TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

SEP 28 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-327
Tennessee Valley Authority	)	50-328

SEQUOYAH NUCLEAR PLANT (SQN) - COMPARISON OF THE SQN DIESEL GENERATOR LOAD ANALYSIS (DGLA) RESULTS

This letter provides NRC with the information that was requested during a telephone conversation on September 21, 1988, regarding the results of the SQN DGLA (SQN-E3-002) that was issued as part of the unit 1 restart effort. The specific information requested was for TVA to provide a graphical comparison of the DGLA results obtained for the unit 1 restart effort (SQN-E3-002, revision 10) versus those obtained by TVA during the unit 2 restart effort (SQN-E3-002, revision 7). NRC also requested that TVA provide a list of the major differences between these two revisions with respect to the methods used to determine the diesel generator (DG) load.

The enclosure provides a graphical comparison of the maximum loading for the heaviest loaded DG (i.e., DG 2B-B). This comparison shows that the maximum loading calculated for unit 1 restart (in support of two-unit operation) is bounded by that previously calculated for unit 2 restart. The enclosure also provides a list of the major differences between revision 7 and revision 10 of the DGLA.

No commitments are made by this letter. Please direct questions concerning this issue to B. A. Kimsey at (615) 870-6847.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Manager
Nuclear Licensing and
Regulatory Affairs

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission

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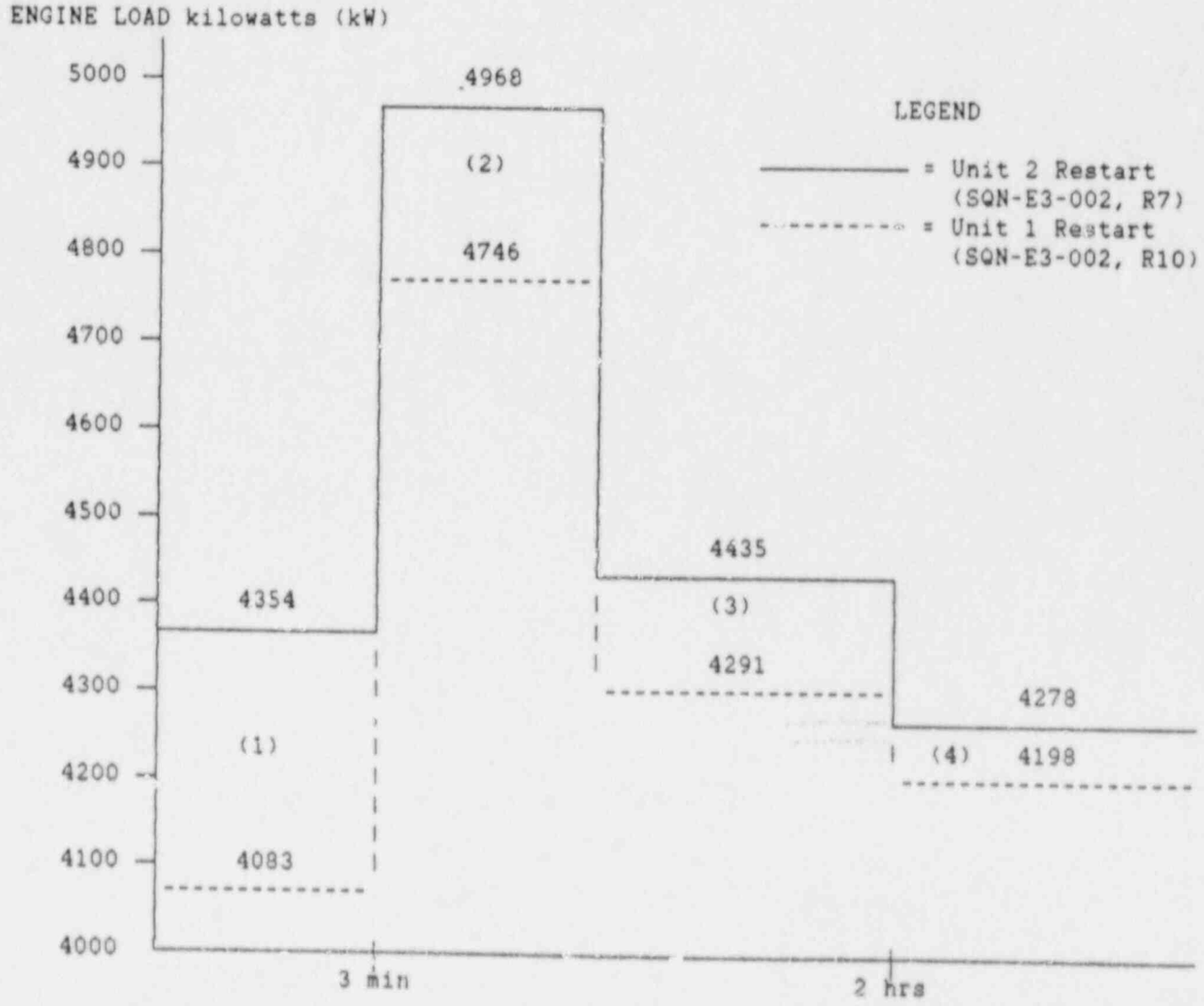
ENCLOSURE
Comparison of the SQN DGLA Results



REFERENCES	U2 Restart (DG 2B-B)	U1 Restart (DG 2B-B)
(1) Max Transient Load	SQN-E3-002,R7 Sh 44	SQN-E3-002,R10 Sh 9
(2) Max Transient Load	SQN-E3-002,R7 Sh 45	SQN-E3-002,R10 Sh 9
(3) Max Running Load	SQN-E3-015,R1 Sh L3	SQN-E3-002,R10 Sh 9
(4) Max Continuous Load	SQN-E3-015,R1 Sh L3	SQN-E3-002,R10 Sh 9

Notes:
1. This graph and the DGLA results are based on the heaviest loaded DG (DG 2B-B).
2. "Maximum Running Load" represents the maximum load as a result of automatic sequencing. "Maximum Continuous Load" represents removal of the nonessential loads in accordance with abnormal operating instruction (AOI)-35 and manual initiation of the hydrogen mitigation system.

MAJOR DIFFERENCES

The following items represent the major differences between SQN-E3-002, R7, and SQN-E3-002, R10. The kW difference is shown for each item along with the appropriate scenario(s) and the points in time that the difference is applicable. This list is not all inclusive because there are other differences (approximately 5 to 20 kW) such as more accurate power factor/efficiency data for low voltage motors and differences because of modifications.

A. Transformer and Cable Losses Excluded Justification: SQN-E3-002, R10, Sh 243
Difference: -71.4 kW, Phase A and B, Transient and Steady-State ($t \geq 0$)

B. Different Assumption For Random Loads Justification: SQN-E3-002, R10, Sh 1
Difference: -194.4 kW, Phase A, Transient ($t \geq 0$)
-173.8 kW, Phase B, Transient ($t \geq 0$)

"MTTG Lube Oil Pump" Not A DG Load Justification: EFB-SQN-MS-TI-05-001, R0
Difference: -62.0 kW, Phase A and B, Steady-State ($t \geq 15$ min)

D. "DG Immersion Heaters" Off By Thermostat Justification: SQN-E3-002, R10, Sh 4
Difference: -32.0 kW, Phase A and B, Steady-State ($t < 2$ hrs)

E. "DG Air Compressors" Are A Constant Load Justification: Extra Conservatism
Difference: +16.8 kW, Phase A and B, Steady-State ($t > 2$ hrs)

F. 120-min Valves Stroke Before 25 min Justification: SQN-E3-002, R10, Sh 215
Difference: -8.5 kW, Phase A and B, Steady-State ($t < 2$ hrs)