

NRC INSPECTION MANUAL

OTSB

PART 9900: TECHNICAL GUIDANCE

STS3481.TG

STANDARD TECHNICAL SPECIFICATIONS SECTION 3/4.8.1 TDI DIESEL GENERATOR AIR ROLL TESTS

A. PURPOSE

To provide guidance on the performance of the Transamerica DeLaval, Inc. (TDI) Diesel Generator Air Roll Tests while the plant is in the Action Statement of Technical Specification 3.8.1.1.

B. BACKGROUND

On June 15, 1987 an inspection of operational activities at Vogtle Electric Generating Plant identified a violation concerning activities which rendered the Emergency Diesel Generator inoperable. "B" train diesel had become inoperable, thus placing the plant in Action Statement b of Technical Specification 3.8.1.1. Within five (5) minutes it was restored to OPERABLE condition. However, one of the notes associated with the Action Statement required that the "A" train diesel be demonstrated operable in accordance with the Surveillance Requirements "regardless of when the inoperable diesel generator is restored to OPERABILITY." In the performance of this operability demonstration of "A" train diesel, the diesel was made inoperable in order to perform the Moisture Check/Air Roll Test required by License Condition 4 of Attachment 1 to the Vogtle license. The other note associated with this Action Statement states that "The diesel shall not be rendered inoperable by activities performed to support testing pursuant to the Action Statement (e.g., an Air Roll)." NRR was requested to determine (1) if the licensee is still in the Action Statement until the operable diesel is demonstrated operable, even though the inoperable diesel was made operable, and (2) should the Air Roll Test be performed on the operable diesel.

C. DISCUSSION

NUREG 1216 "Safety Evaluation Report Related To Operability And Reliability of Emergency Diesel Generators Manufactured by Transamerica DeLaval, Inc." stated that cylinder heads were one of the components which warranted special emphasis in the area of maintenance/surveillance. Therefore, a license condition was

required of all plants using TDI diesels which required periodic air roll tests to check for moisture in the cylinders. The tests were to be performed prior to planned starts and after diesel engine shutdowns. The staff recognized that the tests would make the diesel inoperable for periods up to thirty-minutes. However it was "...not the staff's intent that an engine should intentionally be put into a condition where it cannot receive a start signal if the other diesel(s)

or other ac sources are already inoperable." Thus a caveat was placed in the license condition and in the Technical Specifications to prevent the Air Roll Tests while in the Action Statements of Technical Specification 3.8.1.1. The caveat did not address when the plant exits the Action Statement.

As long as the diesel is inoperable the plant is considered in the Action Statements of Technical Specifications 3.8.1.1, and any demonstrations of operability of the other diesel shall not be preceded or followed by air roll tests until the plant exits the Action Statement. If the inoperable diesel is declared operable prior to the performance of the testing required by the Action Statement, it is permissible to perform the Air Roll Tests prior to starting the second diesel, even though the plant is still in the Action Statement. The basis for this conclusion is the SER statement quoted above which states that the staff's intent was to prevent both diesels being inoperable at the same time. As long as one diesel is operable, the Air Roll Tests must be performed prior to any planned start per the license condition.

D. REFERENCES

Memorandum from A. Gibson, Director, Division of Reactor Safety, for G. Lainas, A/D for Region II Reactors, NRR, dated November 20, 1987, Subject: Technical Specification (TS) Requirement For Testing TDI Diesels. The memorandum is available in the Document Control System (DCS 69235/001).

NUREG 1216, "Safety Evaluation Report Related To Operability and Reliability of Emergency Diesel Generators Manufactured by Transamerica DeLaval, Inc.," dated August 1986. NUREG 1216 is available in the Document Control System (DCS 37785/171).

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