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

November 20, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Byron Generating Station Units 1 and 2
Process Control Program
NRC Docket Nos. 50-454 and 50-455

Reference (a): October 12, 1984 letter from
T. R. Tramm to H. R. Denton.

Dear Mr. Denton:

This letter provides the basis for withholding from public disclosure the Byron Process Control Program (PCP) for the cement radwaste solidification system which was provided in reference (a). The necessary affidavit was not available when that document was filed.

Attachment A to this letter is the nonproprietary version of the Byron cement radwaste PCP. The proprietary version was provided in reference (a). A letter from Stock Equipment Company is also provided to satisfy the requirement of 10 CFR 2.790(b)(1) for an affidavit from the owner of the information. The attachment to that letter also contains the proprietary information.

One signed original and fifteen copies of this letter are provided for NRC review. Five copies of the Stock letter and its proprietary attachment are also provided.

Please address further questions regarding this matter to this office.

Very truly yours,

T. R. Tramm

T. R. Tramm
Nuclear Licensing Administrator

8411270313 841120
PDR ADOCK 05000454
P PDR

bs

Attachment A

Enclosure: October 9, 1984 letter from Paul S. Hunt to
T. R. Tramm with proprietary attachment

9454N

B001
1/1

Change: BNL
DMB/DSS
FEMA
LPDR
NRC PDR
NSIC
NTIS
} Non Prop Only

STOCK

October 9, 1984

Mr. Thomas R. Tramm
Commonwealth Edison Company
P.O. Box 767
Chicago, Illinois 60690

Dear Mr. Tramm:

Stock Equipment Company hereby certifies that those portions of the following pages of the Process Control Program for the Byron Station, described as BAP 300-35, Revision 2, that are outlined per the attached marked copies are hereby considered to be proprietary:

a. Page 9 - Tumble Time, 1st Fill, 2nd Fill

b. Page 10 - Gallons/Waste Stream

c. Page 10 - Paragraph beginning "The amount . . ." and ending with ". . . drumming operation."

d. Page 11 - The nomogram identified as "Sodium Metasilicate Anhydrous".

e. Page 12 - The nomogram identified as "Waste Stream" and "Cement Type II".

Stock Equipment Company contends that public disclosure of the information can cause substantial harm to the competitive posture of Stock Equipment Company since said company has invested several years of development time and capital testing various combinations of cement, additive and waste, as well as cement, additive, and resins, that will provide a solidified matrix that will meet or exceed the standards established by the Nuclear Regulatory Commission.

Since the control of the quality of the solidified product is a delicate balance between the ratio of the ingredients of the process and the means by which these ingredients are processed through the use of specific mechanical, hydraulic, pneumatic, and electrical devices in a manner specific to provide said controlled solidified matrix, it is the contention of Stock Equipment Company that any public disclosure would impose upon the competitive position of Stock Equipment Company.

Stock Equipment Company • 16490 Chillicothe Road • Chagrin Falls, Ohio 44022, U.S.A. • (216) 543-6000 • Telex 98-0611
A Unit of General Signal

Stock Equipment Company has made known this information only to those persons at domestic nuclear radwaste facilities involved in the processing of waste products for solidification. These issues have been defined as proprietary information, not to be revealed to third persons without permission from Stock Equipment Company.

Information of the nature specific to the ratios of the ingredients and means of processing these ingredients using specific forms of equipment are not common or public knowledge. There may be public disclosures and documents that treat the handling of a portion or segment of the ingredients for generic applications not related to the solidification of nuclear waste products.

Public disclosure of this information may also allow foreign elements to utilize this information for developing solidification systems that could be marketed domestically through licensing agreements or through direct marketing of the product in the U. S. market. The upshot is that the trade deficit imbalance becomes even further impacted by the ingress of foreign products.

Very truly yours,

STOCK EQUIPMENT COMPANY

Paul S. Hunt

Paul S. Hunt
Vice President, Engineering

PSH:ck
Enclosure

cc: Mr. Richard Pleniewicz
Mr. Robert Aken

Mildred A. Peters

MILDRED A. PETERS, Notary Public
STATE OF OHIO
My Commission Expires Mar. 30, 1989

ATTACHMENT A

Nonproprietary Version of
Attachment A
to BAP 300-35, Rev. 2

9454N

PDF

ATTACHMENT A
BYRON SOLIDIFICATION FORMULAS

Tumble Times for
Liquid Waste Solidification
Using Type II Cement

Waste Stream	Tumble Time (minutes): 1st Fill	2nd Fill
50 weight % Na_2SO_4	[redacted]	
50 weight % H_3BO_3		
Cation Bed Resin (expended with $CaCl_2$ & NaOH)		
Anion Bead Resin (expended with H_3BO_3)		
Mixed Bed, 50/50 Anion/Cation Bead Resin		

Notes:
1. All slurries of resins are assumed to be processed at 10% free standing water. The above times may also be used for 15 and 20%.
2. If a single fill process is used, the proper tumble time is the one given for 2nd Fill.

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AUG 02 1984
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(1351P)

Radwaste Solidification Formulas
for
Borated Bead Resins Using Type II Cement

Percent Free Standing Water	Type II Cement	Gallons Waste Stream
10% F.S.W.	250 lbs.	[ ]
15% F.S.W.	260 lbs.	
20% F.S.W.	270 lbs.	

The concentration of boric acid is measured or calculated to determine the amount of sodium metasilicate to be blended with the cement per the attached nomograph. [ ]

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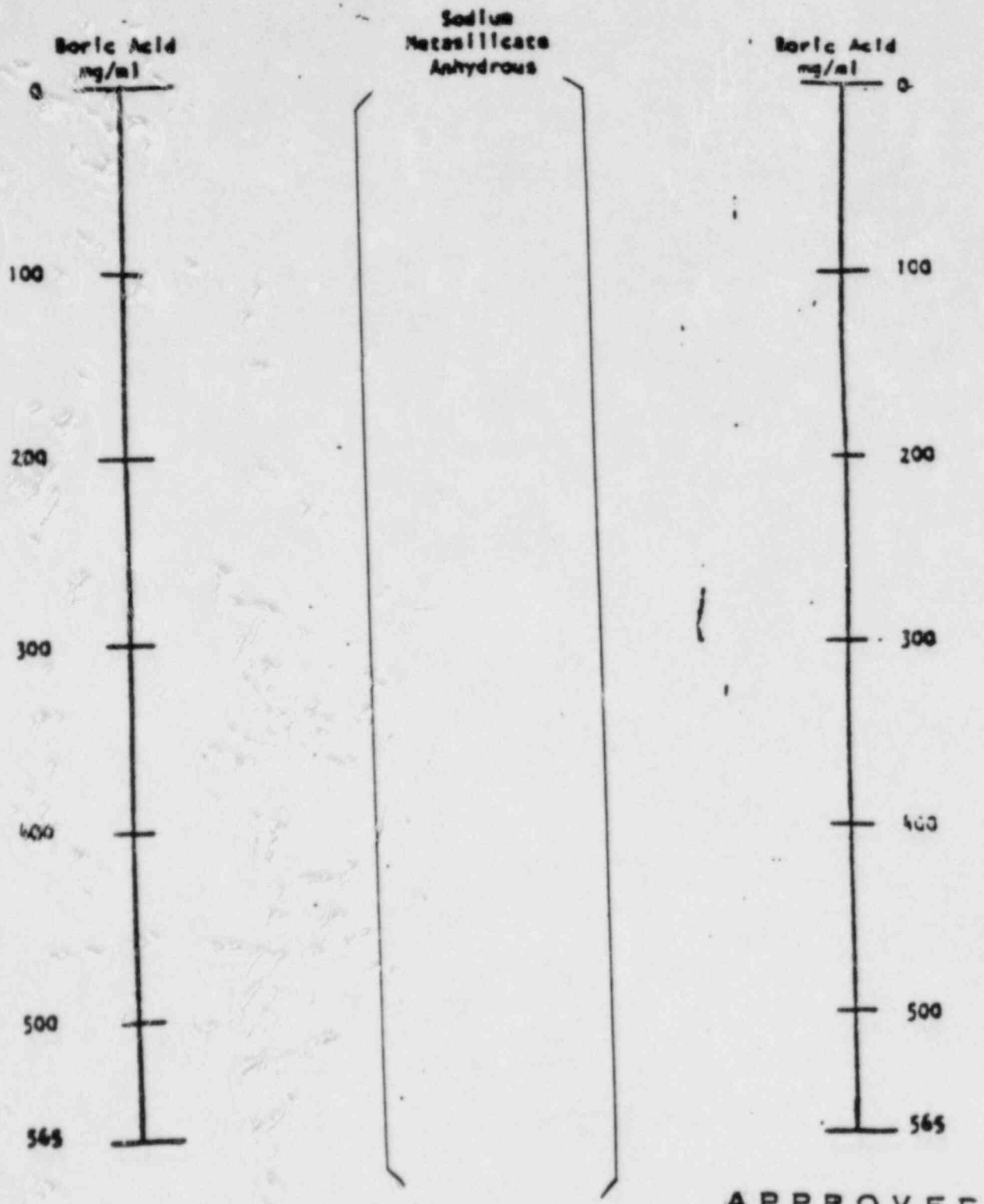
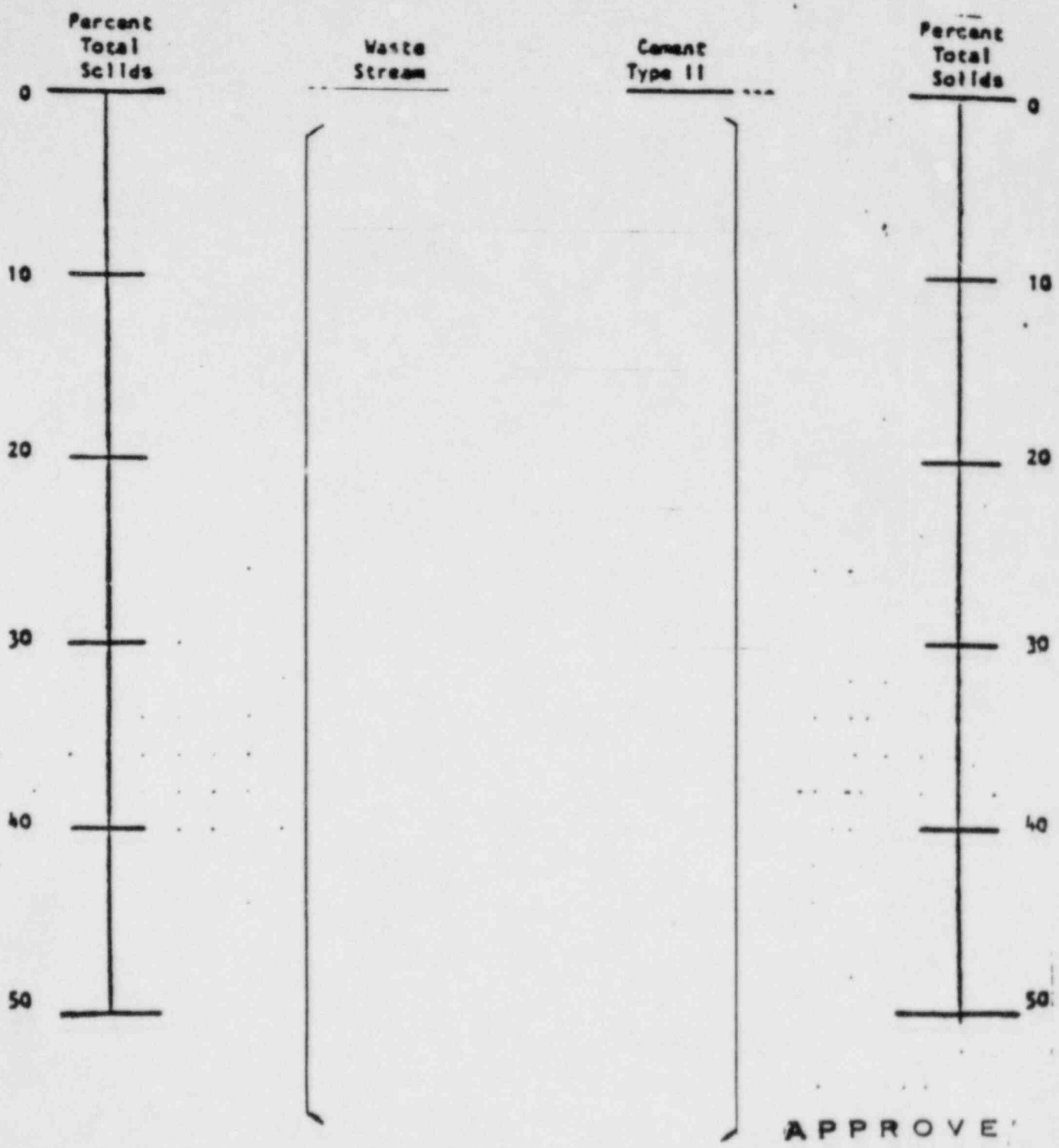
NOMOGRAM for
P.W.R. Wastes Containing Boric Acid
(Bead Resin and Concentrates)



APPROVED
AUG 02 1984
B. O. S. R.

NOMOGRAM for
P.W.R. Concentrated
Wastes Containing
Boric Acid



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AUG 02 1984
B.O.S.R.

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