

PDR-016



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

JAN 30 1985

Ms. Nina Bell  
Nuclear Information and Resource Service  
1346 Connecticut Avenue, NW, 4th Floor  
Washington, DC 20036

IN RESPONSE REFER  
TO FOIA-84-886

Dear Ms. Bell:

This is in further response to your letter dated November 28, 1984, in which you requested, pursuant to the Freedom of Information Act (FOIA), two categories of records related to Transamerica Delaval Inc., diesel generators installed at the Shearon Harris nuclear plant.

The documents listed on enclosed Appendix B are responsive to your request. Documents 1 through 7 have previously been made available for inspection and copying at the Public Document Room (PDR). Access to these records may be acquired by referring to the accession number listed by each of these documents. Document 8 is being placed at the PDR in file folder FOIA-84-886.

This completes NRC's action on your request.

Sincerely,

J. M. Felton, Director  
Division of Rules and Records  
Office of Administration

Enclosure: As stated

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PDR FOIA  
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APPENDIX B

1. 12/09/81 Letter to the Director, Office of Inspection and Regulation from R. E. Boyer, (3 pages) - Accession No. 8112160099
2. 11/1983 NUREG-1038, "Safety Evaluation Report Related to the Operation of Shearon Harris Nuclear Power Plant, Units 1 and 2" - Accession No. 8312230068
3. 10/28/82 Letter to the Director, Office of Inspection and Enforcement from R. E. Boyer, (2 pages) - Accession No. 8211160262
4. 11/1984 TDI Diesel Generator - Design Review and Quality Revalidation Report by TDI Diesel Generator Owners Group - Volumes 1-4 - Accession No. 8501030172
5. 11/14/84 Transcript of Shearon Harris Proceedings, pages 6842-6852 - Accession No. 8411190434
6. 12/20/84 Letter to Harold R. Denton from A. B. Cutter, (2 pages) w/attachment: Emergency Diesel Generator Equipment, dated December 17, 1984 (16 pages) - Accession No. 8501170185
7. 01/02/85 Letter to H. R. Denton from C. L. Ray (1 page) w/attachment: Monthly Status Report dated January 2, 1985 (15 pages) - Accession No. 8501070285
8. 01/14/85 Memorandum for Frank J. Miraglia from Carl H. Berlinger, Subject: TDI Diesel Status Summary Report (1 page) w/enclosure: TDI Diesel Status Report for December 31, 1984 (20 pages)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

January 14, 1985

MEMORANDUM FOR: Frank J. Miraglia, Deputy Director  
Division of Licensing

THRU: Dennis M. Crutchfield, Assistant Director  
for Safety Assessment, DL

FROM: Carl H. Berlinger, TDI Project Group Leader  
Division of Licensing

SUBJECT: TDI DIESEL STATUS SUMMARY REPORT

Enclosed is the TDI Diesel Status Summary Report for December 31, 1984.

A handwritten signature in cursive script that reads "Carl H. Berlinger".

Carl H. Berlinger, TDI Project  
Group Leader  
Division of Licensing

Enclosure:  
As stated

cc w/enclosure:

D. Eisenhut	E. Murphy
G. Lainas	D. Persinko
T. Novak	R. Caruso
E. Adensam	M. Miller
S. Hood	C. Berlinger
K. Jabbour	E. Marinos
T. Kenyon	C. D. Sellers
A. Schwencer	H. Shaw
R. Auluck	E. Tomlinson
D. Houston	R. J. Wright
E. Weinkam	J. Stolz
G. Knighton	C. Grimes
B. Buckley	S. Burwell
J. Youngblood	J. Stefano
S. Miner	W. Paulson
T. Michaels	M. Carrington
J. Zwolinski	

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TRANSAMERICA DELAVAL, INC. (TDI)  
DIESEL STATUS SUMMARY REPORT

Overview

The TDI project group is conducting a review of issues relative to the reliability of diesel engines supplied by TDI, which are used for emergency onsite power at certain nuclear power plants. After a series of incidents involving the diesel generators, culminated by a crankshaft failure at the Shoreham Nuclear Power Plant, several nuclear utilities (initially eleven-now thirteen) formed an Owners Group to address these issues. The Owners Group has developed a program plan that consists of three program elements.

The first program element, known as Phase I, consists of a review of a limited number of components with known design and or manufacturing concerns that warrant attention on an accelerated schedule. The number of components in this program is 16, however, components for different engines, i.e., crankshafts for in-line 8, V-16 etc. have to be treated separately. Therefore, there are more than 16 reports that have been identified for completion of Phase I. The schedule for completion of these reports and the progress thus far is shown in Enclosure 1.

Phase II of the program, the Design Review/Quality Revalidation (DR/QR), is a review of a larger set of engine components to assure that their design and manufacture including specifications, quality control and assurance and operational surveillance and maintenance are adequate. The schedule for completion of these reports and the progress thus far is shown in Enclosure 2.

In addition to these two phases of the program the Owners Group has proposed engine teardowns and inspections for all utilities. These schedules are in Enclosure 3. These inspections are used to develop the data required for the DR/QR program. For plants that will be licensed on an interim basis (see program plan for licensing and restart below) the inspections are also used for assessing the condition of an engine after preoperational tests to determine whether interim licensing can proceed. Since the Owners Group is scheduled to be phased out early in 1985, they will issue a DR/QR in some cases based on an inspection performed on a similar engine and will rely on the licensee to validate the DR/QR report when the engine is torn down for inspection e.g., Rancho Seco.

The schedule for plant specific actions needed to support NTOLs and OR restarts is shown in Enclosure 4.

Program Plan for Licensing and Restart

The staff SER outlining the elements that will be considered with regard to the TDI diesels for licensing or restart of a plant on an interim basis, pending completion of Phase I and II, was issued on August 13, 1984 (Reference 1). Licensing or restart can proceed on an interim basis i.e., until the next refueling outage, under the following conditions (a more detailed description is given in Reference 1, page 13-18):

1. TDI diesels, in general, will be limited to operating at a brake mean effective pressure (BMEP) of 185 psig or less except as follows:
  - a. For engines where emergency service load requirements result in a BMEP greater than 185 psig, the utility shall provide information demonstrating that crankshafts, pistons and other key engine components which are of the same design as those in the subject engines have operated successfully for at least 10E7 loading cycles under load conditions which meet or exceed the severity of the maximum emergency service load requirements for the subject engines. The load level above a load corresponding to 185 psig BMEP enveloped by successful operating experience is referred to as the "qualified load" for the subject engine.
  - b. Where appropriate operating experience does not already exist relative to this qualified load, a test of an engine with the same designs of these key components for 10E7 cycles will be required to establish an adequate "qualified load" for the subject engines.

The staff will consider excepting engines from the requirement in 1a or 1b on a case-by-case basis where the 185 psig BMEP criterion is exceeded only for brief periods of time.

2. The TDI diesels will have AE type piston skirts. Alternatively, for engines with non-AE piston skirts, the utility shall provide information that piston skirts of the same design have operated successfully for at least 10E7 cycles under load conditions which meet or exceed the maximum emergency service load requirements for the subject engines. Where appropriate operating experience does not exist, a test of an engine with an identical piston design for 10E7 cycles will be required to establish an acceptable qualified load for the subject pistons. The staff will consider excepting engines from this requirement where utilities can satisfactorily demonstrate to the NRC acceptable design margin for the pistons for the maximum emergency load requirements.
3. Appropriate changes to the Plant Technical Specifications and engine operating procedures shall be made to ensure that engines are not tested above 185 psig BMEP, or above "qualified load" as justified on the basis of analysis of key engine component operational data.
4. Following preoperational testing which includes tests in the Regulatory Position of Regulatory Guide 1.108, the engine with the most operational hours on critical internal engine components shall be subjected to an engine disassembly and inspection. Action to be taken on the other engine(s) of a plant will be contingent upon the results of the inspection conducted on the subject engine, and the owner's ability to demonstrate through a review of the manufacturers QA records, that the engines have similar "as-manufactured" quality.

A description of the inspections performed and the results shall be submitted to NRC and Battelle, Pacific Northwest Laboratory (PNL), for review prior to plant operation above 5% power. The NRC SER that permits operation above 5% power or restart is developed after the staff reviews the PNL Technical Evaluation Report (TER).

5. Following engine reassembly additional post inspection tests are performed.
6. The engine maintenance and surveillance program to be implemented during the (interim) period prior to completion of Phase I and II shall be submitted for NRC staff review and approval.

The interim basis for licensing will be reviewed after completion of Phase I and Phase II of the program to see what modifications need to be made to the license conditions. A final SER will be issued for each of the plants that are being licensed or restarted on an interim basis. These plants are anticipated to include Grand Gulf, Catawba, Comanche Peak, San Onofre, Shoreham, and River Bend.

For plants where the Phase I and Phase II program is scheduled to be completed sufficiently ahead of the licensing or restart of the plant, a final TDI Diesel SER will be developed which encompasses the results of Phase I, Phase II and the operational history of a lead engine. Plants anticipated to be licensed directly on a long-term basis because the Phase I and Phase II program results will be available for implementation in time are Shearon Harris, Perry, Vogtle, Rancho Seco, and WNP-1.

Upon completion of all the DR/QR SERs (Phase II), the staff will review the results to determine if any generic or plant specific implications may exist for each TDI plant and will modify the final SERs accordingly.

The TDI diesel hearing for Shoreham began on September 10, 1984. Suffolk County, Long Island, is the intervenor. The litigated items at the start of the hearing were cylinder heads, cylinder block, crankshaft and pistons. During the course of the hearing cylinder heads and pistons were dropped as litigated items.

One of the diesels at Shoreham, DG 103, completed 740 hours of operation at a load of 3300 kw. Teardown for inspection began on November 2, 1984. This diesel will be considered the lead engine for the DSR-48 series of engines (in-line 8) at a qualified load of 3300 kw.

Cross examination regarding all filed testimony before the Shoreham ASLB was completed and the hearing adjourned on November 16, 1984. The hearing is to resume on February 12, 1985 in consideration of a motion by LILCo to partially reopen the record in the following areas: a) requalification of diesels at a load of 3300Kw and b) discussion of recent DG 103 test results especially with regard to the crankshaft and cylinder block.

A program plan, outlining the actions needed to be completed prior to transferring the responsibilities of the TDI Project Group to a suggested line organization, is being prepared for issuance by January 18, 1985.

References

Letter, D. G. Eisenhut (NRC) to J. B. George (TUGCO), August 13, 1984, Subject: Safety Evaluation Report, Transamerica Delaval, Inc. Diesel Generator Owners Group Program Plan.

## ENCLOSURE 1

STATUS SUMMARY REPORT OF PROGRAM PLAN AND  
SIXTEEN COMPONENTS WITH KNOWN PROBLEMS  
PHASE I PROGRAM

Item	Owners Submittal	PNL Review (Draft) to NRC	NRC Review to PNL	PNL Review (Final)	NRC SER	Responsible NRC Staff	Responsible PNL Staff
1. Owners Group Program Plan	03/02/84C <sup>1</sup>	05/11/84C	06/13/84C	06/29/84C	08/13/84C	C.Berlinger	W.Laity
2. Air-Start Valve Cap Screws - Shoreham only - All other engines	03/23/84C <sub>2</sub> 04/13/84C <sub>2</sub>	10/15/84C	10/26/84C	01/25/85T	02/08/85T	C.Sellers	M.Clement
3. Connecting Rods - DSR-48 - DSRV (All)	04/27/84C 09/07/84C	10/29/84C 11/09/84C	12/03/84C 12/03/84C	02/15/85T <sup>3</sup> 02/15/85T <sup>3</sup>	03/01/85T 03/01/85T	H.Shaw	J.Alzheimer
4. Connecting Rod Bearing Shells	03/12/84C	09/28/84C	10/17/84C	01/25/85T	02/08/85T	C.Sellers	J.Nesbitt
5. Crankshaft - DSR-48 - DSRV-16 - DSRV-20	04/20/84C 05/24/84C 06/15/84C	12/03/84C 12/03/84C 12/03/84C	12/19/84C 12/19/84C 12/19/84C	02/08/85T <sup>3</sup> 02/08/85T <sup>3</sup> 02/08/85T <sup>3</sup>	02/22/85T 02/22/85T 02/22/85T	H.Shaw	S.Dahlgren
6. Cylinder Block and Liners (All engines)	06/25/84C	12/03/84C	12/19/84C	02/08/85T <sup>3</sup>	02/22/85T	E.Tomlinson	J.Nesbitt
7. Cylinder Heads (All engines)	05/15/84C	10/15/84C	11/08/84C	02/08/85T <sup>3</sup>	02/22/85T	E.Tomlinson	J.Alzheimer
8. Cylinder Head Studs - Shoreham only - All other engines	03/30/84C <sub>2</sub> 04/13/84C <sub>2</sub>	10/15/84C	10/26/84C	01/25/85T	02/08/85T	C.Sellers	M.Clement



## ENCLOSURE 1

STATUS SUMMARY REPORT OF PROGRAM PLAN AND  
SIXTEEN COMPONENTS WITH KNOWN PROBLEMS  
PHASE I PROGRAM

Item	Owners Submittal	PNL Review (Draft) to NRC	NRC Review to PNL	PNL Review (Final)	NRC SER	Responsible NRC Staff	Responsible PNL Staff			
9. Engine Base and Bearing Caps - DSR-48 - DSRV (A11)	04/27/84C <sub>2</sub> 06/18/84C <sup>2</sup>	11/07/84C	11/21/84C	02/08/85T <sup>3</sup>	02/22/85T	R.Wright	S.Dahlgren			
10. Engine Mounted Electrical Cable - Shoreham - Comanche Peak - Catawba - Grand Gulf - Perry, Shearon Harris, Rancho Seco, San Onofre, River Bend	04/24/84C 06/08/84C 06/08/84C 06/04/84C 07/27/84C	One report will be issued for all plants except Vogtle and WNP-1, which will be reviewed as part of Phase II.			10/23/84C	11/09/84C	01/31/85T	02/15/85T	E.Tomlinson	J.Nesbitt
11. HP Fuel Oil Tubing (All engines)	04/27/84C	10/15/84C	10/26/84C	02/15/85T <sup>3</sup>	03/01/85T	H.Shaw	J.Alzheimer			
12. Jacket Water Pumps - DSR-48 - DSRV-16 - DSRV-20	04/16/84C <sub>2</sub> 06/15/84C <sub>2</sub> 07/17/84C <sup>2</sup>	10/15/84C	10/26/84C	01/25/85T	02/08/85T	E.Tomlinson	J.Nesbitt			
13. Piston Ski - AF & AE - AN & AH	05/24/84C <sub>2</sub> 11/30/84C <sup>2</sup>	02/15/85T	02/22/85T	02/28/85T <sup>3</sup>	03/08/85T	R.Wright	S.Dahlgren			

ENCLOSURE 1

STATUS SUMMARY REPORT OF PROGRAM PLAN AND  
SIXTEEN COMPONENTS WITH KNOWN PROBLEMS  
PHASE I PROGRAM

Item	Owners Submittal	PNL Review (Draft) to NRC	NRC Review to PNL	PNL Review (Final)	NRC SER	Responsible NRC Staff	Responsible PNL Staff
14. Push Rods (All engines)	04/19/84C	10/15/84C	10/26/84C	01/25/85T	02/08/85T	H. Shaw	S. Dahlgren
15. Rocker Arm Capscrew - Shoreham only - All other engines	03/13/84C <sup>2</sup> 04/25/84C <sup>2</sup>	10/15/84C	10/26/84C	01/25/85T	02/08/85T	C. Sellers	M. Clement
16. Turbocharger - DSR-48, DSRV-16 - DSRV-20 - Supplemental Report Vanes and Capscrews	05/15/84C 06/15/84C 11/27/84C	09/28/84C 10/15/84C 02/15/85T	10/17/84C 10/26/84C 02/22/85T	02/08/85T <sup>3</sup> 02/08/85T <sup>3</sup> 02/28/85T <sup>3</sup>	02/22/85T 02/22/85T 03/08/85T	C. Sellers	M. Clement

<sup>1</sup> C - Complete  
T - Target

<sup>2</sup> - One SER report will be issued for this component.

<sup>3</sup> - PNL's estimates. PNL has indicated, however, that they will try to complete by January 31, 1985.

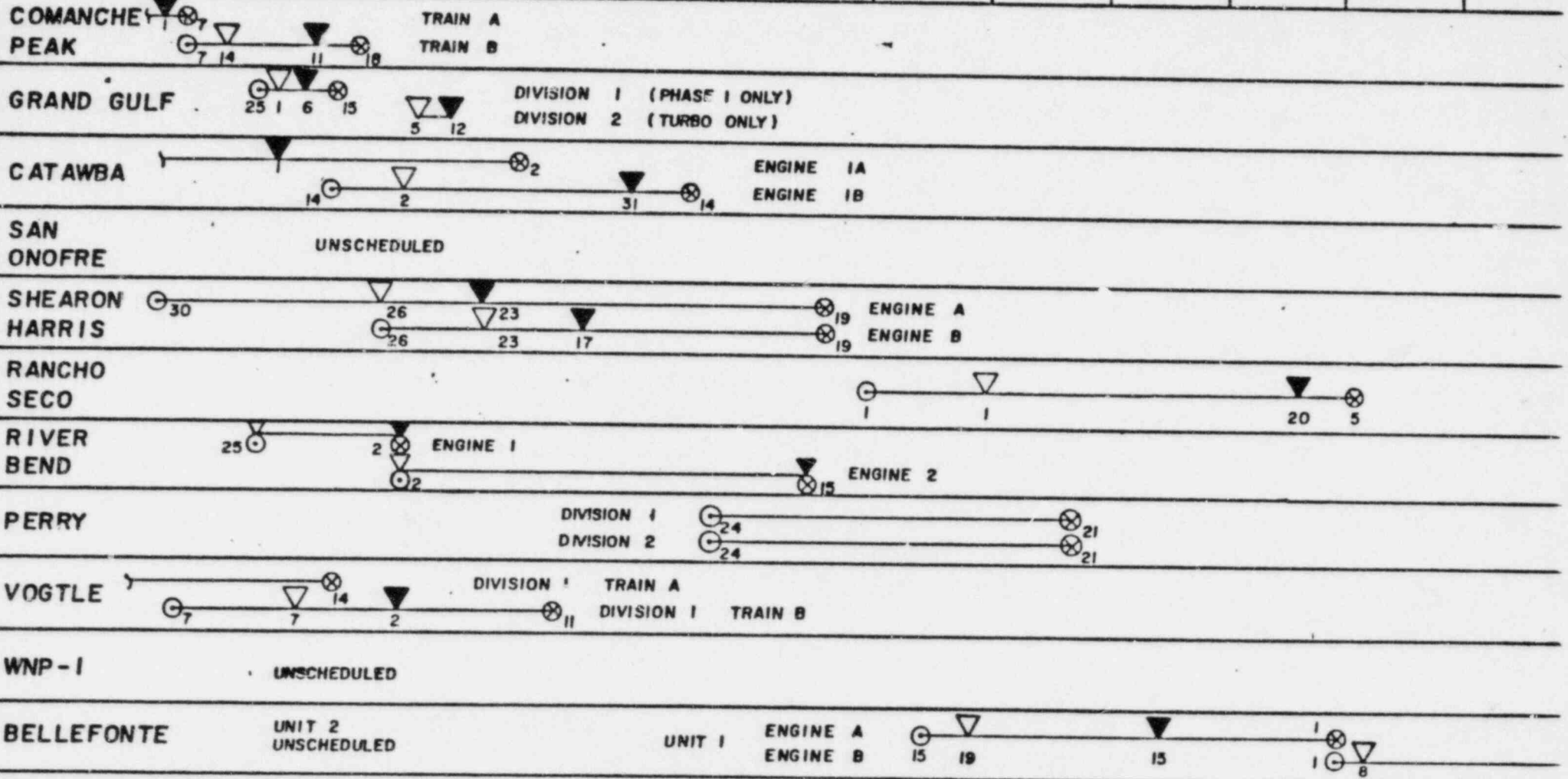
ENCLOSURE 2  
DR/OR SCHEDULE SUMMARY

	<u>ISSUED BY OWNERS GROUP</u>	<u>PNL TER - (DRAFT)</u>
LILCO-Shoreham	06/22/84C	10/18/84C
TU-Comanche Peak	09/07/84C	01/31/85T
Gulf States-River Bend	12/07/84C	03/08/85T
CP&L-Shearon Harris	11/15/84C	03/29/85T
CEI-Perry	12/31/84C	04/12/85T
Southern California Edison Company-San Onofre	11/27/84C	04/26/85T
MP&L-Grand Gulf	10/23/84C	05/10/85T
Duke-Catawba	11/02/84C	05/24/85T
Georgia-Vogtle	01/11/85T	06/14/85T
SMUD-Rancho Seco	12/18/84C	06/28/85T
WPPS-WNP-1	01/22/85T	07/12/85T
TVA-Bellefonte	02/04/85T	07/26/85T

# TDI OWNERS ENGINE INSPECTION SCHEDULE

1984/85

MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
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<p>⊙ BEGIN ENGINE DISASSEMBLY</p> <p>⊗ COMPLETE ENGINE REASSEMBLY</p>	<p>▽ BEGIN ENGINE INSPECTION</p> <p>▼ COMPLETE ENGINE INSPECTION</p>
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ENCLOSURE 4

CATAWBA MILESTONES  
NRC DIESEL SER TASK MANAGER - M. A. MILLER  
PNL TASK MANAGER - J. NESBITT

<u>Milestones</u>	<u>Date</u>
Duke Power submits Diesel 1A inspection report	06/29/84C
Load fuel - preoperational tests started	07/18/84C
Submit surveillance/maintenance schedule for D/G	07/16/84C
PNL submits inspection report TER (FINAL)	08/06/84C
Staff SER on diesels (INTERIM)	08/13/84C
Diesel 1A engine reassembled	08/12/84C
DR/QR issued by Owners Group	11/02/84C
Criticality	01/07/85C
DR/QR issued by Duke	01/15/85T
DR/QR TER by PNL (draft)	05/24/85T
DR/QR TER by PNL (final)	06/21/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	08/02/85T

ENCLOSURE 4

COMANCHE PEAK MILESTONES  
NRC DIESEL SER TASK MANAGER - D. PERSINKO  
PNL TASK MANAGER - D. DINGEE

<u>Milestones</u>	<u>Date</u>
TUGCO submitted DG 1A inspection results	06/07/84C
TUGCO submitted DG 1B inspection results	06/29/84C
Hearing schedule set by board (est.)	
DG 1A preoperational tests complete	08/15/84C
DG 1B preoperational test complete	08/15/84C
Submit surveillance/maintenance schedule for D/G	08/01/84C
TUGCO submits comprehensive overall assessment and test results	08/15/84C
PNL submits inspection, preoperational test results and surveillance/maintenance schedule TER (DRAFT)	08/31/84C
PNL submits inspection results TER (FINAL)	09/13/84C
Staff SER on diesels (INTERIM)	09/24/84C
DR/QR issued by Owners Group	09/07/84C
DR/QR TER by PNL (draft)	01/31/85T
DR/QR TER by PNL (final)	02/22/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	06/21/85T
<u>Litigated items</u>	
QA breakdown of applicant	

ENCLOSURE 4

GRAND GULF MILESTONES  
NRC DIESEL SER TASK MANAGER - E. MURPHY  
PNL TASK MANAGER - D. DINGEE

<u>Milestones</u>	<u>Date</u>
DG 11 preoperational tests complete	07/02/84C
MP&L submits Division I inspection report and surveillance and maintenance schedule	07/05/84C
PNL submits inspection report TER (FINAL)	07/23/84C
DG 12 preoperational tests complete	07/23/84C
Staff SER on diesels (INTERIM)	07/24/84C
Staff SER on Technical Specifications review on non-diesel items	07/23/84C
Commission briefing	07/31/84C
Supplementary Staff SER on diesels (INTERIM)	08/16/84C
License issued	08/31/84C
DR/QR issued by Owners Group	10/23/84C
DR/QR issued by MP&L	11/26/84C
DR/QR TER by PNL (draft)	05/10/85T
DR/QR TER by PNL (final)	05/24/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	07/05/85T

ENCLOSURE 4

PERRY MILESTONES  
NRC DIESEL SER TASK MANAGER -  
PNL TASK MANAGER - D. PERSINKO

<u>Milestones</u>	<u>Date</u>
DR/QR issued by Owners Group	12/31/84C
DR/QR issued by CEI	01/31/85T
DR/QR TER by PNL (draft)	04/12/85T
DR/QR TER by PNL (final)	04/26/85T
Start of Hearing	
Final staff SER on diesels incorporating Phase I, Phase II and test results	06/07/85T
Fuel Load	07/15/85T

Litigated Items

Diesel Generator Reliability - Board Order 12/23/83 - issue 16



ENCLOSURE 4

RANCHO SECO MILESTONES  
NRC DIESEL SER TASK MANAGER -  
PNL TASK MANAGER -

<u>Milestones</u>	<u>Date</u>
DR/QR issued by Owners Group*	12/18/84C
DR/QR issued by SMUD	04/19/85T
DR/QR TER by PNL (draft)	06/28/85T
DR/QR TER by PNL (final)	07/12/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	09/13/85T
Startup from 1986 refueling outage**	10/01/86T

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\* Owners Group plans to issue DR/QR report even though inspection of engine will not be complete. Engine inspection by SMUD is scheduled for completion 02/20/85. The DR/QR issued by the owners group will specify what the results of the inspection should be based on the Shoreham DR/QR and SMUD will verify the recommendations and issue the report final.

\*\* Rancho Seco is presently satisfying GDC 17 with two General Electric diesels. The two TDI diesels are for emergency power that will be needed when TMI requirements are implemented beginning 10/86.

ENCLOSURE 4

RIVER BEND STATION MILESTONES  
NRC DIESEL SER TASK MANAGER - M. MILLER  
PNL TASK MANAGER -

<u>Milestones</u>	<u>Date</u>
GSU submits RBS TDI program plan	07/19/84C
DR/QR inspection complete	08/17/84C
GSU submits surveillance/maintenance schedule for D/G	10/26/84C
DR/QR issued by Owners Group	12/07/84C
DR/QR issued by Gulf States Utilities	12/21/84C
DR/QR TER by PNL (draft)	03/08/85T
Staff SER on diesels (5% Power)	03/15/85T
Fuel load	04/02/85T
DR/QR TER by PNL (final)	03/22/85T
PNL TER, 100% Power, incorporates Phase I, Phase II, maintenance and surveillance, and test results	04/26/85T
Final staff SER on diesels incorporating Phase I, Phase II, maintenance and surveillance, and test results	05/10/85T

ENCLOSURE 4

SAN ONOFRE MILESTONES  
NRC DIESEL SER TASK MANAGER - E. MARINOS  
PNL TASK MANAGER - D. DINGEE

<u>Milestones</u>	<u>Date</u>
SCE submits TDI diesel records and answers to questions	06/29/84C
Letter from staff to SCE explaining requirements for restart	07/26/84C
SCE submits inspection results and surveillance and monitoring program	10/26/84C
PNL TER on acceptability of diesels for restart (FINAL)	11/07/84C
Staff SER on diesels (INTERIM)	11/19/84C
Criticality	11/24/84C
DR/QR issued by Owners Group	11/27/84C
DR/QR issued by SCEC	02/01/85T
DR/QR TER by PNL (draft)	04/26/85T
DR/QR TER by PNL (final)	05/03/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	07/19/85T

ENCLOSURE 4

SHEARON HARRIS MILESTONES  
NRC DIESEL SER TASK MANAGER -  
PNL TASK MANAGER -

<u>Milestones</u>	<u>Date</u>
DR/QR inspection complete	10/19/84C
DR/QR issued by Owners Group	11/15/84C
DR/QR issued by CP&L	12/20/85C
DR/QR TER by PNL (draft)	03/29/85T
DR/QR TER by PNL (final)	04/19/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	05/24/85T
Load fuel	<sup>03</sup> 00/28/8 <sup>6</sup> 5T

Litigated items

QA breakdown of applicant (not admitted as of this time)

ENCLOSURE 4

SHOREHAM MILESTONES  
NRC DIESEL SER TASK MANAGER - R. CARUSO  
PNL TASK MANAGER - W. LAITY

<u>Milestones</u>	<u>Date</u>
DR/QR issued by Owners Group	06/22/84C
LILCO submits diesel inspection reports (includes surveillance and maintenance schedule and preoperational test results for DG 101 and 102, no preoperational test for DG 103)	06/29/84C
Suffolk County (and State of N.Y.) testimony filed	07/31/84C
LILCO testimony filed	08/14/84C
Meeting of staff witnesses to finalize testimony	08/17/84C
First draft of staff testimony and references to OELD	08/20/84C
Preoperational test of DG 103 complete	08/24/84C
Staff testimony filed	08/30/84C
Start of hearing (est. duration 2-4 weeks)	09/10/84C
DR/QR TER by PNL (draft)	10/18/84C
DG 103 10E7 cycle test complete	11/02/84C
Staff SER on Emergency Load Requirements	12/03/84C
LILCo submits DG 103 10E7 cycle test results (3300Kw load)	12/07/84C
PNL submits TER on 10E7 cycle tests	12/11/84C
Staff SER on diesels (Interim) (testing, inspections and load)	12/18/84C
NRC and LILCO response to contention on 3300Kw load	12/27/84C
DR/OR TER by PNL (final)	01/11/85T
LILCO testimony on all issues	01/15/85T
County testimony on all issues	01/25/85T
NRC testimony on all issues	02/05/85T

SHOREHAM MILESTONES  
NRC DIESEL SER TASK MANAGER - R. CARUSO  
PNL TASK MANAGER - W. LAITY

- 2 -

Hearing resumes (limited to cylinder block and crankshaft) 02/12/85T

Final staff SER on diesels incorporating Phase I,  
Phase II and test results 08/16/85T

Litigated items

1. Cylinder block
2. Crankshaft

ENCLOSURE 4

VOGTLE MILESTONES  
NRC DIESEL SER TASK MANAGER -  
PNL TASK MANAGER -

<u>Milestones</u>	<u>Date</u>
DR/QR inspection complete	07/15/84C
DR/QR issued by Owners Group	01/11/85T
DR/QR TER by PNL (draft)	06/14/85T
DR/QR TER by PNL (final)	06/28/85T
Final staff SER on diesels incorporating Phase I, Phase II and test results	08/30/85T
Fuel load	09/05/86T