June 22, 1983

Docket Nos: 50-390
and 50-391

APPLICANT: Tennessee Valley Authority

FACILTIY: Watts Bar, Units 1 and 2

SUBJECT: SUMMARY OF A TELECON ON LIQUEFACTION WITH TVA ON MAY 25, 1983

Enclosure 1 is the May 25, 1983, telecon summary supplied by Dinesh Gupta.

Enclosure 2 is list of participants.

Melanie Miller, Project Manager
Licensing Branch No. 4
Division of Licensing

Enclosures:
As stated

cc: See next page

OFFICE	DL:LB #4	SGEB	DL:LB #4	SGEB	DL:LB #4		
SURNAME	MMiller/hmc	LHeller	EAdensam	DGupta	TKenyon		
DATE	6/15/83	6/16/83	6/17/83	6/16/83	6/ /83		

June 22, 1983

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-390/391
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Summary of a Tele-Conference on Liquefaction with TVA

Held on May 25, 1983

TVA briefly described their plan to construct underground barriers adjacent to ERCW pipelines. This field remedial action is designed to prevent large displacements of loose, low plasticity materials, in the event of any liquefaction of soils in this area under SSE. TVA had discussed this basic scheme with the NRC staff in a meeting on May 20, 1983. The staff told TVA that their proposed scheme looks feasible and we expect TVA to submit detailed plans of their proposal for our review.

TVA then described their approach to calculate seismically induced settlements of soils in the pipeline area. They indicated that they have used the method proposed by Lee and Albaisa (1974 ASCE Geotechnical Engineering Division Journal). The staff informed TVA that we consider the use of this method to be appropriate; however, since TVA has stated that they do not have laboratory test data on soils to be directly used in this approach, some conservatism is warranted in light of empirical settlement data. The staff and consultants suggested that, in lieu of lab data, TVA may use the following criteria to calculate seismically induced settlements:

For soils below water table

Soils:	Seismic Settlement:
Clean Sands (SP, SW)	6 percent
Dirty Sands/Silts (SM, ML)	3 percent
clayey (CL)	1 percent

For soils above water table

One half of the above settlement values may be used.

TVA agreed to check the pipeline stresses using the above criteria and to inform the staff of their findings as soon as conveniently possible. The staff agreed to send TVA a draft copy of "Current Methodologies for Assessing Seismically Induced Settlements in Soil" which discusses the above in greater detail.

List of Participants

NRC

Dinesh Gupta
Lyman Heller
Melanie Miller

NBS

Bill Kovacs

Corps of Engineers

John Wagner

TVA

Joe Hunt
Vince Bianco
Dave Ormsby
Ray Threlkeld
Sam Stone

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