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U.S. NUCLEAR REGERATORY



## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

May 29, 1981

Docket No. 50-325/324

MEMORANDUM FOR:	Thomas Ippolito, Chief
	Operating Reactors Branch #2, DL

FROM: John Hannon, Project Manager Operating Reactors Branch #2, DL

SUBJECT: SUMMARY OF MEETING HELD ON MAY 11, 1981 WITH CPL REPRESENTATIVES

A meeting was held with representatives of the Carolina Power & Light Company to discuss general information on the technical, legal, and licensing aspects of a proposed Low Level Radioactive Waste Incinerator installation and operation. A list of those in attendance is enclosed.

## Technical Design

The proposed waste incinerator is to be manufactured by Helix as a demonstration project having the support of both DOE and the State of North Carolina. It will be similar in design to the LASL Control Air Incinerator except that it will operate at a feed rate of approximately 600 #/hr (the LASL unit operates at about 200#/hr). Only wastes generated at Brunswick would be disposed of.

The proposed incinerator will use a dual combustion chamber, the first being slightly starved, the second using excess air resulting in complete combustion. The system operates sub-atmospheric under induced draft and employs a stack release.

## Required Permits

In addition to Commission approval for the proposed incinerator required by 10 CFR 20.305, CP&L stated that a state refuse burning permit would also be required. Public comments regarding incineration of resins have been raised as a result of the NC State Legislative efforts to develop a rad-waste disposal policy. Although the proposed design includes a nozzle for burning resins, CP&L intends to employ only the low level waste incineration capability. However, CP&L stated that their preliminary studies indicated that resin incineration would be economically justified, and if testing later proves the technical capability to be feasible, they would consider requesting approval for the resin incineration feature at a later date.

### Building

CP&L stated that the building that would house the incineration plant would be located on site, independent of existing structures. CP&L is considering the existing stack flow rates in the determination of the proposed release point. Fire protection and seismic criteria will be considered in the design.

### Low-Level Wastes

CP&L stated that the current rad-waste generation rate is approximately 80-100,000 ft/yr of compacted trash. Volume reduction factors with the proposed system are 40/1 uncompacted and 12/1 compacted. The question of how to handle the ash has not been resolved, although CP&L maintains that dry ash can be safely shipped in high integrity containers for burial. Storage capacity presently exists at the Brunswick site for up to a seven-month backlog of compacted low-level waste.

## Testing

All pre-licensing testing will be done at the LASL facility. No testing will be performed at the Brunswick incinerator. Once put into operation, it will be employed solely for trash volume reduction. Tracer tests are scheduled in May-June at LASL to aid in the ash solidification decision.

### Licensing Submittal

CP&L must apply to the NRC for operation of the Demo Plant. It will most likely be pre-noticed, although that decision must await a preliminary review of the submittal. The submittal would follow the format of a spent fuel pool expansion request, and would be expected to address all of the issues brought up in the staff's review of the Newport News Incorp. topical on this subject.

CP&L stated the proposed waste incinerator could theoretically be operated completely independent of the nuclear power plant. The staff stated that if that were the case, the application would more properly be considered under 10 CFR Part 30 by the Low-Level Waste Licensing Branch in the Office of Nuclear Materials Safety and Safeguards. Internal disposition of the licensee's submittal will be decided separately.

# Schedule

CP&L anticipates a submittal as early as mid-July 1981. The long range schedule would call for clean trash burn in August 1982 and contaminated trash burn in September 1982. Any public hearings held on this matter would require the completion of a staff SER in advance.

John M. Hanno

/John Hannon, Project Manager Operating Reactors Branch #2, DL

Enclosure: As stated cc: Service List

# Rad Waste Incinerator Meeting

Jim Van Vliet DOL/ORB#2 Tim Johnson NMSS/WMLL George H. Warriner CP&L Martin Bridges CP&L Samantha Francis Flynn CP&L DOL/ORB#2 John N. Hannon W. Gammill NRC/ETSB Richard Bangart ETSB/NRR WMLL (WM) NRC Ken Jackson J. S. Baegli ETSB C. A. Willis NRC/ETSB T. Ippolito NRC/DOL Myron Karman NRC/OELD

5/11/81

# Mr. J. A. Jones

cc:

Richard E. Jones, Esquire Carolina Power & Light Company 336 Fayetteville Street Raleigh, North Carolina 27602

George F. Trowbridge, Esquire Shaw, Pittman, Potts & Trowbridge 1800 M Street, N. W. Washington, D. C. 20035

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Mr. Charles R. Dietz Plant Manager P. O. Box 458 Southport, North Carolina 28461 MEETING SUMMARY DISTRIBUTION

Docket File NRC PDR Local PDR ORB Reading J. Olshinski J. Heltemes, AEOD T. Ippolito J. Hannon OELD OI&E (3) Licensing Assistant ACPS (10) NSIC TERA J. Van Vliet T. Johnson W. Gammill R. Bangart K. Jackson J. S. Baegli C. A. Willis M. Karman

cc: Service List