

Timeline

Date	Event
2/79	Alleger started employment with TVA
12/83	Initial ice loading into Watts Bar ice condenser (IC) commenced
2/84	Initial ice loading completed
12/84	Alleger started assignment as system engineer for IC
4/16/91	Watts Bar melted ice for economic reasons due to extended delay in plant licensing
2/17/95	Watts Bar completed second loading of ice into IC
4/19/95	Approximately 170 broken screw pieces and 32 whole screws were found in IC melt tank by system engineer
4/21/95	PER 950246 issued by Alleger (Exhibit 5)
6/2/95	Original version of TVA Central Lab Services (CLS) report 95-1021 issued (Exhibit 6)
6/8/95	Alleger faxed copy of original version of CLS report to Westinghouse & Duke
6/12/95	CLS issued endorsement (Exhibit 26) to original version of CLS report, referenced by RIMS number.
6/14/95	Meeting held at Watts Bar to discuss IC screw issue
6/19/95	Revised version of CLS report 95-1021 issued (Exhibit 7). No revision number used. Original and revised versions of report were labeled with same number.
6/22/95	Westinghouse evaluation (WAT-D-10048) issued (also referred to as MSE-REE-1371). This provided a basis for accept-as-is of condition described in PER 950246. This evaluation (Exhibit 4) was a statical analysis (to show IC was operable with no more than 2 of 12 Screws per joint missing) and did not address either version of CLS report or potentially defective screws.
7/11/95	CLS issued memo to Watts Bar engineering in effort to clarify reason for 2 different versions for CLS report. Both versions were mentioned by RIMS number but stated intent was that only later version would be considered official QA record and be sent to RIMS
7/12/95	PER 950246 transferred from system engineering organization (alleger) to site engineering (lead civil engineer)

5/19

7/28/95	Watts Bar lead civil engineer signed documents in closure package for PER 950246 indicating corrective actions were complete and the PER was ready for closure. PER closure based on Westinghouse evaluation.
8/10/95	Closure verification for PER 950246 by site QA organization
8/25/95	Original version of CLS report dated 6/2/95 entered in RIMS (Exhibit 25)
9/95	Alleger received RIF notice and transferred to TVA service organization
11/95	Watts Bar OL issued by NRC
7/31/97	Memo from CLS Metallurgical Engineer intended to clarify information concerning 2 versions of CLS report (Exhibit 31, pg 9)
7/31/97	Memo from CLS Lead Metallurgical Engineer intended to clarify information concerning 2 versions of CLS report (Exhibit 31, pg 8). Stated that all copies of original CLS report had not gone to RIMS
12/2/97	Watts Bar NE issued supplement to PER 950246 closure package to document that a copy of CLS report had been sent to Westinghouse (Exhibit 11)
12/16/97	DOL hearing on alleger's I&H complaint
2/12/98	Watts Bar lead civil engineer interviewed by NRC OIG
9/3/98	CLS Lead Metallurgical Engineer report to TVA management (Exhibit 14) regarding why Set B information was omitted from 6/19/95 CLS report [TVAN Chief Metallurgical Engineer-Nuclear stated that he had not learned of a possible defect in the new screws until this date (Exhibit 12, pg 16)]
9/24/98	CLS issued CAR to address inability to locate 6/12/95 endorsement and 6/19/95 CLS report in RIMs (Exhibit 31)
10/20/98	TVAN Chief Metallurgical Engineer-Nuclear provided reconciliation report to TVA management (Exhibit 13)
10/26/98	Watts Bar NE issued additional supplement to PER 950246 closure package to include information from reconciliation report on differences between two versions of CLS reports (Exhibit 34). TVA management concluded omission was inadvertent
2/11/99	OI interview with alleger (Exhibit 2)
3/10/99	CLS Metallurgical Engineer interviewed by OI (Exhibit 27)
3/10/99	CLS Lead Metallurgical Engineer interviewed by OI (Exhibit 21)
3/10/99	TVAN Chief Metallurgical Engineer-Nuclear interviewed by OI (Exhibit 12)
3/22/99	Watts Bar lead civil engineer interviewed by OI (Exhibit 10)
5/15/99	CLS Lead Metallurgical Engineer reinterviewed by OI (Exhibit 22)

8/19/99	CLS QA manager interviewed by OI (Exhibit 24)
11/19/99	OI Report 2-1998-023 issued