



Commonwealth Edison

One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

March 3, 1982

Mr. A. Schwencer, Chief
Licensing Branch #2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555



Subject: LaSalle County Station Units 1 & 2
Diesel Generator Piping Convention
NRC Docket Nos. 50-373 and 50-374

Dear Mr. Schwencer:

The purpose of this letter is to provide the results of a design review of piping on the LaSalle County Station diesel generators. In a January telecon with A. Bournia and John Knox, et al of the NRC, Edison was requested to review the piping on the LSCS diesel generators to comply with a newly imposed convention on the piping interface between the plant and a diesel generator. That interface is the first joint/flange/screwed connection on the pipe outward from the diesel engine block. The Commission staff wanted to be assured that a design review was completed for the diesel generator piping located between the former interface point (on-skid connection) and this new interface point. Further, they wanted to be assured that design margin was identified for piping under this new definition and that engineering standards were met.

The results of this design review of the as-built conditions at the station for HPCS diesels and the three emergency power diesels follows:

Air Start Piping - AE review of the as-built conditions shows that the air start piping furnished as a part of the diesel engines meets the intent of ANSI B31.1 Power Piping Code. Field measurements show that actual pipe thickness is 1.8 to 2.0 times the minimum required thickness per ANSI B31.1. These thicknesses translate directly to stress margins of the same magnitude. Pressure ratings on flexible air hoses exceed these margins.

Boo!
s
//

Fuel Oil Piping - The fuel oil piping furnished as an integral part of the diesel generators conforms to the requirements of National Fire Protection Association Standards NFPA 30 and 37. NFPA 30 requires that fuel oil piping meet ANSI B31.1 Code requirements; therefore, at LaSalle the diesel generator fuel oil piping meets the B31.1 standards. Actual field measurements of piping wall thickness reveals 1.86 to 2.11 times the minimum thickness required by ANSI B31.1. These thicknesses translate directly to stress margins of the same magnitude.

8203080379 820303
PDR ADOCK 05000373
A PDR

March 3, 1982

Lube Oil Piping - The lube oil piping also conforms to the requirement of NFPA 30 and 37 and, as such, should also meet the intent of ANSI B31.1 code requirements. Field measurements indicate that actual piping thickness is 1.83 to 2.05 times the minimum thickness required by ANSI B31.1. Stress margins of the same magnitude translate from these thickness margins.

Cooling Water Piping - The cooling water piping from the temperature regulator to the heat exchanger for each diesel engine conforms to ASME Section III Class 3 (1974) requirements. All other piping furnished as an integral part of the diesel engine equipment meets the intent of ANSI B31.1. Field measurements of actual piping thickness indicates 1.80 to 2.05 times the minimum thickness required by ANSI B31.1. These thicknesses translate directly to stress margins of the same magnitude. Plant piping to the original interface point meets the ASME III Code.

The entries in FSAR Table 3.21 relating to the above piping are still correct after definition of the newly defined interface point. The piping supports also received a design review during the SQRT program for plant-connecting piping and for skid mounted and engine mounted piping. An acceptance report is part of the SQRT record file on this equipment.

One (1) copy of sketches with connection piping to the diesel engines, as provided from the vendor, is furnished to show the location of the first joint/flange/screwed connection off the engine block. LaSalle diesels 0, 1A, 1B and 2A are depicted.

If there are any further questions concerning this matter, please contact this office.

Very truly yours,

CW Schroeder 3/3/82

C. W. Schroeder
Nuclear Licensing Administrator

lm

Enclosure

cc: NRC Resident Inspector - LSCS

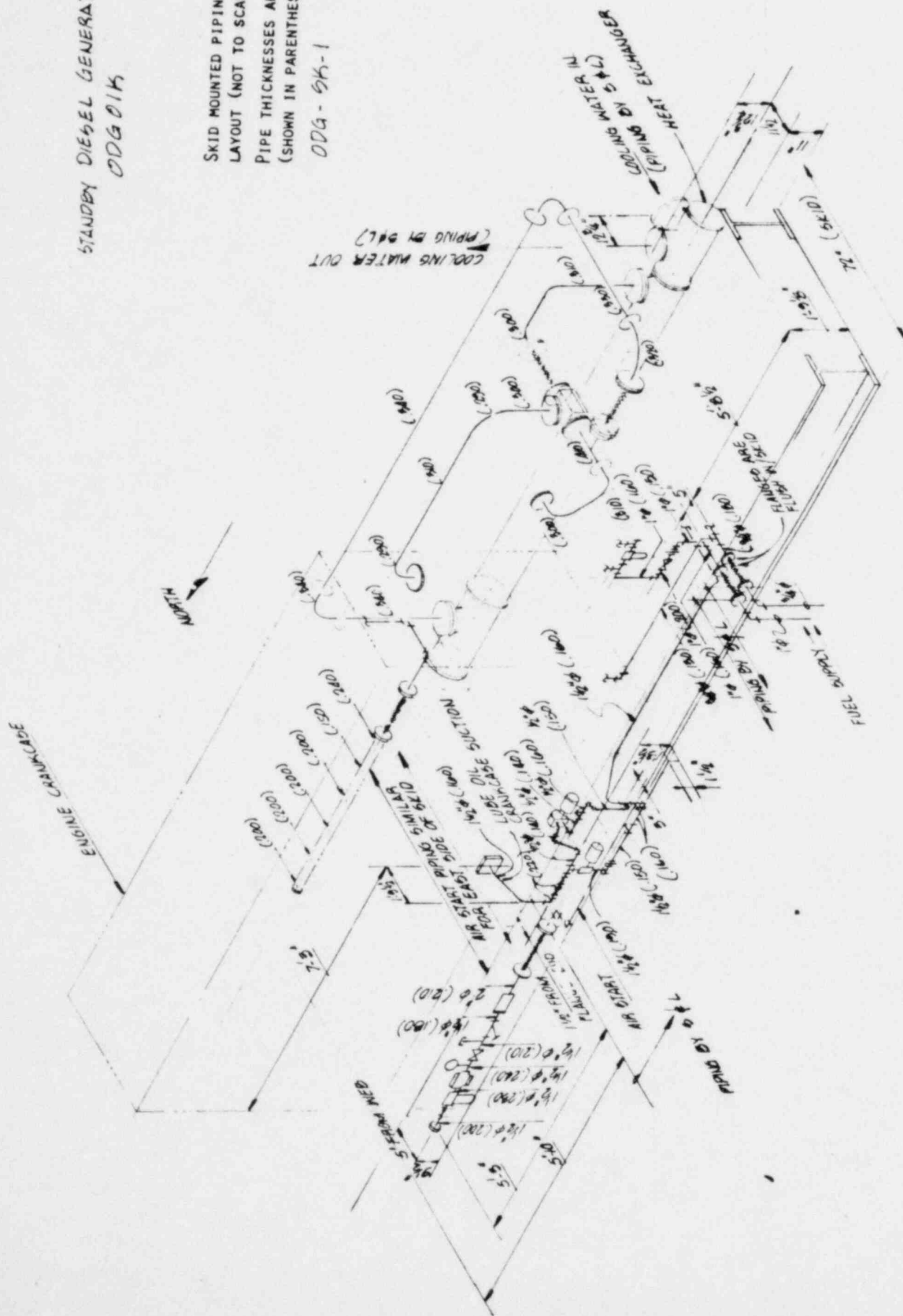
3540N

STANBY DIESEL GENERATOR DDG01K

SKID MOUNTED PIPING ISOMETRIC
LAYOUT (NOT TO SCALE)

PIPE THICKNESSES ARE IN INCHES
(SHOWN IN PARENTHESES)

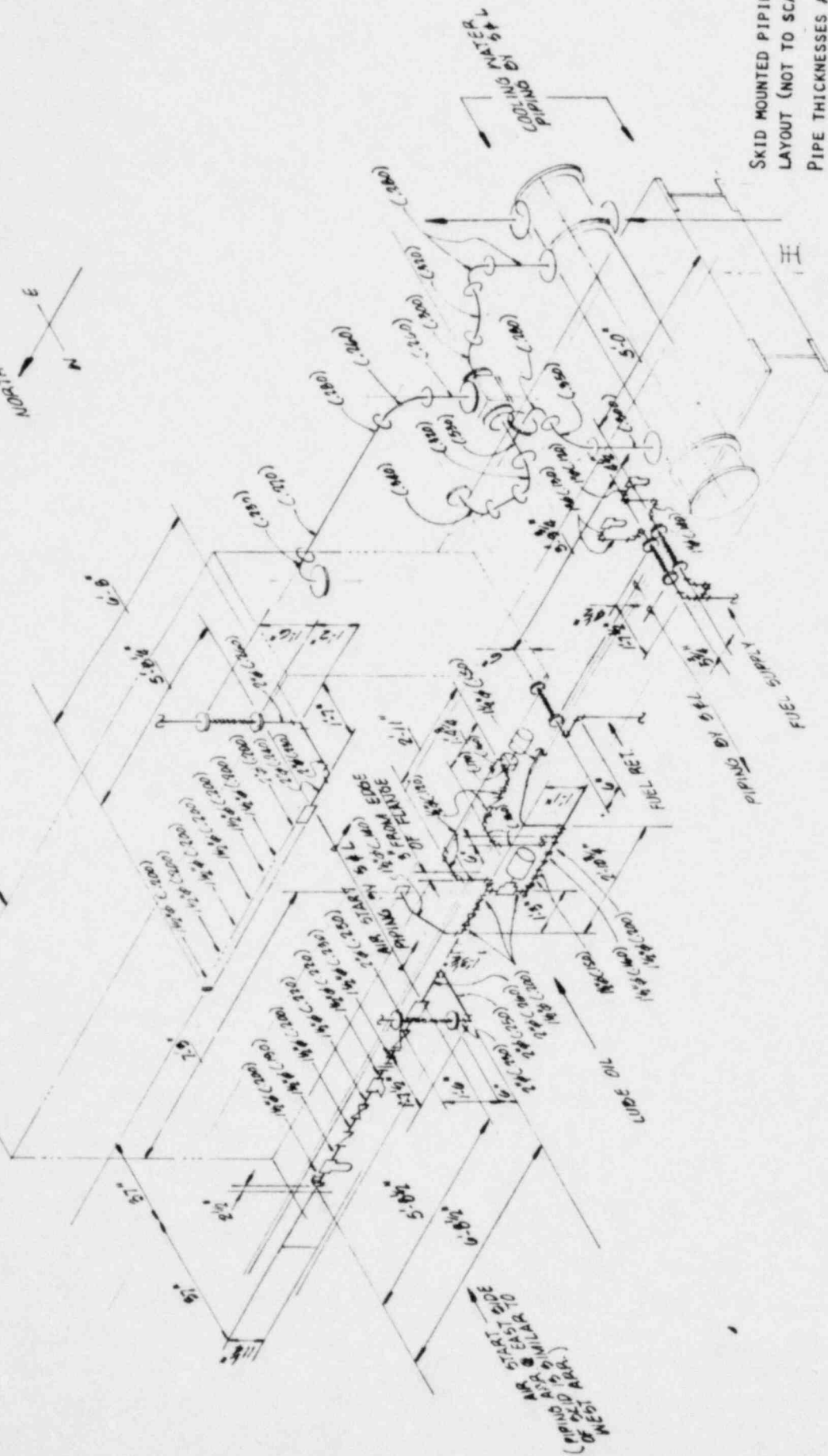
DDG-5K-1



HPG DIESEL
1E22-5001



CRANKCASE OUTFITTING



SKID MOUNTED PIPING ISOMETRIC
LAYOUT (NOT TO SCALE)
PIPE THICKNESSES ARE IN INCHES
(SHOWN IN PARENTHESES)

1E22-5001-5K-4