



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

September 1, 1992

Docket Nos. 50-390  
and 50-391

LICENSEE: Tennessee Valley Authority (TVA)  
FACILITY: Watts Bar Nuclear Plant, Units 1 and 2  
SUBJECT: MEETING SUMMARY - August 26, 1992, ROUTINE CONFERENCE ON  
LICENSING STATUS (TAC M72494, M72495, M83948 AND M83949)  
Reference: Meeting notice by P. S. Tam, August 13, 1992

On August 26, 1992, NRC and TVA representatives met at the Watts Bar site to discuss the status, needed actions, priorities and schedules of various licensing issues. These include all unresolved outstanding issues, confirmatory issues, proposed license conditions, corrective action programs (CAPs), special programs (SPs), TVA's response to generic letters and bulletins, and upcoming NRR-led team inspections. The discussion was based on the latest licensing status as published in the Watts Bar Safety Evaluation Report Supplement 9 (NUREG-0847, Supp. 9). The Office of Nuclear Reactor Regulation (NRR) issues the Safety Evaluation Report (NUREG-0847) and supplements (SSERs) as its principal licensing basis documents for Watts Bar. Section 1 of the latest SSER (SSER 9) officially documents the issues that NRR considers needing resolution before an operating license can be granted.

Enclosure 1 is the list of meeting participants.

Schedular information and other comments were exchanged between TVA and NRR personnel, agreed upon, and subsequently used to update the NRR staff's work control system, Workload Information and Scheduling Program (WISP, Enclosure 2). Updated schedular information regarding the CAPs and SPs is documented in Enclosure 3.

TVA participants described the status of TVA's top 10 actions. These are flagged by appropriate indicators in Enclosure 2.

9209080087 920901  
PDR ADOCK 05000390  
A PDR

NRC FILE CENTER COPY

*Memo of*  
*DF01*

TVA provided a handout summarizing the status of actions being undertaken at Watts Bar as a result of Bulletin 92-01, and Information Notices 91-47 and 91-79, all regarding Thermo-Lag 330 fire barrier materials. The handout is included in this summary as Enclosure 4. By copy of this summary, the Plant Systems Branch (Pat Madden) is provided with a copy of TVA's handout.

Original signed by

Peter S. Tam, Senior Project Manager  
Project Directorate II-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Participant list
2. WISP report
3. Charts showing CAP and SP milestones
4. TVA Handout on Thermo-Lag 330 fire barriers

cc w/enclosures:

See next page

OFFICE	PDII-4/LA	PDII-4/PM	PDII-4/D
NAME	MSanders <i>ms</i>	PTam:as/dw <i>PT</i>	FHebdon <i>FH</i>
DATE	9/01 /92	9/ 1 /92	9/ 1 /92

Watts Bar Nuclear Plant

cc:

Mr. John B. Waters, Chairman  
Tennessee Valley Authority  
ET 12A  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902

Mr. D. E. Nunn, Vice President  
3B Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

Mr. W. J. Museler, Vice President  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Mr. M. J. Burzynski, Manager  
Nuclear Licensing and Regulatory Affairs  
Tennessee Valley Authority  
5B Lookout Place  
Chattanooga, Tennessee 37402-2801

Mr. G. L. Pannell, Site Licensing Manager  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
3B Lookout Place  
Spring City, Tennessee 37381

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

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

General Counsel  
Tennessee Valley Authority  
ET 11H  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902

The Honorable Robert Aikman  
County Judge  
Rhea County Courthouse  
Dayton, Tennessee 37321

The Honorable Johnny Powell  
County Judge  
Meigs County Courthouse  
Route 2  
Decatur, Tennessee 37322

Regional Administrator  
U.S.N.R.C. Region II  
101 Marietta Street, N.W.  
Suite 2900  
Atlanta, Georgia 30323

Senior Resident Inspector  
Watts Bar Nuclear Plant  
U.S.N.R.C.  
Route 2, Box 700  
Spring City, Tennessee 37381

Dr. Mark O. Medford, Vice President  
Nuclear Assurance, Licensing & Fuels  
3B Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

LIST OF PARTICIPANTS

ROUTINE LICENSING STATUS MEETING

August 26, 1992

<u>Name</u>	<u>Affiliation</u>
Becky Mays	TVA Watts Bar Site Licensing
Vic Nerses	NRC/NRR/Project Directorate II-4
Paul Pace	TVA Watts Bar Site Licensing
Peter Tam	NRC/NRR/Project Directorate II-4
John Vorees	TVA Watts Bar Site Licensing
Glenn Walton (part-time)	NRC Senior Resident Inspector

TaskID	MPA Num	Age (Mon)	Rev Mth	Pri	Actyp	Title	Appl Date	RAI Issued	RAI Response	Licensing Action Complete	Licensee Impl.	Comments
***** Active Actions *****												
M63590		[ 39]	TS	2	RN	WATTS BAR 1 - CORRECTIVE ACTION PROGRAM: Q - LIST.	(05/22/89)	(08/16/90)	(11/07/90C)	(12/31/92T)	(10/31/92T)	Submittal to modify scope by 9/92. (Top 3)
M63591		[ 16]	TS	2	RN	WATTS BAR 1 - SPECIAL PROGRAM: EQUIPMENT QUALIFICATION OPEN ISSUE 4	(04/30/91)	(05/01/92)	(09/30/92T)	(03/31/93T)	(03/31/93T)	RAI response by 9/92.
M63595		[ 41]	TS	2	RN	WATTS BAR 1 - SPECIAL PROGRAM: MODERATE ENERGY LINE BREAK FLOODING (SECTION 3.6.1)	(03/22/89)	(--/--/--)	(06/30/92C)	(12/31/93T)	(05/31/93T)	6/30/92 submittal under review.
M63597		[ 46]	TS	3	RN	WATTS BAR 1 - CONTAINMENT ISOLATION REVIEW	(10/20/88)	(03/15/89)	(05/12/89C)	(03/31/93T)	(06/30/93T)	1/93 tentative date for Kudrick site visit.
M63632		[ 27]	TS	2	RN	WATTS BAR 1 - MSLB OUTSIDECONTAINMENT (SECT 3.11.3.3)	(05/04/90)	(06/04/90)	(11/30/92T)	(12/30/92T)	(--/--/--)	TVA: submittal by 11/92.
M63647		[ 24]	TS	3	RN	WATTS BAR 1 - HEALTH PHYSICS PROGRAM (SECT 12.6)	(08/15/90)	(10/19/90)	(01/03/91C)	(06/30/93T)	(--/--/--)	FSAR to be updated by Amend. 74 (?) per Horning.
M63648		[ 6]	TS	2	RN	WATTS BAR 1 - CORRECTIVE ACTION PROGRAM: FIRE PROTECTION, OPEN ISSUE 12, CONF. ISSUE 38, LIC. COND 20	(02/05/92)	(--/--/--)	(06/15/92C)	(05/31/93T)	(08/30/93T)	6/15 submittal under review. More submittals by 8/92 (Top 3)
M63649		[ 90]	TS	2	RN	WATTS BAR 1 - POWER SYSTEM CONCERNS, CONF. 28-35, LIC. COND.13,17	(02/06/85)	(06/20/91)	(06/18/92C)	(08/31/92T)	(--/--/--)	Draft FSAR pages received. Expect to close several issues.
M63656		[ 0]	TS	3	RN	WATTS BAR 1 - EMERGENCY PLANNING LIC. COND. 27	(--/--/--)	(--/--/--)	(--/--/--)	(06/30/93T)	(11/30/92T)	TVA submittal app. 12/92.
M63657		[ 25]	TS	2	RN	WATTS BAR 1 - PHYSICALSECURITY PLAN (SECT 13.6)	(07/24/90)	(--/--/--)	(06/17/92C)	(09/30/93T)	(12/31/92T)	SSER 10 will eliminate PLC 38. Review of 6/17 ltr. ongoing.
M68624	A022	[ 4]	TS	2	LL	WATTS BAR 1 - IMPLEMENTATION OF THE STATION BLACKOUT RULE, 10CFR50.63	(04/22/92)	(--/--/--)	(--/--/--)	(12/31/92T)	(--/--/--)	Submittal by 8/92 using coping approach.
M71917		[ 39]	TS	2	RN	WATTS BAR 1 - CORRECTIVE ACTION PROGRAM (CAP) FOR CABLE ISSUES	(05/22/89)	(--/--/--)	(11/21/91C)	(12/30/92T)	(12/31/93T)	NRR action complete in SSER 9. Will monitor impl. (Top 4)
M71923		[ 39]	TS	2	RN	WATTS BAR 1 CORRECTIVE ACTION PROGRAM (CAP) FOR QA RECORDS	(05/22/89)	(04/10/91)	(05/15/92C)	(03/31/93T)	(09/30/93T)	NRR action complete in SSER 9. (Top 8)
M72106		[ 39]	TS	2	RN	WATTS BAR 1 - CORRECTIVE ACTION PROGRAM (CAP) FOR WELDING ISSUES	(05/22/89)	(--/--/--)	(07/31/90C)	(10/30/92T)	(09/30/92T)	Closeout ltrs. on CAP and Welding Project by 9/92.
M72181	X811	[ 5]	TS	2	RN	WATTS BAR 1 - BULLETIN 88-11 PRESSURIZER SURGELINE THERMAL STRATIFICATION	(03/30/92)	(--/--/--)	(--/--/--)	(10/31/92T)	(--/--/--)	Submittal on Item 2.a under review by H. Shaw, app. 8/92.
M72693	X809	[ 0]	TS	2	RN	WATTS BAR 1 - THIMBLE THINNING IN PWR'S (BULLETIN 88-09)	(--/--/--)	(--/--/--)	(--/--/--)	(12/31/93T)	(--/--/--)	No need for submittal until after plant start.
M74488	B111	[ 0]	TS	3	RN	WATTS BAR 1- INDIVIDUAL PLANT EVALUATIONS (GL 88-20)	(--/--/--)	(--/--/--)	(09/30/92T)	(06/30/93T)	(--/--/--)	IPE submittal 9/92; IPEEE has separate TAC number.
M74801	A025	[ 0]	TS	3	RN	WATTS BAR 1 - ACCEPTABLE IST PROGRAMS(GL 89-04)	(--/--/--)	(--/--/--)	(--/--/--)	(09/30/93T)	(--/--/--)	Per GI 89-04. Relief requests by 7/93.
M76631	X001	[ 7]	PM	3	RN	WATTS BAR 1 - RESPONSE TO NRCB 90-01 LOSS OF FILL OIL IN ROSEMOUNT TRANSMITTER	(01/31/92)	(--/--/--)	(--/--/--)	(12/31/92T)	(--/--/--)	Supplemental bulletin being prepared, date uncertain.
M76742		[ 32]	TS	2	RN	WATTS BAR 1 - TECHNICAL SPECIFICATION REVIEW	(12/29/89)	(--/--/--)	(--/--/--)	(06/30/93T)	(--/--/--)	Detailed review schedule will be developed in 9/92.
M76881		[ 0]	TS	3	RN	WATTS BAR 1 - INSERVICE INSPECTION (LICENSE CONDITION 4)	( / / )	( / / )	( / / )	(09/30/93T)	( / / )	Submittal by 7/93.

Report Date 08/31/92

## Condensed Project Manager Report

TaskID	MPA Num	Age (Mon)	Rev Mth	Pri	Actyp	Title	Appl Date	RAI Issued	RAI Response	Request Comp	Licensing Action Complete	Licensee Impl.	Comments
M76972		[ 32]	TS	2	RN	WATTS BAR UNIT 1 - QUALITY ASSURANCE	(12/07/89)	(--/--/--)	(--/--/--)	(12/30/92)	(12/30/92T)	(--/--/--)	Response to SSER 5 by Amendment 72, app. 10/92.
M76974		[ 16]	TS	2	RN	WATTS BAR UNIT 1 - SPECIAL PROGRAM : MECHANICAL EQUIPMENT QUALIFICATION	(04/30/91)	(04/09/92)	(--/--/--)	(12/31/92)	(12/31/92T)	(12/31/92T)	MEQ submittal by 9/92, as part of response to EQ
M77132		[ 83]	TS	2	RN	WATTS BAR 1 - TMI II.F.2, ON INADEQUATE CORE COOLING INSTRUMENTATION, LIC. COND. 3	(09/19/85)	(08/16/90)	(01/24/92C)	(04/30/94)	(04/30/94T)	(09/30/92T)	SSER10 accepts 1/24/92 submittal. Need impl. let
M77222		[ 25]	TS	2	RN	WATTS BAR UNIT 1 - SEVERE ACCIDENT MITIGATION DESIGN ALTERNATIVES (SAMDA) IN THE PES	(07/30/90)	(01/29/91)	(07/31/92L)	(04/30/93)	(12/31/92T)	(--/--/--)	Awaiting TVA response to 1/29/91, at site by lat
M77543		[ 91]	TS	2	RN	WATTS BAR 1 - PROCEDURE TO ESTIMATE CORE DAMAGE, (SECTION 9.3.2)	(01/31/85)	(--/--/--)	(01/31/93T)	(06/30/93)	(06/30/93T)	(--/--/--)	SSER 5. TVA submittal by 1/93.
M77553		[ 0]	TS	2	RN	WATTS BAR 1 - OFFSITE DOSE CALCULATION MANUAL (ODOM)	(--/--/--)	(--/--/--)	(--/--/--)	(09/30/92)	(12/30/92T)	(--/--/--)	Klementowicz is reviewer. Submittal by 8/92.
M77560		[ 95]	TS	3	RN	WATTS BAR 1 - HEAVY LOADS (LICENSE CONDITION 39)	(09/24/84)	(--/--/--)	(12/31/92T)	(--/--/--)	(03/31/93T)	(--/--/--)	TVA submittal by 1/93.
M77569		[ 89]	TS	2	RN	WATTS BAR 1 - STEAM GENERATOR TUBE RUPTURE ANALYSIS PER WCAP - 11698	(03/31/85)	(--/--/--)	(--/--/--)	(12/31/92)	(12/31/92T)	(--/--/--)	See SSER 5, 15.6.3. TVA submittal by 4/92. Top
M77861		[ 26]	TS	2	RN	WATTS BAR 1 - PROPOSED LICENSE CONDITIONS 28 AND 29	(06/26/90)	(--/--/--)	(07/27/92C)	(09/30/92)	(09/30/92T)	(09/30/93T)	Expect to delete PLC 28 and 29 in SSER 10.
M77896	A021	[ 26]	TS	2	LL	WATTS BAR 1 PRESSURIZED THERMAL SHOCK, 10 CFR 50.61	(06/26/90)	(--/--/--)	(07/13/92C)	(10/31/92)	(10/31/92T)	(--/--/--)	7/13/92 letter under review, target late 1992.
M79692		[ 19]	TS	2	RN	WATTS BAR 1 - PIPE BREAK SPECTRA USED AS RESULT OF LLB APPROVAL	(01/29/91)	(--/--/--)	(09/20/91C)	(08/31/92)	(09/15/02T)	(--/--/--)	Under review by Fair and DAngelo. SE by 8/92.
M79717		[ 19]	PM	2	RN	WATTS BAR 1 - SEISMIC DESIGN CONCERNS ORIGINATING FROM FSAR AMEND 64 OPEN ISSUE 19	(01/04/91)	(08/22/91)	(04/06/92C)	(12/31/92)	(12/31/92T)	(--/--/--)	Outstanding Issue 19 e and g to be resolved duri
M79718		[ 16]	TS	2	RN	WATTS BAR 1 - MECHANICAL SYSTEMS CONCERNS ORIGINATING FROM FSAR AMEND. 64, OPEN ISSUE 20	(04/18/91)	(01/04/91)	(08/04/92C)	(01/31/93)	(01/31/93T)	(--/--/--)	8/4/92 letter on FW check valve slam under review
M79992		[ 17]	TS	2	RN	WATTS BAR 1 - SAFETY AND RELIEF VALVE TESTING (TMI II.D.1)	(03/21/91)	(10/10/91)	(07/11/91C)	(12/31/92)	(12/31/92T)	(12/31/92T)	Response to 10/10/91 RAI by 10/92.
M80143		[ 16]	TS	2	RN	WATTS BAR 1 - FSAR AMENDMENT NO. 65 REVIEW	(04/10/91)	(07/11/91)	(09/13/91C)	(09/30/92)	(09/30/92T)	(--/--/--)	SSER 10 has Sec. 4.2 review. Only Chap. 12 remai
M80152		[ 22]	TS	3	RN	WATTS BAR 1 - CONTAINMENT EFFECTS DUE TO REMOVAL OF BORON INJECTION TANK	(10/18/90)	(--/--/--)	(01/21/92C)	(9/30/92)	(10/15/92T)	(--/--/--)	Started by TVA 5/2/84 letter. Amend. 69 info. un
M81063		[ 6]	TS	2	RN	WATTS BAR 1 - USE OF EAGLE 21 PROCESS PROTECTION SYSTEM	(02/26/92)	(--/--/--)	(--/--/--)	(12/31/92)	(12/31/92T)	(--/--/--)	More info. by 10/92. No site review planned. (Top
M81887		[ 0]	TS	2	RN	WATTS BAR UNIT 1 - USE OF VANTAGE - 5H FUEL DESIGN	(08/24/92)	(--/--/--)	(--/--/--)	(12/31/92)	(12/31/92T)	(--/--/--)	Under review.
M81959		[ 10]	TS	2	LL	WATTS BAR 1 - ASME CODE CASE N-491	(10/23/91)	(--/--/--)	(--/--/--)	(09/30/92)	(10/30/92T)	(--/--/--)	Per McLellan, SE by 9/92, if not sooner.
M82032		[ 11]	TS	2	RN	WATTS BAR 1 - FIFTH DIESEL GENERATOR NON-ELECTRICAL ISSUES	(09/24/91)	(--/--/--)	(--/--/--)	(05/31/93)	(05/31/93T)	(--/--/--)	SSER 10. Address tornado damage to air intake by
M82065		[ 12]	TS	2	RO	WATTS BAR 1 - THIRD ANNUAL REPORT ON EMPLOYEE CONCERN SPEC. IAL PROGRAM	(08/27/91)	(--/--/--)	(--/--/--)	(05/31/92)	(08/31/92T)	(--/--/--)	T. Ross has lead on this joint TVA submittal.
M82367		[ 10]	TS	2	RA	WATTS BAR 1 - SHALLOW UNDER ANCHORS	(10/16/91)	(--/--/--)	(04/30/92C)	(09/30/92)	(10/31/92T)	(--/--/--)	Awaiting revised information per 8/25 telecon.
M82644		[ 7]	TS	2	RN	WATTS BAR 1 - FSAR AMENDMENT 69.	(01/21/92)	(07/14/92)	(09/30/92T)	(10/31/92)	(10/31/92T)	(--/--/--)	NA) Despite 15-page RAI, staff sees no fatal flaw wi
M82878		[ 6]	TS	2	LL	WATTS BAR 1 - ALTERNATIVE TO ASME III, SUBSECTION NC/ND PARA7153	(02/25/92)	(--/--/--)	(--/--/--)	(10/30/92)	(10/30/92T)	(--/--/--)	Submit revision by 8/92.

Condensed Project Manager Report

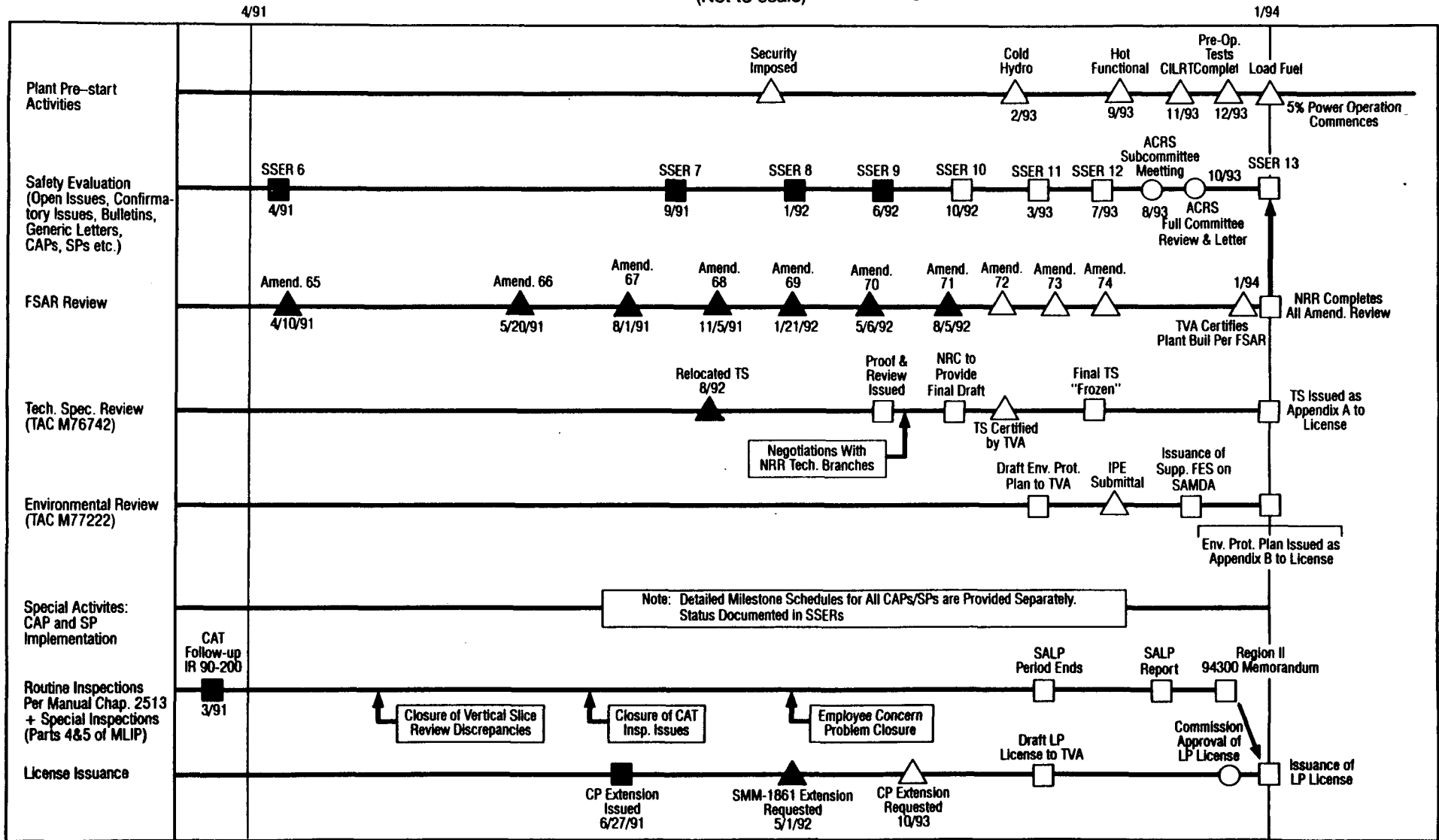
TaskID	MPA Num	Age (Mon)	Rev Mth	Pri	Actyp	Title	Appl Date	RAI Issued	RAI Response	Licensing Action Complete	Licensee Impl.	Comments
MB3202		[ 4]	PM	2	RO	WATTS BAR 1 - DOCUMENTATION OF STAFF	(04/30/90)	(--/--/--)	(--/--/--)	(12/30/92T)	(--/--/--)	NRR staff activities only, no TVA involvement.
MB3261		[ 4]	TS	2	RN	WATTS BAR 1 - TVA NUCLEAR POWER ORGANIZATION REVISION 3	(04/17/92)	(--/--/--)	(--/--/--)	(09/30/92T)	(--/--/--)	Under review by Mary-Ann Bismonte, target 8/15/92.
MB3322		[ 3]	TS	2	RN	WATTS BAR UNIT 1 - FSAR AMENDMENT 70	(05/06/92)	(--/--/--)	(--/--/--)	(12/30/92T)	(--/--/--)	Under review.
MB3525	B120	[ 1]	TS	3	RR	WATTS BAR 1 - GENERIC LETTER 92-01 REACTOR VESSEL STRUCTURAL INTEGRITY.	(07/07/92)	(--/--/--)	(--/--/--)	(12/31/93T)	(12/31/93T)	7/7/92 submittal under review.
MB3693	B118	[ 8]	PM	3	RR	WATTS BAR 1 - IPEEE FOR EXTERNAL EVENTS (GL 88-20) SUPPLEMENT 4	(12/20/91)	(--/--/--)	(--/--/--)	(12/31/95T)	(--/--/--)	Awaiting 1994 submittal.
MB3837		[ 2]	TS	2	RN	WATTS BAR 1-APPLICATION OF LEAK-BEFORE-BREAK TO PRESSURIZER SURGE LINE.	(06/22/92)	(--/--/--)	(--/--/--)	(06/30/93T)	(--/--/--)	S. Sheng to begin review 11/92. OK with TVA?
MB3948	X201	[ 0]	TS	1	RR	WATTS BAR 1 - THERMO-LAG (BULLETIN 92-01)	(--/--/--)	(--/--/--)	(--/--/--)	(10/31/92T)	(--/--/--)	Bulletin is for info. only for CP holders.
MB4234		[ 24]	TS	2	RN	WATTS BAR 1 - FSAR AMENDMENT 71.	(08/05/90)	(--/--/--)	(--/--/--)	(01/31/93T)	(--/--/--)	Under review by 8 NRR branches.
MB4249		[ 1]	TS	2	RN	WATTS BAR 1 - CONTROL ROD DRIVE MECHANISM SEISMIC QUALIFICATION.	(07/30/92)	(--/--/--)	(--/--/--)	(12/31/92T)	(--/--/--)	Awaiting infor. in Amend. 727
RO0514		[ 39]	TS	2	RN	WATTS BAR UNIT 1: CORRECTIVE ACTION PROGRAM (CAP) PLAN FOR SEISMIC ANALYSIS AND CIVIL CALC. PROGRAM	(05/22/89)	(01/04/91)	(07/27/92C)	(12/31/92T)	(01/31/93T)	7/27/92 letter on Civil Calc. Program under review.

# WATTS BAR UNIT 1: MAJOR MILESTONES TO LOW POWER (LP) LICENSE

Dated 9/92

Page 1

(Not to scale)



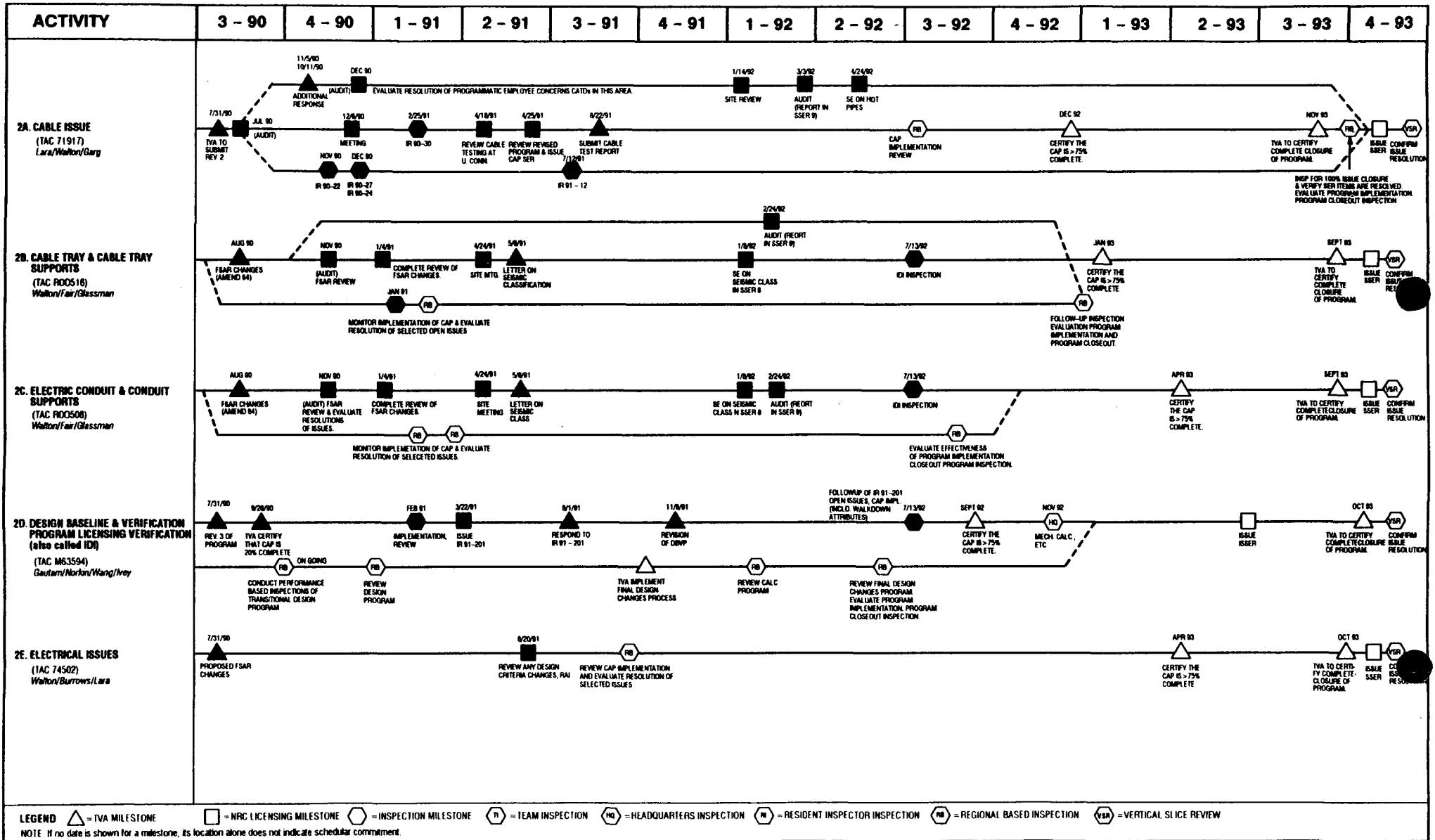
□ = NRC Milestones    △ = TVA Milestones    ○ = Meetings    ▲ = Date not defined

Enclosure 5



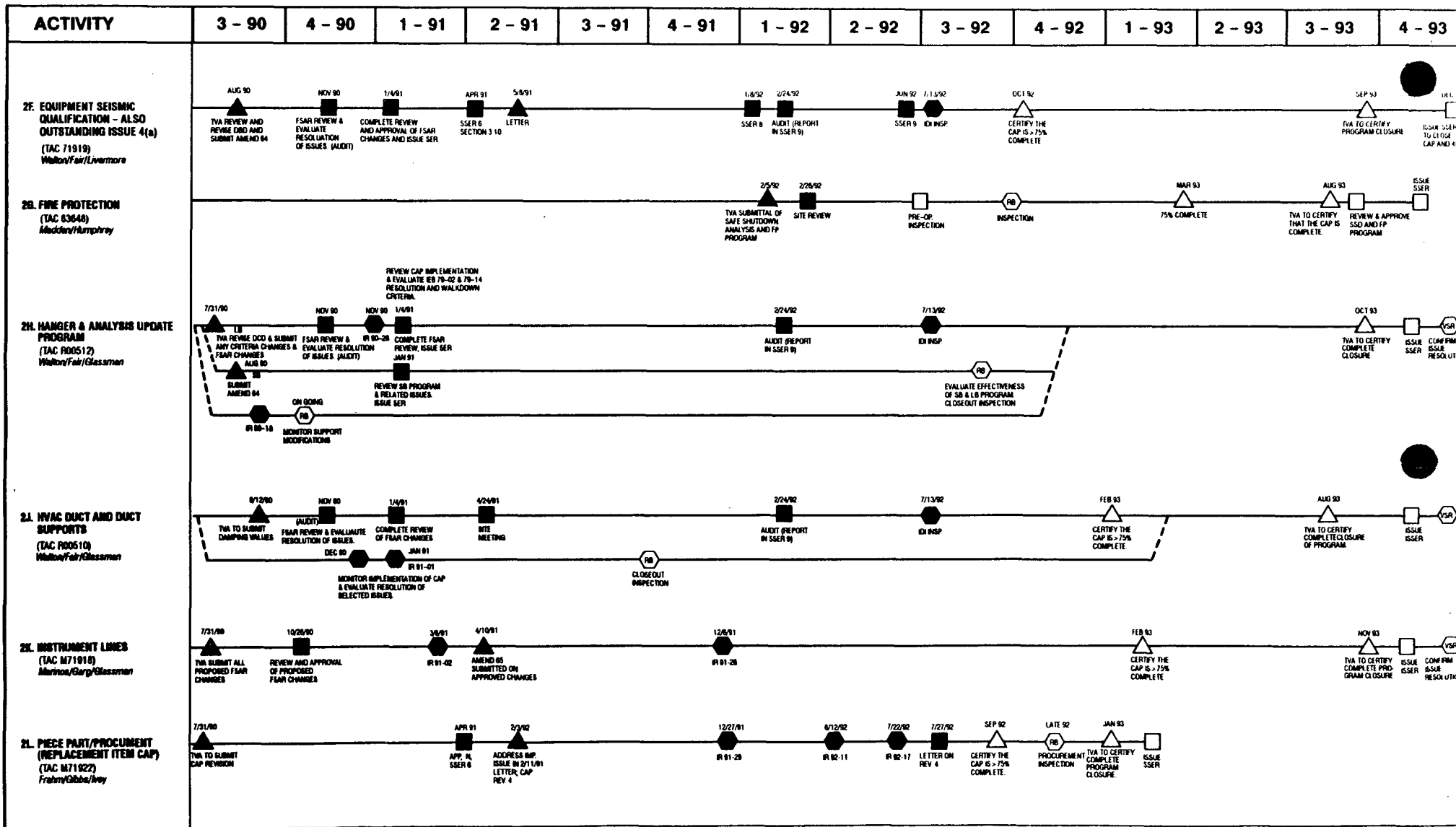
# WATTS BAR UNIT 1 CAPS

(See SSER 9 for official listing of accomplished milestones)



# WATTS BAR UNIT 1 CAPS

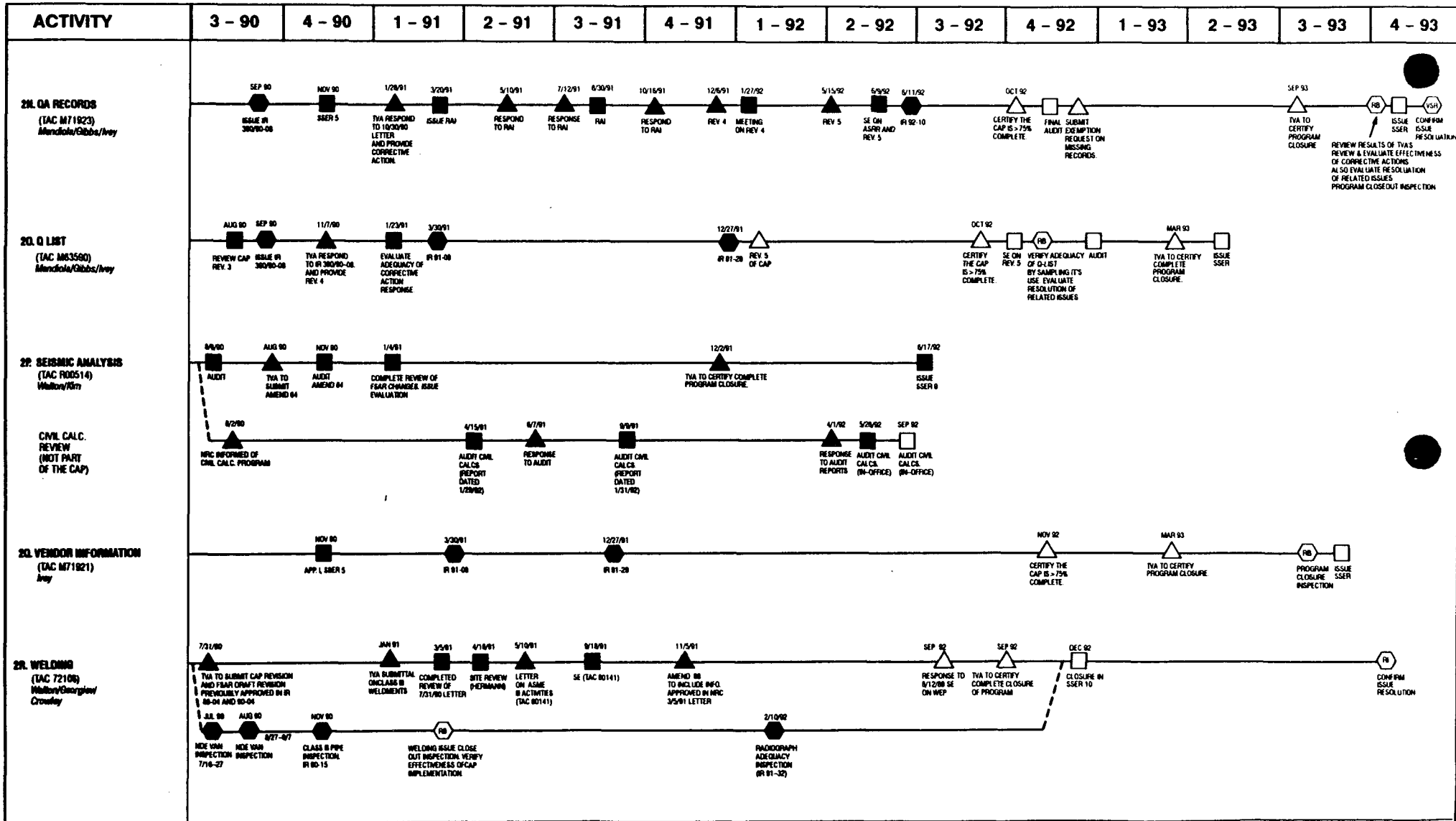
(See SSER 9 for official listing of accomplished milestones)



LEGEND - TVA MILESTONE - NRC LICENSING MILESTONE - INSPECTION MILESTONE - TEAM INSPECTION - HEADQUARTERS INSPECTION - RESIDENT INSPECTOR INSPECTION - REGIONAL BASED INSPECTION - VERTICAL SLICE REVIEW

# WATTS BAR UNIT 1 CAPS

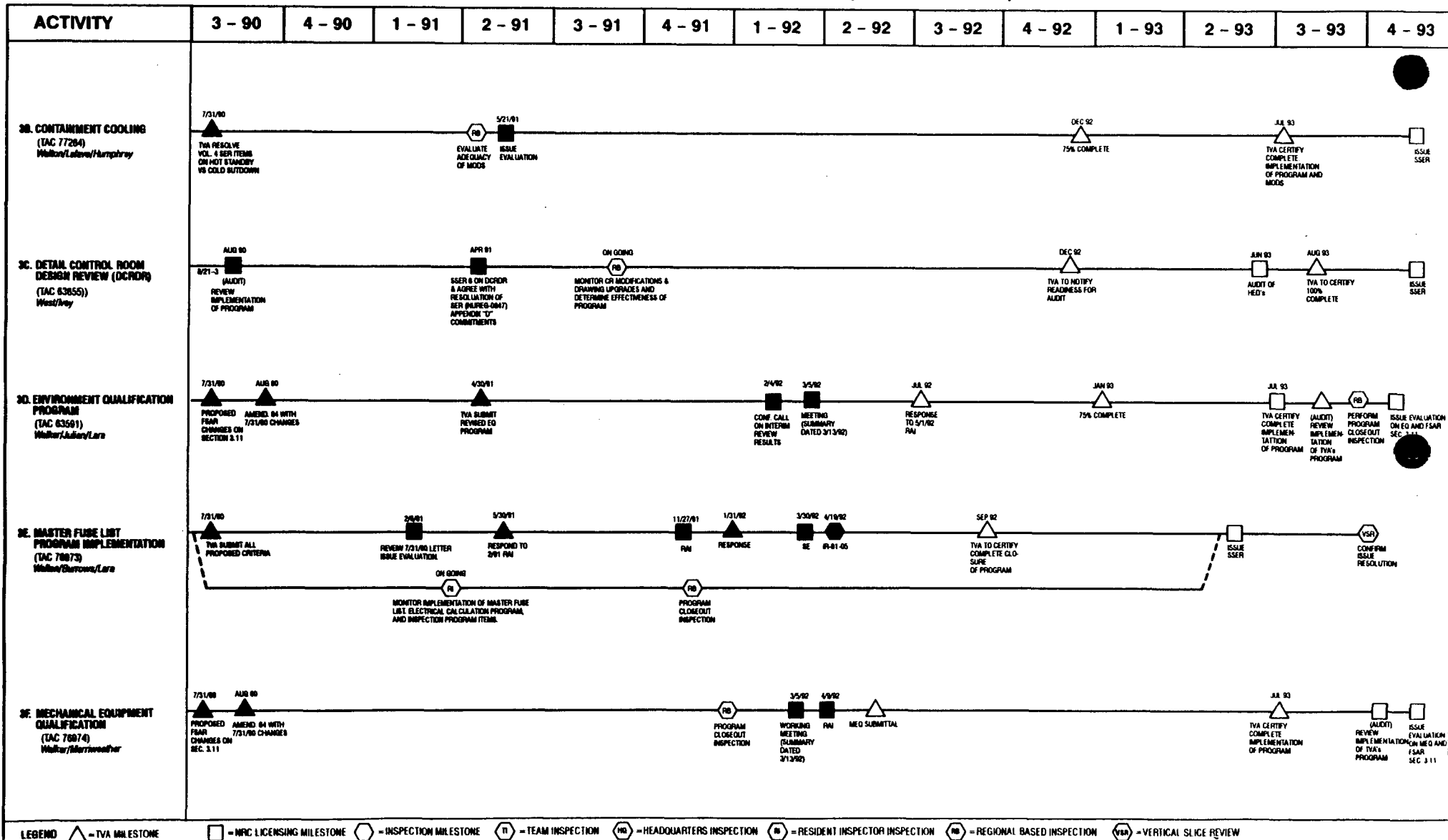
(See SSER 9 for official listing of accomplished milestones)



LEGEND - TVA MILESTONE - NRC LICENSING MILESTONE - INSPECTION MILESTONE (N) - TEAM INSPECTION (HQ) - HEADQUARTERS INSPECTION (R) - RESIDENT INSPECTOR INSPECTION (RB) - REGIONAL BASED INSPECTION (VSR) - VERTICAL SLICE REVIEW

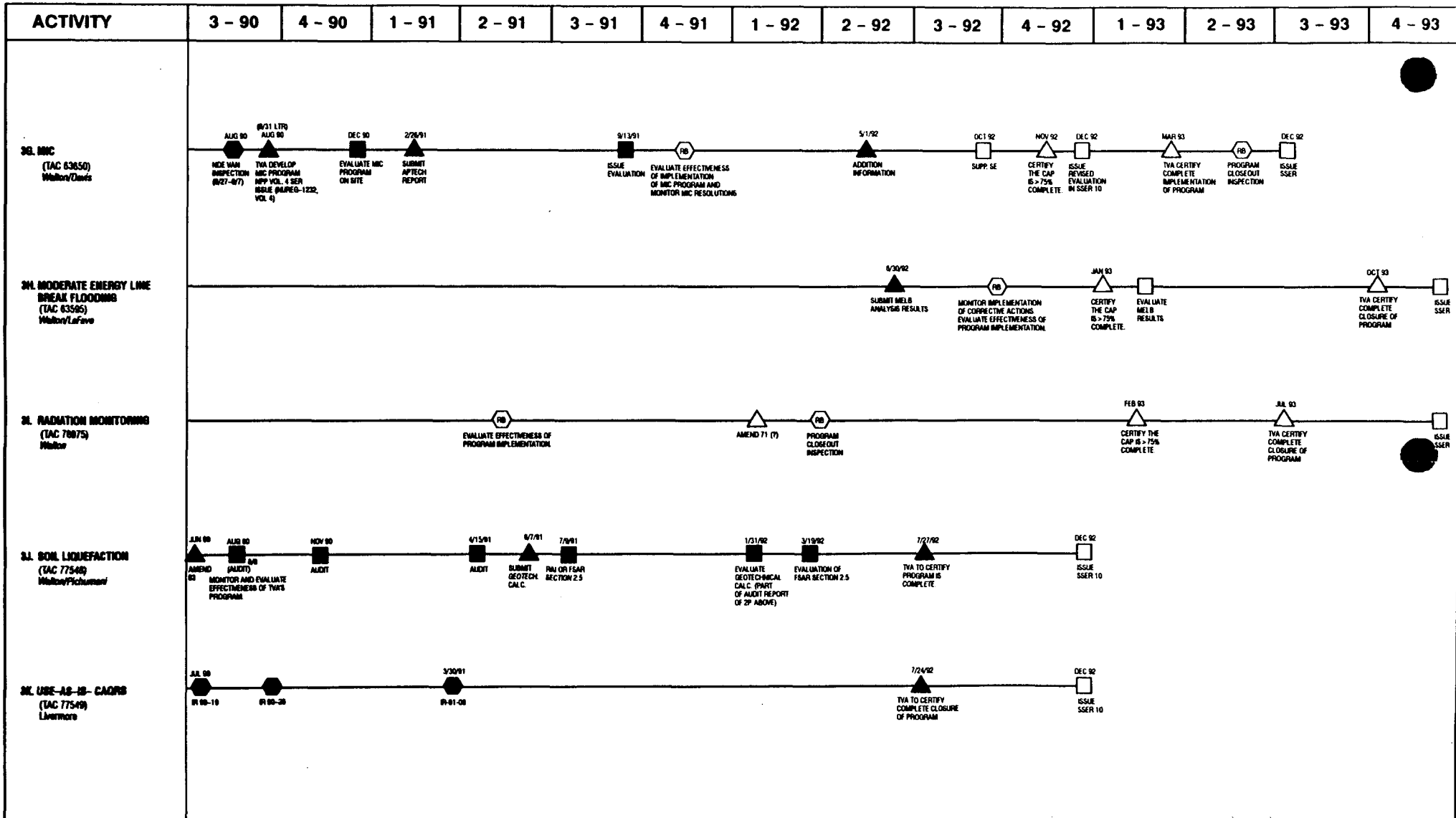
## WATTS BAR UNIT 1 SPs









(See SSER 9 for official listing of accomplished milestones)



## WATTS BAR UNIT 1 SPs

(See SSER 9 for official listing of accomplished milestones)



LEGEND  - TVA MILESTONE  - NRC LICENSING MILESTONE  - INSPECTION MILESTONE  - TEAM INSPECTION  - HEADQUARTERS INSPECTION  - RESIDENT INSPECTOR INSPECTION  - REGIONAL BASED INSPECTION  - VERTICAL SLICE REVIEW

WATTS BAR NUCLEAR PLANT (WBN) - ELECTRICAL ENGINEERING EVALUATION OF IE  
BULLETIN 92-01

- References:
1. Nuclear Regulatory Commission (NRC) Information Notice 91-47: Failure of Thermo-Lag Fire Barrier Material to Pass Fire Endurance Test
  2. NRC Information Notice 91-79: Deficiencies in the Procedures for Installing Thermo-Lag Fire Barrier Material dated December 6, 1991

References 1 and 2 provided information (1) about the failure of the fire endurance test performed by Gulf States Utility Company of Thermo-Lag 330 systems and (2) on the deficiencies in installation procedures for Thermo-Lag barrier material manufactured by Thermal Science, Incorporation (TSI). NRC, in Reference 2, indicated that "The vendor (TSI) stated that it had not included several essential application steps and precautions in its installation procedures manual because the information was presented during the TSI certification training for installers." Reference 2 also states "that stress skin must be placed over panel joints to ensure a continuous outer layer of stress skin for three-hour barriers and a recent procedure, TSI Technical Note 20684-AL, of October 1989, provides updated installation procedures . . . and requires that each butt joint be covered by an additional layer of stress-skin and trowel-grade material." These statements were discussed by telephone between TSI and TVA-WBN on December 30, 1991. No additional verbal or written installation instructions were provided by TSI for their three-hour fire barrier installed on steel cable trays. Accordingly, TSI Technical Note 20684, Installation Procedures Manual (for steel cable trays), Revision V, is still the installation instruction for steel raceways.

The three-hour rated TSI fire barrier material is not currently installed on aluminum cable trays at WBN. If aluminum trays require protection in the future, it will be installed in accordance with the latest procedure.

Based on TVA's review and evaluation, the installation problems described in NRC Information Notices 91-47 and 91-79 do not exist at WBN.

Presently, WBN has installed one-hour fire barrier material manufactured by Minnesota Mill and Mine (3M) and three-hour fire barrier material manufactured by TSI. The existing TSI three-hour material was installed (1) on conduits only and (2) in accordance with TSI installation procedures and (3) by installers certified by TSI. Our review of current installation procedures for TSI fire barrier material identified no discrepancies between TSI and TVA procedural requirements. The three-hour wrap installed is on the below listed conduits.

<u>Conduit Number</u>	<u>Size</u>	<u>Location/Elevation</u>	<u>Building</u>
1PM6420D	3I	Az 198 - 265/770	Reactor Building Annulus
1PM6399D	3I	Az 198 - 145/770	Reactor Building Annulus
1PM6398D	3I	Az 145/770 - 728	Reactor Building Annulus
1PM6388F	3I	Az 198/730 - 740	Reactor Building Annulus
1PM6389F	3I	Az 198 - 265/740	Reactor Building Annulus
1PM6390F	3I	Az 265 - 275/740	Reactor Building Annulus
1M4556	3I	XA4/737	Auxiliary Building
1M4555	3I	XA4/737	Auxiliary Building
1PM6385F	3I	Az 198 - 265/744	Reactor Building Annulus
1PM6360F	3I	Az 280/754	Reactor Building Annulus
1PM6470D	3I	Az 265/773	Reactor Building Annulus
1NM3066D	3I	Az 205/733	Reactor Building Annulus
1NM3064D	3I	Az 205 - 220/730	Reactor Building Annulus
1NM3062D	3I	Az 220/730 - 754	Reactor Building Annulus
1NM3060D	3I	Az 220 - 230/754	Reactor Building Annulus
1PM5660D	3I	Az 155 - 265/744	Reactor Building Annulus
1PM6365D	3I	Az 240/750	Reactor Building Annulus

Additionally, one-hour fire barrier material was purchased from TSI for installation prior to Unit 1 operation. Certification of training for installer will be required prior to incorporating design change notices (DCNs) which add the one-hour rated TSI material. Future installation will be in accordance with the latest TSI and TVA procedures.

WBN Engineering, in cooperation with TVA Corporate Engineering, Browns Ferry Nuclear Plant (BFN), Sequoyah Nuclear Plant (SQN), and TSI, is developing a fire endurance test program based on actual and anticipated plant configurations of Thermo Lag 330. Some test articles will be assembled using current TSI/TVA installation procedures, and others will be assembled using enhanced construction methods being developed by TVA. The purpose of the test program is to demonstrate adequacy of the installed configurations and to qualify enhanced installation methods for future installation at WBN.

Also, results from the WBN fire endurance test will be used to reevaluate the adequacy of the existing TSI installed system.

DISTRIBUTION

Docket File

NRC PDR

Local PDR

S. Varga

14-E-4

G. Lainas

14-H-3

F. Hebdon

V. Nerses

B. Wilson

RII

K. Barr

RII

G. Walton

RII

E. Merschhoff

RII

P. Madden

8-D-1

P. Tam

M. Sanders

OGC

15-B-18

ACRS (10)

WBN Rdg. File