

REPORTED DEFICIENCY AND CORRECTIVE ACTION FOR
DIESEL ENGINE TURBOCHARGER THRUST BEARING PROBLEM

NATURE OF DEFICIENCY

Stewart/Stevenson informed Burns & Roe by letter, dated May 29, 1979, that the Electro-Motive Division of General Motors Diesel Engines, furnished by them as part of the emergency onsite power system, may have a potential problem with the turbocharger thrust bearing.

Recent lubricating oil system tests conducted at Electro-Motive indicate that certain repeat start operating modes could result in turbocharger thrust bearing damage which might ultimately cause a turbocharger failure.

This problem has been identified in IE Circular No. 79-12, dated June 28, 1979.

We have determined that the two emergency onsite power systems and the HPCS system use the Electro-Motive diesel engines with the potential turbocharger problem.

SAFETY IMPLICATIONS

Failure of the turbocharger would result in a failure of the diesel generator to perform its intended function, and would reduce the Emergency Core Cooling Systems below minimum requirements.

CORRECTIVE ACTION TAKEN AND PLANNED

Electro-Motive is currently working on the development of an improved lube oil system. The system will be available for installation on our units in the near future. The modification kits will be installed prior to system startup testing.