



Commonwealth Edison

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Chicago, Illinois 60690

March 15, 1983

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Units 1 and 2
Drywell to Wetwell Vacuum Breaker Valves
NRC Docket Nos. 50-373 and 50-374

Dear Sir:

On February 23, 1983, a telecon was held between Messrs. Bournia, Eltawila, and Terao of the NRC staff and Messrs. Schroeder, Ralph, and Belanin representing Commonwealth Edison. During that telecon the NRC requested technical justification that the hydrodynamic torque measurements on AGCo vacuum breaker discs can be used to make dynamic simulations of GPE vacuum breaker valves. Enclosed please find scaled cross-sectional drawings of the GPE and AGCo drywell-to-wetwell vacuum breaker disc and valve body assembly. A review of these drawings shows that the valve discs are geometrically similar and swing open as a consequence of the differential pressure across the valve disc from similar pivot locations in the valve body. Therefore, if the valve discs are held open at equal angles and the differential pressure is applied across the valve disc, the hydrodynamic torque normalized by the differential pressure across the disc, valve disc area and moment arm will be the same numerical value for each disc. This nondimensional torque coefficient (which has been denoted $g(\theta)$ in the report submitted to the NRC entitled "Reanalysis of the LaSalle Wetwell-to-Drywell Vacuum Breakers Under Pool Swell Loading Conditions" Revision A) is a function of valve opening angle, which in general would be valve unique had not the valve disc and details of the valve body and seat been geometrically similar.

It is our understanding that this information is sufficient to clarify why use of the measured hydrodynamic torque results for the AGCo valve when scaled is appropriate when used in making dynamic simulations of the GPE drywell-to-wetwell valve.

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Director of NRR

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March 15, 1983

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

Enclosed for your use are one (1) signed original and thirty-nine (39) copies of this letter and the attachments.

Very truly yours,

C. W. Schroeder 3/15/83

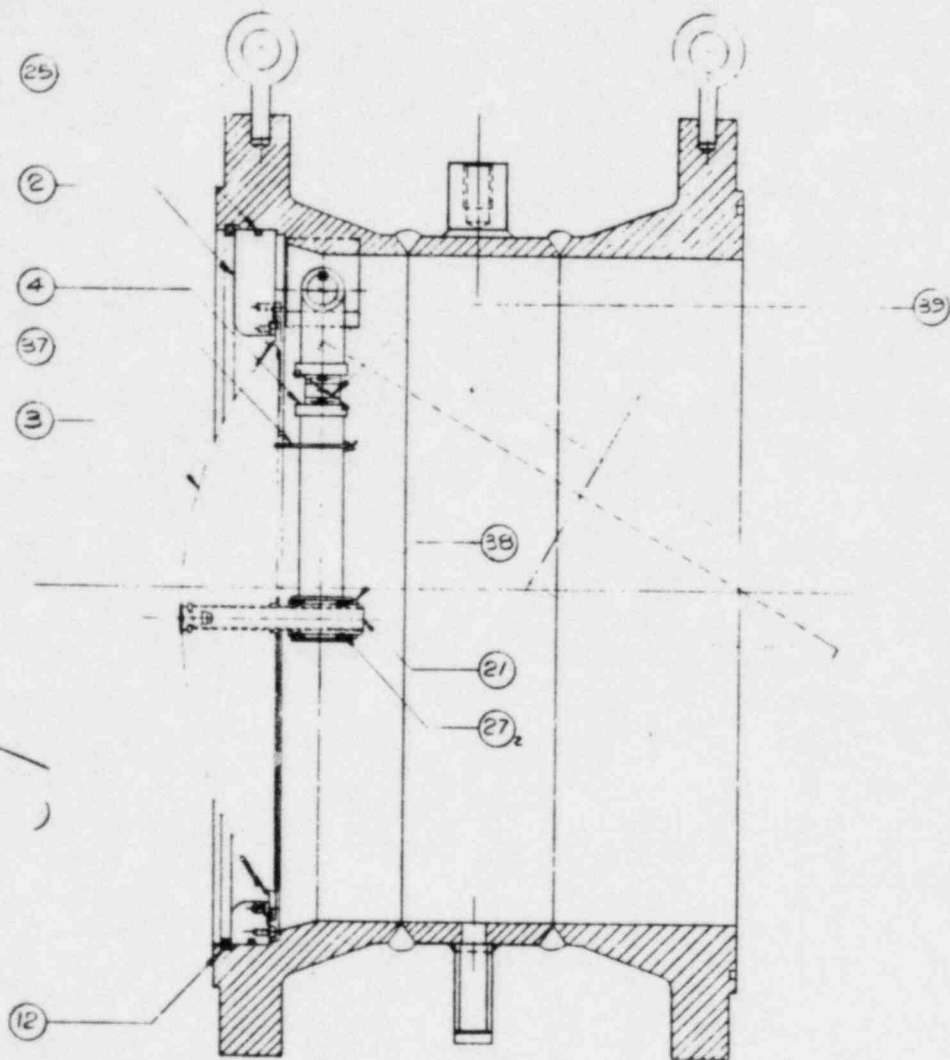
C. W. Schroeder
Nuclear Licensing Administrator

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Attachments

cc: NRC Resident Inspector - LSCS

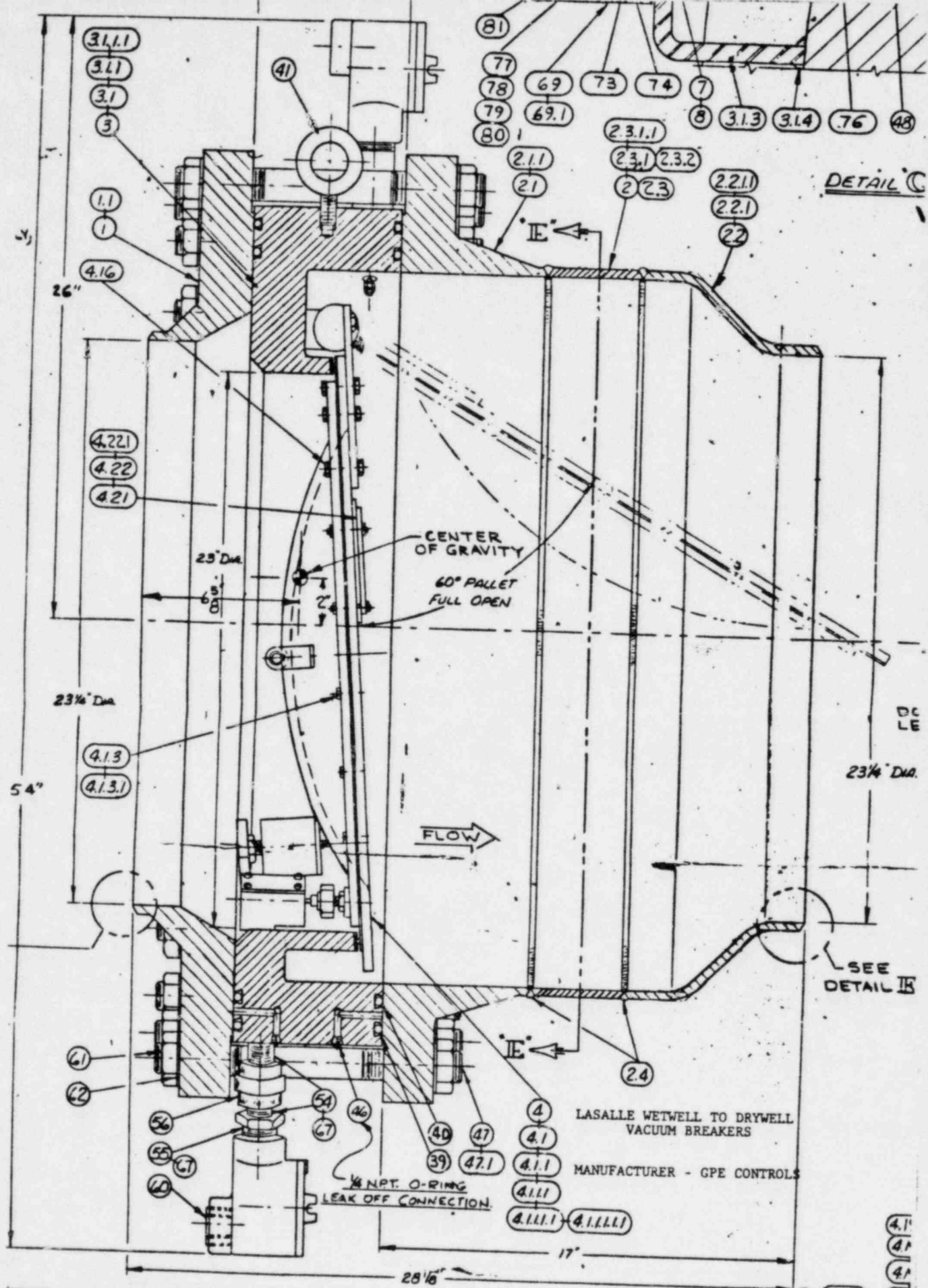
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SECTION AA

Limerick Generating Station
 Manufacturer - Anderson, Greenwood & Company



ASME OR AISI MATERIAL	NDE EXAM AND TEST	NOTES
ALUMINUM		
ALUMINUM		
18-8 S.S.		
18-8 S.S.		
ASTM A276, TYPE 316		
ALUMINUM		

SECTION E-E

