



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

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December 6, 1984

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NUCLEAR LICENSING & SAFETY DEPARTMENT

Secretary of the Commission
Nuclear Regulatory Commission
Washington, D.C. 20555

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Attention: Docketing and Service Branch

Dear Sir:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417
License No. NPF-29
File: 0260/L800.0/15313
Radiation Protection Instruments
AECM-84/0494

Mississippi Power & Light Company (MP&L) on behalf of Grand Gulf Nuclear Station (GGNS) is responding to your request for comments on Draft Regulatory Guide, "Standard Format and Content Guide for Test and Calibration of Radiation Protection Instrumentation."

MP&L has the following comments.

- o The Draft Regulatory Guide basically endorses ANSI N323-1978. GGNS is not presently committed to this ANSI standard.
- o ANSI N323-1978 could require users (utilities) to calibrate their instruments to parameters (i.e. humidity, temperature and pressure) beyond the type testing required of the instrumentation vendors.
- o GGNS performs a daily source check but ANSI N323-1978 requires this check to be done several times a day for in-use instruments.

MP&L believes the staff has underestimated the impact on the industry in their value/impact statement. In an article by E. W. Ballinger, P. C. Harding & C. G. Hudson⁽¹⁾, the authors surveyed 14 utilities (17 separate sites with a total of 25 operating plants) about their instrument inventory and program. The survey found that on the average 37% of instrument inventory were out of service at any one time. The authors calculated that for every 10 persons

- (1) E. W. Ballinger, P. C. Harding & C. G. Hudson, Ph.D "Number of Survey Instruments Needed in a Survey in a Power Reactor Health Physics Program," Radiation Protection Management, Vol. 1, Number 1, The Techrite Co., Marietta, GA. Oct. 1983.

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that entered areas where they may be exposed to radiation, one survey instrument is needed. Using this information and projecting the needs of 2000 people (working in radiation areas onsite) to support a major refueling outage, a plant would need 200 survey instruments available at any time.

If 37% of the instruments are out of service at any time an additional 74 survey instruments are required. A total of 274 survey instruments are needed to support a major refueling outage. This does not address personnel friskers or contamination monitors needed, which are also covered by N323-1978.

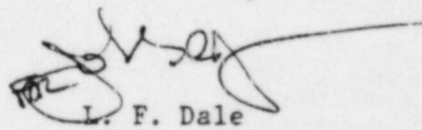
With the average cost of a survey instrument being about \$1000.00 per instrument the outlay of initial money for this number of instruments would be \$274,000. The impact study calls for the purchase of a back-up instrument to be used while the original instrument is sent offsite for calibration. This would double the instrument expenditure above to \$548,000, this does not consider cost of repairs, shipping and handling. The impact report contends "This impact is expected to be small because few licensees are expected to switch to commercial services, and most small licensees already use commercial calibration services." However, even the large licensees that calibrate onsite will have the same expenditure for back up instruments to adequately maintain calibrated survey instruments available at anytime, while at the same time meeting the intent of N323-1978.

Having calibrated and reliable radiation protection instruments is an important part of the program to maintain exposures as low as reasonably achievable (ALARA). However, N323-1978 should not become a Regulatory Guide, but should be reviewed and tested in conjunction with ANSI (draft) N42.17 (PERFORMANCE SPECIFICATIONS FOR HEALTH PHYSICS INSTRUMENTATION).

Once the overall performance of radiation survey instruments is improved by the manufacturer; the user will have an instrument that is more dependable, of better quality, and more accurate to use. This will greatly aid in having properly calibrated instruments for survey requirements to meet the intent of Section 20.201 of 10CFR20.

If you have any questions please advise.

Yours truly,



L. F. Dale

Director, Licensing & Safety

PJR/JGC:rg

cc: See next page

cc: Mr. J. B. Richard
Mr. R. B. McGehee
Mr. N. S. Reynolds
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