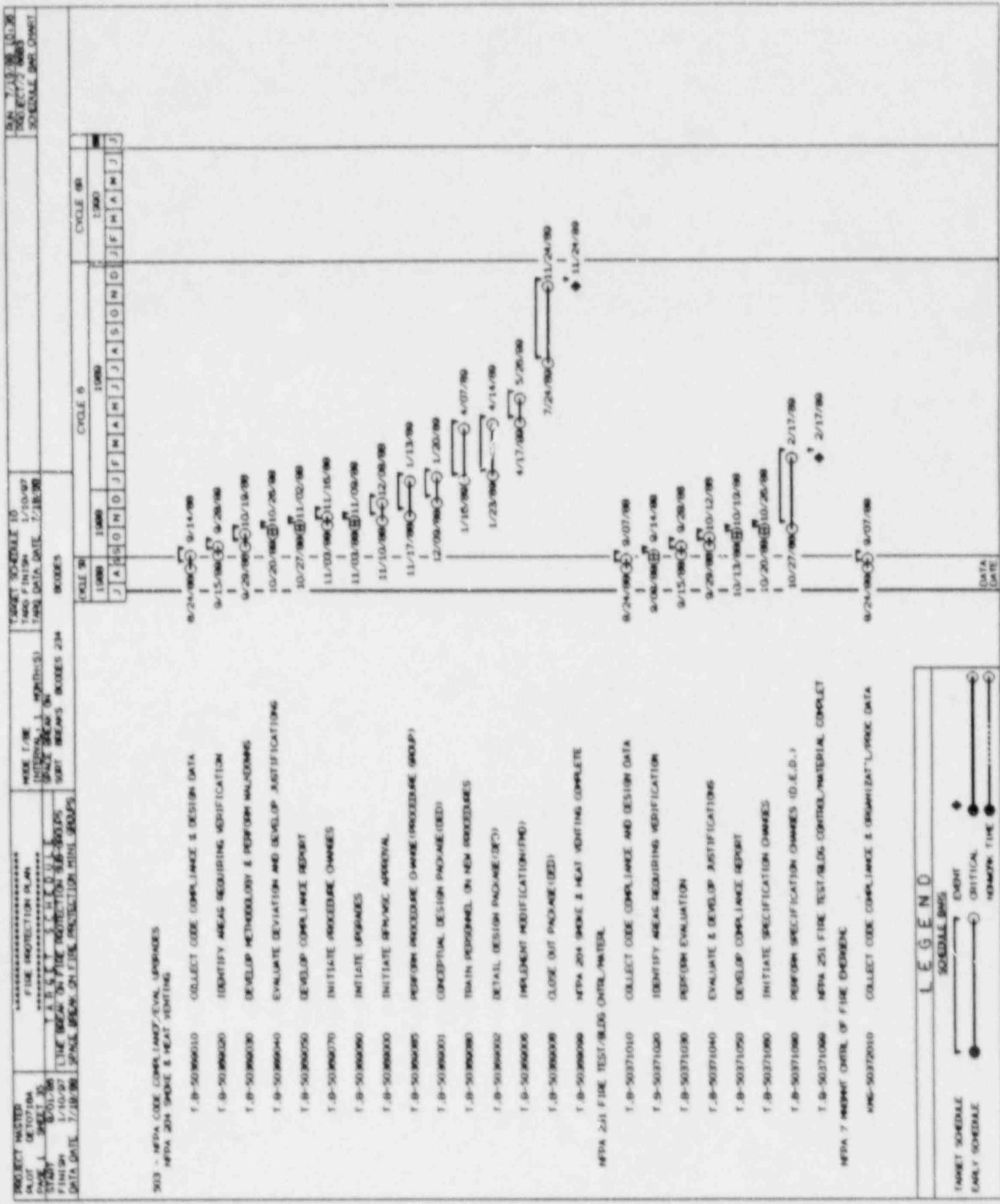




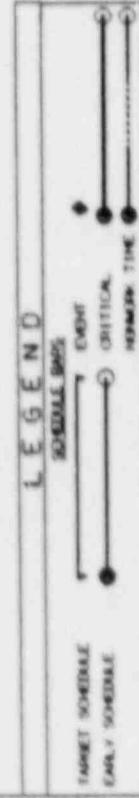






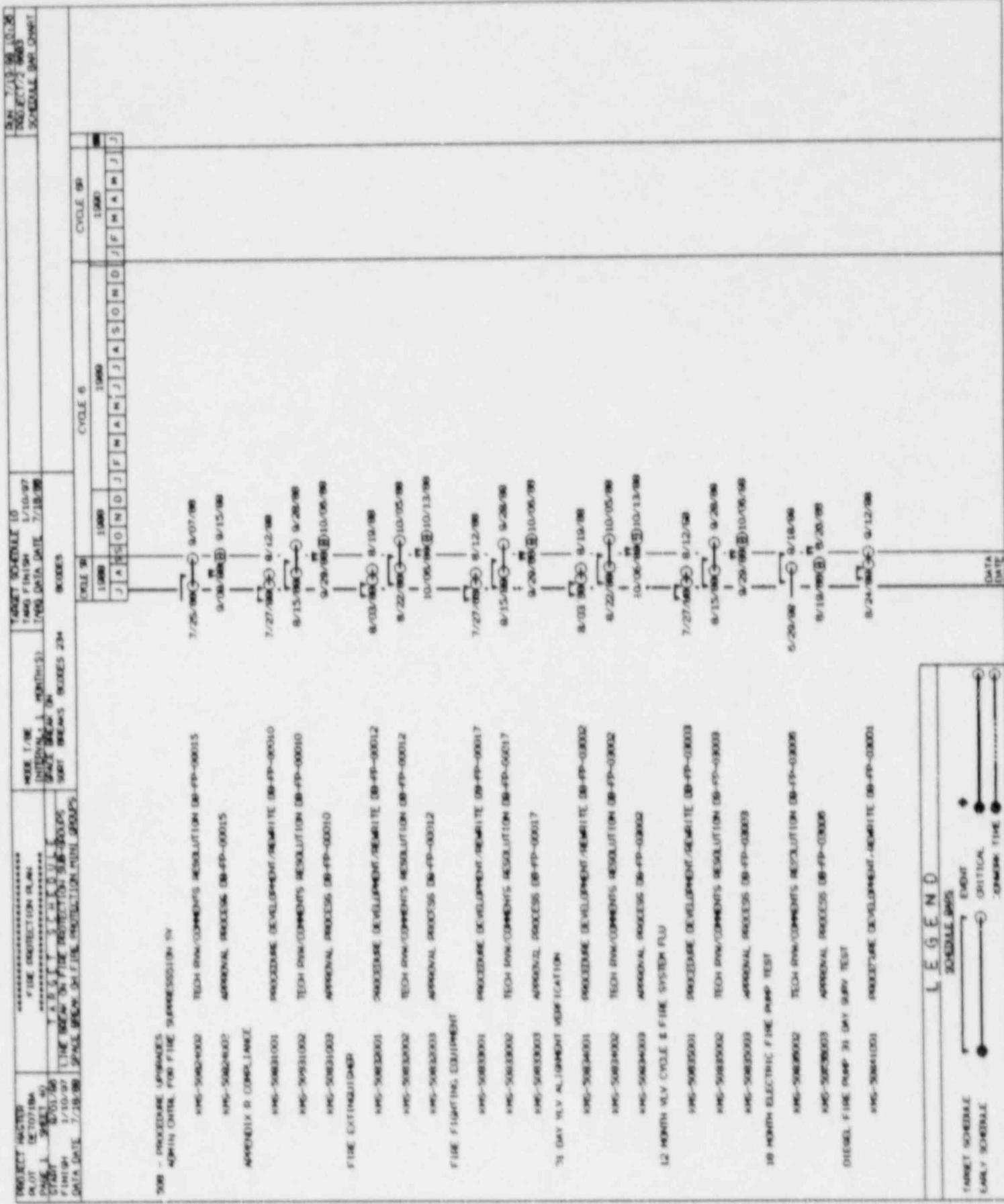


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FIRE-FIRE PLAN GUIDELINES				
HNGO-5000120002	TECH DOCUMENTS RESOLUTION 00-APP-000003	6/26/06(B) 7/19/06		
HNGO-5000120003	APPENDIX APPENDIX 00-APP-000003	7/20/06(B) 7/27/06		
FIRE-BOUNDARY				
HNGO-5000120003	APPENDIX APPENDIX 00-APP-000005	5/25/06(B) 7/20/06		
ADMIN CENTER: HNTL'S & INSIGHT SO				
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HNGO-5000120003	APPENDIX APPENDIX 00-APP-00011	7/14/06(B) 7/21/06		
ADMIN CENTER: FIRE FIRE: DETECTION SYSTEM				
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HNGO-5000120002	TECH DOCUMENTS RESOLUTION 00-APP-00016	7/21/06(B) 8/02/06		
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HNGO-5000220003	APPENDIX APPENDIX 00-APP-00002	3/08/06(B) 8/16/06		
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HNGO-5000220001	PROCEDURE DEVELOPMENT/IMPLEMENTATION 00-APP-00014	7/06/06(B) 7/22/06		
HNGO-5000220002	TECH DOCUMENTS RESOLUTION 00-APP-00014	7/25/06(B) 8/07/06		
HNGO-5000220003	APPENDIX APPENDIX 00-APP-00014	9/08/06(B) 8/15/06		
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				DATA DATE



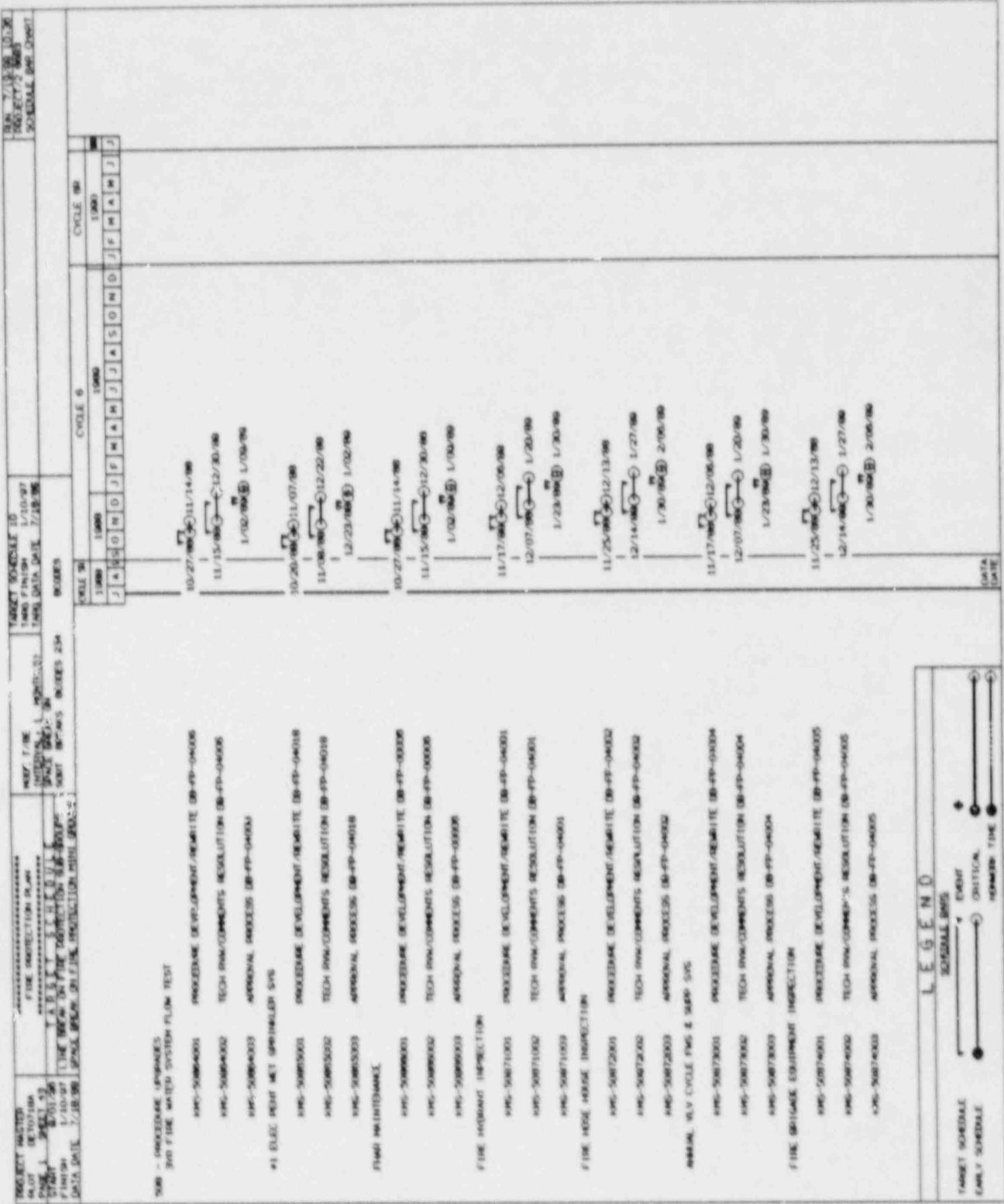
TARGET SCHEDULE
ACTUAL SCHEDULE

EVENT
CRITICAL
NORMAL TIME

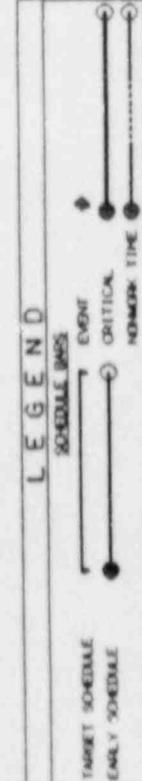


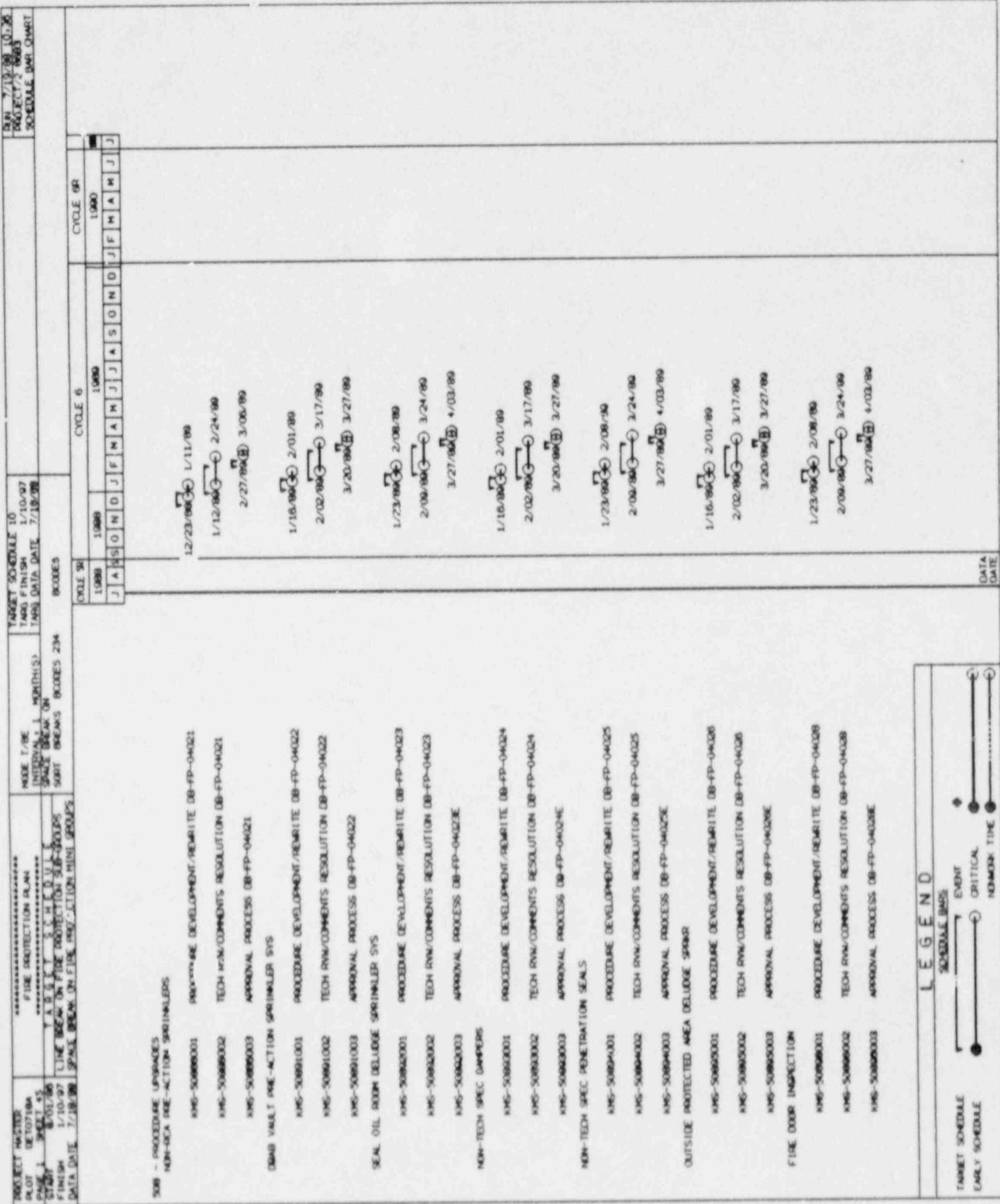
LEGEND

TARGET SCHEDULE	●
EARLY SCHEDULE	○
SOCIAL SKILLS	+
EVENT	•
EDITION	↔
FEEDBACK LINE	—○—



PROJECT NUMBER OR OF DEPARTMENT		FIRE PROTECTION PLAN		MODE / RE INTERVAL / MONTH(S)	TARGET SCHEDULE TO T400 FINISH TASK DATA DATE
KNG-500875001		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040008		1/17/89(3) → 12/06/89	1/10/97 1/10/97 SCHEDULED BY CHART
KNG-500875002		TECH DRAW/COMMENTS RESOLUTION DB-FP-040008		12/07/89(3) → 1/20/90	
KNG-500875003		APPROVAL PROCESS DB-FP-040008		1/23/90(3) → 1/30/90	
KNG-500875004		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040009		1/25/90(3) → 12/13/90	
KNG-500875005		TECH DRAW/COMMENTS RESOLUTION DB-FP-040009		1/21/90(3) → 1/27/90	
KNG-500875006		APPROVAL PROCESS DB-FP-040009		1/30/90(3) → 2/06/90	
KNG-500875007		FIRE GAGE / GASKET INSPECTION & REPAIRS		1/2/90(3) → 1/04/90	
KNG-500881001		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040111		1/05/90(3) → 2/17/90	
KNG-500881002		TECH DRAW/COMMENTS RESOLUTION DB-FP-040111		2/20/90(3) → 2/27/90	
KNG-500881003		APPROVAL PROCESS DB-FP-040111		2/27/90(3) → 3/05/90	
KNG-500881004		FIRE STATION VLV OPERABILITY		1/2/90(3) → 1/11/90	
KNG-500881005		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040112		1/12/90(3) → 2/24/90	
KNG-500881006		TECH DRAW/COMMENTS RESOLUTION DB-FP-040112		2/27/90(3) → 3/05/90	
KNG-500881007		APPROVAL PROCESS DB-FP-040112			
KNG-500880001		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040117		1/2/90(3) → 1/14/90	
KNG-500880002		TECH DRAW/COMMENTS RESOLUTION DB-FP-040117		1/05/90(3) → 2/17/90	
KNG-500880003		APPROVAL PROCESS DB-FP-040117		2/27/90(3) → 3/05/90	
KNG-500880004		FIRE EXTINGUISHER MAINT & HYDRO TEST		1/2/90(3) → 1/11/90	
KNG-500880005		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040119		1/12/90(3) → 2/24/90	
KNG-500880006		TECH DRAW/COMMENTS RESOLUTION DB-FP-040119		2/27/90(3) → 3/05/90	
KNG-500880007		APPROVAL PROCESS DB-FP-040119			
KNG-500880008		OUTSIDE PROTECTED AREA NET PIP SEAL		1/2/90(3) → 1/04/90	
KNG-500880009		PROCEDURE DEVELOPMENT / REWRITTE DB-FP-040200		1/05/90(3) → 2/17/90	
KNG-500880010		TECH DRAW/COMMENTS RESOLUTION DB-FP-040200		2/20/90(3) → 2/27/90	
KNG-500880011		APPROVAL PROCESS DB-FP-040200			
KNG-500880012		TANK SCHEDULE			
KNG-500880013		EARLY SCHEDULE			
KNG-500880014		LATE SCHEDULE			
KNG-500880015		CRITICAL TIME			
KNG-500880016		NONCRITICAL TIME			
KNG-500880017		DATA DATE			





LEGEND

SCHEDULED DATES

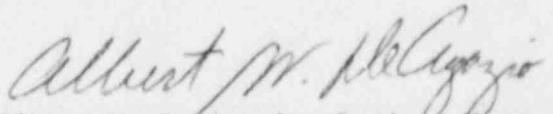
EVENT

CRITICAL TIME

NONCRITICAL TIME

the control room is a deviation from staff guidance contained in the June 1977 "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance."

This issue will be the subject of future discussions between the licensee and the staff.



Albert W. De Agazio, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects

cc: See next page